



**PULMONARY MEDICINE, INFECTIOUS DISEASE  
AND CRITICAL CARE CONSULTANTS**  
MEDICAL GROUP, INC.

**Leaders in outcomes oriented, evidence based, compassionate, cost effective care**

## **MSDS Table of Contents**

As of 12/06/2011

**Air - Compressed (gas) for PFTs**

Common Name: Compressed Air

Manufacturer: Airgas

<http://www.airgas.com/documents/pdf/001002.pdf>

**Ajax Oxygen Bleach Cleaner**

Common Name: Disinfectant Powder Cleanser

Manufacturer: Colgate Palmolive

<http://www.colgatecommercial.com/ColgateSite/media/MSDS/AJAX%20CLEANER%20POWER-OXYGEN%20BLEACH.pdf>

**Albuterol Sulfate**

Common Name: Albuterol Sulfate inhalation solution 0.083%

Manufacturer: Nephron Pharmaceuticals

[http://nephronpharm.com/images/documents/MSDS\\_0.083\\_rev\\_7-22-2004.pdf](http://nephronpharm.com/images/documents/MSDS_0.083_rev_7-22-2004.pdf)

**ALCARE PLUS Foam Sanitizer**

Common Name: Hand Sanitizer

Manufacturer: Steris

<http://www.steris.com/documents.cfm?id=6399>

**Alcohol Individual Prep Pads**

Common Name: Medi-Pak - Alcohol Prep Pads

Manufacturer: Cypress Medical Products

[https://mms.image.mckesson.com/CumulusWeb/Click\\_and\\_learn/Medi-Pak\\_Alcohol\\_Prep\\_Pads\\_Sterile\(58-204,%2058-404\).pdf](https://mms.image.mckesson.com/CumulusWeb/Click_and_learn/Medi-Pak_Alcohol_Prep_Pads_Sterile(58-204,%2058-404).pdf)

**Awesome**

Common Name: All Purpose Cleaner

Manufacturer: Awesome Products Inc.

[Click HERE for attached MSDS sheet](#)

**Betadine**

Common Name: Povidone Iodine Solution

Manufacturer: Perdue Frederick Company

[Click HERE for attached MSDS sheet](#)

**Carbon Monoxide for PFT**

Common Name: Carbon Monoxide

Manufacturer: Airgas

<http://www.airgas.com/documents/pdf/001014.pdf>

Cavi-wipes

Common Name: Disinfecting Wipes

Manufacturer: Metrex Research Corp

<http://www.metrex.com/msds/metrex/us/english/Caviwipes.pdf>

Chem Dry

Common Name: Carpet Cleaner

Manufacturer: Harris Research Inc.

<http://www.chemdry.com/products-tips/products-available-at-the-home-depot/Stain%20Extinguisher%20Aerosol%20C190%2C%20C196%2C%20C198.pdf>

CitriCide

Common Name: Air Deodorizer

Manufacturer: Healthlink

<http://www.healthlinkinc.net/MSDS/CitriCideMSDS.PDF>

Cloralex

Common Name: Bleach

Manufacturer: AlEn

<http://www.alen.com.mx/alenamericas/MSDS/Cloralex/MSDS%20Cloralex%20%20Regular%20Bleach%20%20.pdf>

Clorox

Common Name: Bleach

Manufacturer: The Clorox Company

[http://www.clx.com/products/msds/bleach/cloroxregularbleach0809\\_.pdf](http://www.clx.com/products/msds/bleach/cloroxregularbleach0809_.pdf)

Clorox Clean-Up Cleaner w/Bleach

Common Name: All Purpose Cleaner

Manufacturer: The Clorox Company

<http://www.clx.com/products/msds/cloroxcleanup/cloroxclean-upcleanerwithbleach.pdf>

Comet

Common Name: Disinfectant Powder Cleanser

Manufacturer: Proctor & Gamble

<http://www.pgpro.ca/Portals/0/Documents/msds/PGP%20Comet%20Disinfectant%20Cleanser%20with%20Chlorinol%20EN%20MSDS%20110110.pdf>

Cosco 2000 Plus Ink

Common Name: Stamp Ink

Manufacturer: M&R Marking Systems, Inc.

[Click HERE for attached MSDS sheet](#)

Depo-Medrol

Common Name: Depo-Medrol

Manufacturer: Pfizer

[http://www.pfizer.com/files/products/material\\_safety\\_data/PZ01044.pdf](http://www.pfizer.com/files/products/material_safety_data/PZ01044.pdf)

Dust Destroyer

Common Name: Compressed Gas Duster

Manufacturer: Falcon

[http://www.falconsafety.com/documentLibrary/Dust%20Destroyer%20Compressed-Gas%20Duster%20-%20October%202009%20\(English\).pdf](http://www.falconsafety.com/documentLibrary/Dust%20Destroyer%20Compressed-Gas%20Duster%20-%20October%202009%20(English).pdf)

Expo Dry Erase Board Cleaner

Common Name: Dry Erase Board Cleaner

Manufacturer: Sanford Corp.

<http://www.officedepot.com/pdf/msds/127731.pdf>

E-Z seal postage machine sealant

Common Name: postage machine sealing solution

Manufacturer: Pitney Bowes Inc.

[Click HERE for attached MSDS sheet](#)

Flu Vaccine

Common Name: Flulaval vaccine 2011-2012

Manufacturer: ID Biomedical Corporation of Quebec

<http://www.msds-gsk.com/13034608.pdf>

GBG Foam Sanitizer

Common Name: Hand Sanitizer

Manufacturer: Healthlink

<http://www.healthlinkinc.net/MSDS/GBGFoamingMSDS.pdf>

Helium (gas) for PFTs

Common Name: Helium Gas

Manufacturer: Airgas

<http://www.airgas.com/documents/pdf/001025.pdf>

Hempz Hand Lotion

Common Name: Hand Moisturizer

Manufacturer: PBI Group, INC

[http://www.4mss.com/products/download\\_files/hempz/hempz\\_herbal\\_moisturizer.pdf](http://www.4mss.com/products/download_files/hempz/hempz_herbal_moisturizer.pdf)

Hydrogen Peroxide

Common Name: Hydrogen Peroxide - Medi-Pak

Manufacturer: Hydrox Laboratories

[https://mms.image.mckesson.com/CumulusWeb/Click\\_and\\_learn/Medi-Pak\\_Hydrogen\\_Peroxide\\_3\\_24oz\\_20\\_16oz\\_\(23-F0010\\_23-D0012\).pdf](https://mms.image.mckesson.com/CumulusWeb/Click_and_learn/Medi-Pak_Hydrogen_Peroxide_3_24oz_20_16oz_(23-F0010_23-D0012).pdf)

Ipratropium Bromide

Common Name: Ipratropium Bromide Solution

Manufacturer: Nephron Pharmaceuticals

[http://nephronpharm.com/images/upload\\_images/file/MSDS%2002%25%20rev\\_%209-2-2008.PDF](http://nephronpharm.com/images/upload_images/file/MSDS%2002%25%20rev_%209-2-2008.PDF)

Kleen Guard Furniture Polish

Common Name: Furniture Polish

Manufacturer: Alberto Culver

<http://msds.alberto.com/ATN/MSDSUS/DEFAULT/00133800.PDF>

Lung Diffusion Mix (gas) for PFTs

Common Name: Lung Diffusion Mix Gas

Manufacturer: Airgas

<http://www.airgas.com/documents/pdf/005184.pdf>

Lysol Toilet Bowl Cleaner

Common Name: Bathroom Cleaner

Manufacturer: Renckitt Benkiser

<http://dev.rbnainfo.com/MSDS/US/US%20-%20Professional%20LYSOL@%20Disinfectant%20Toilet%20Bowl%20Cleaner%20-%20Complete%20Clean%20Power-English.pdf>

Lysol Wipes

Common Name: Disinfecting Wipes

Manufacturer: Renckitt Benkiser

<http://www.rbnainfo.com/MSDS/CAN/Lysol-Brand-Disinfecting-Wipes-Canada-English.pdf>

Medi-Pak - Hand Lotion

Common Name: Hand Moisturizer

Manufacturer: Central Solutions, Inc

[https://mms.image.mckesson.com/CumulusWeb/Click\\_and\\_learn/Medi-Pak%20Moisturizing%20Skin%20Care%20Lotion%20\(53-28009,%2053-28002,%2053-28003,%2053-28007,%2053-28001,%2053-28006-1000,%2053-28006-2000\).pdf](https://mms.image.mckesson.com/CumulusWeb/Click_and_learn/Medi-Pak%20Moisturizing%20Skin%20Care%20Lotion%20(53-28009,%2053-28002,%2053-28003,%2053-28007,%2053-28001,%2053-28006-1000,%2053-28006-2000).pdf)

Medi-Pak Hand Sanitizer

Common Name: Hand Sanitizer

Manufacturer: Central Solutions, Inc

[https://mms.image.mckesson.com/CumulusWeb/Click\\_and\\_learn/Medi-Pak Instant Hand Sanitizer \(53-28039 53-28032 53-28033 53-28037 53-28036-1000 53-28036-MP1000 53-28036-1250 53-28036-2000\).pdf](https://mms.image.mckesson.com/CumulusWeb/Click_and_learn/Medi-Pak Instant Hand Sanitizer (53-28039 53-28032 53-28033 53-28037 53-28036-1000 53-28036-MP1000 53-28036-1250 53-28036-2000).pdf)

Medi-Pak Hand Soap

Common Name: Hand Soap

Manufacturer: Central Solutions, Inc

[https://mms.image.mckesson.com/CumulusWeb/Click\\_and\\_learn/Medi-Pak Antimicrobial Hand Soap \(53-28073 53-28077 53-28071 53-28076-1000 53-28076-1000-4 53-28076-MP1000 53-28076-2000\).pdf](https://mms.image.mckesson.com/CumulusWeb/Click_and_learn/Medi-Pak Antimicrobial Hand Soap (53-28073 53-28077 53-28071 53-28076-1000 53-28076-1000-4 53-28076-MP1000 53-28076-2000).pdf)

Neutra Air (Lysol)

Common Name: Air Deodorizer

Manufacturer: Renckitt Benkiser

<http://msds.cexp.com/msds/RCK76938.pdf>

Nitrogen Gas for PFTs

Common Name: Nitrogen

Manufacturer: Airgas

<http://www.airgas.com/documents/pdf/001040.pdf>

Ocufresh

Common Name: Eye Wash Saline

Manufacturer: Optics Laboratory, Inc.

<http://www.custom-kits.com/MSDS/OcuFreshMaterialSafetyDataSheet.pdf>

Oops! Staples Correction Tape

Common Name: Correction Tape

Manufacturer: Dongkee Enterprise Inc.

[Click HERE for attached MSDS sheet](#)

OxiClean Active Stain Remover

Common Name: Carpet Cleaner

Manufacturer: Orange Glo

[Click HERE for attached MSDS sheet](#)

Oxygen (gas) for PFTs

Common Name: Oxygen

Manufacturer: Airgas

<http://www.airgas.com/documents/pdf/001043.pdf>

Palmolive (Lemon)

Common Name: Dish Liquid

Manufacturer: Colgate Palmolive

[http://www.colgate.com.au/Colgate/AU/Corp/MSDS/pdfs/PO\\_Antibac\\_Lemon\\_Dish.pdf](http://www.colgate.com.au/Colgate/AU/Corp/MSDS/pdfs/PO_Antibac_Lemon_Dish.pdf)

Pine Sol (Lemon Fresh)

Common Name: All Purpose Cleaner

Manufacturer: The Clorox Company

<http://www.clx.com/products/msds/pinesol/lemonfreshpine-solallpurposecleanermsds8-30-04.pdf>

Pink Pearl Hand Soap

Common Name: Hand Soap

Manufacturer: Amsan, L.L.C.

<http://eaccess.amsan.com/masterImages/aschiapp/MSDS/REN/REN02523.pdf>

Pneumovax

Common Name: Pneumococcal vaccine

Manufacturer: Merck & Co Inc

[http://www.merck.com/product/usa/pi\\_circulars/p/pneumovax\\_23/pneumovax\\_pi.pdf](http://www.merck.com/product/usa/pi_circulars/p/pneumovax_23/pneumovax_pi.pdf)

Postage Machine Cleaner

Common Name: equipment cleaner

Manufacturer: Pitney Bowes Inc.

[http://www.pb.com/bv70/en\\_US/extranet/landingpages/Cleaning%20Kit%20Files/msds%20279%20rev%20a%20pitney%20bowes%20office%20equipment%20cleaner%20%20\(e0006131\).pdf](http://www.pb.com/bv70/en_US/extranet/landingpages/Cleaning%20Kit%20Files/msds%20279%20rev%20a%20pitney%20bowes%20office%20equipment%20cleaner%20%20(e0006131).pdf)

Power House Glass Cleaner

Common Name: Glass Cleaner

Manufacturer: Chase Products

[http://www.gjfood.com/pdf/msds/115\\_821445.pdf](http://www.gjfood.com/pdf/msds/115_821445.pdf)

Purell Hand Sanitizer

Common Name: Hand Sanitizer

Manufacturer: GoJo Industries, Inc.

[http://www.gojo.com/United-States/Brands/PURELL/~/\\_media/Files/MSDS/US%20Canada/English/PURELLInstantHandSanitizer\\_05040.ashx](http://www.gojo.com/United-States/Brands/PURELL/~/_media/Files/MSDS/US%20Canada/English/PURELLInstantHandSanitizer_05040.ashx)

Sani-Cloth Wipes

Common Name: Disinfecting Wipes

Manufacturer: Professional Disposables, Inc.

[http://www.pdipdi.com/assets/msds/MSDS0020-PDI\\_Super\\_Sani-Cloth\\_MSDS-634362865316352008.pdf](http://www.pdipdi.com/assets/msds/MSDS0020-PDI_Super_Sani-Cloth_MSDS-634362865316352008.pdf)

Screen Cleaner (staples brand)

Common Name: Computer Screen Cleaner

Manufacturer: ACL, Inc

<ftp://ftp.kensington.com/pdfs/msds/staples/X80012msds.pdf>

Seventh Generation Dish Liquid

Common Name: Dish Liquid

Manufacturer: Seventh Generation Inc.

[http://www.seventhgeneration.com/sites/default/files/assets/pdf/msds/English/Dish\\_Liquids\\_MSDS\\_0.pdf](http://www.seventhgeneration.com/sites/default/files/assets/pdf/msds/English/Dish_Liquids_MSDS_0.pdf)

Seventh Generation Dishwashing Gel

Common Name: Dishwashing Gel

Manufacturer: Seventh Generation Inc.

[http://www.seventhgeneration.com/sites/default/files/assets/pdf/msds/English/Automatic\\_Dishwasher\\_Gel\\_MSDS\\_0.pdf](http://www.seventhgeneration.com/sites/default/files/assets/pdf/msds/English/Automatic_Dishwasher_Gel_MSDS_0.pdf)

Simply Right Hand Soap

Common Name: Hand Soap

Manufacturer: Apollo Health and Beauty

[Click HERE for attached MSDS sheet](#)

Toner (zoom) all machines

Common Name: Toner

Manufacturer: Toshiba Corporation

[Click HERE for attached MSDS sheet](#)

Vaseline Hand Lotion

Common Name: Vaseline Moisturizer

Manufacturer: Unilever

<http://www.unilevermsdsusa.com/Document/32/69/712d6b9c-d652-4c47-9640-78faf974a2be.pdf>

Windex

Common Name: Glass Cleaner

Manufacturer: Johnson Wax

<http://suministrospormenos.com/Documents/4274WindexOrigGlassCleanerMSDS.pdf>

Xolair

Common Name: Xolair (anti IgE medication)

Manufacturer: Genetich Inc

<http://www.gene.com/gene/products/information/msds/xolair/Xolair.pdf>

Material Safety Data Sheet

Name : **LA's Totally Awesome All Purpose Cleaner & Degreasers & Spot Remover**

Date Issued : 1/10/11

**US MANUFACTURER:**

**Awesome Products Inc.  
Phone 1-800-482-2875  
6370 Altura Blvd., Buena Park, CA 90620  
Emergency Phone : 714-562-8873**

| Hazard Rating     | HMIS | Hazard       | NFPA |
|-------------------|------|--------------|------|
| 4 - Very High     | 1    | Health       | 1    |
| 3 - High          | 0    | Flammability | 0    |
| 2 - Moderate      | 0    | Reactivity   | 0    |
| 1 - Slight        |      | Special      |      |
| 0 - Insignificant |      |              |      |

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**PRODUCT NAME**

All Purpose Cleaner & Degreaser

**REASON FOR CHANGE**

Formulation Revised.

**PRODUCT USE**

Home care cleaning product

**PRODUCT DESCRIPTION**

**16 Oz Awesome All Purpose Cleaner and Degreasers & Spot Remover  
20 Oz Awesome All Purpose Cleaner and Degreasers & Spot Remover  
24 Oz Awesome All Purpose Cleaner and Degreasers & Spot Remover  
32 Oz Awesome All Purpose Cleaner and Degreasers & Spot Remover  
64 Oz Awesome All Purpose Cleaner and Degreaser & Spot Remover**

**SECTION 2 - INGREDIENT INFORMATION**

| Weight %    | Ingredient & Exposure Limit                        |
|-------------|--|
| 0.01 to 2.5 | Orange Oil Blend(CAS# 8008-57-9) & (CAS#111-76-2)) |
| 0.5 to 4.0  | Ethoxylated Alcohol (CAS# 9036 19 5)               |
| 0.5 to 1.5  | Disodium Salt (CAS# 6834-92-0)                     |
| 0.5 to 1.5  | Tetra Sodium EDTA (CAS# 64-02-8)                   |
| 0.5 to 0.8  | Hydroxy Sodium (CAS# 1310-73-2)                    |
| QS          | Water (CAS# 7732-18-5)                             |

**SECTION 3 - HEALTH HAZARDS IDENTIFICATION (Also see Section 11)**

**ROUTE(S) OF ENTRY**

Effects of Acute Exposure

**Eye**

May Cause : Mild eye irritation.

**Skin**

Prolonged or repeated contact may cause : irritation

**Inhalation**

None Known

**Ingestion**

None Known.



## Material Safety Data Sheet

Name : **LA's Totally Awesome All Purpose Cleaner & Degreasers & Spot Remover**

Date Issued : 1/10/11

MEDICAL CONDITIONS GENERALLY RECOGNIZED AS BEING AGGRAVATED BY EXPOSURE

None Known.

### **SECTION 4 - FIRST AID MEASURES**

#### **EYE CONTACT**

Flush immediately with plenty of water for at least 15 to 20 minutes.

If irritation persists, get medical attention.

#### **SKIN CONTACT**

Rinse with plenty of water

#### **INHALATION**

No special requirements.

#### **INGESTION**

Immediately drink 1-2 glasses of water or milk. Seek immediate medical attention.

### **SECTION - 5 - FIRE AND EXPLOSION INFORMATION**

#### **FLASH POINT**

Not Applicable

#### **FLAMMABLE LIMITS**

Not applicable.

#### **AUTOIGNITION TEMPERATURE**

Not applicable.

#### **EXTINGUISHING MEDIA**

Foam. CO<sub>2</sub>. Dry chemical. Water Fog.

#### **SPECIAL FIREFIGHTING PROCEDURES**

Normal fire fighting procedures may be used.

#### **UNUSUAL FIRE AND EXPLOSION HAZARDS**

Container may melt and leak in heat of fire

### **SECTION 6 - PREVENTATIVE RELEASE MEASURES**

#### **STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED**

Dike large spills. Absorb with oil-dri or similar inert material

Sweep or scrape up and containerize

### **SECTION 7 - HANDLING AND STORAGE**

#### **PRECAUTIONARY INFORMATION**

May be : Eye irritant. Avoid contact with eyes. If such contact occurs, flush immediately with plenty of water for at least 15 to 20 minutes.

If irritation persists, seek medical aid. Keep out of reach of children.

## Material Safety Data Sheet

Name : **LA's Totally Awesome All Purpose Cleaner & Degreasers & Spot Remover**

Date Issued : 1/10/11

### SECTION 8 - SPECIAL PROTECTION INFORMATION

#### RESPIRATORY PROTECTION

No special requirements under normal use conditions.

#### VENTILATION

No special requirements.

#### PROTECTIVE GLOVES

No special requirements under normal use conditions.

#### EYE PROTECTION

No special requirements under normal use conditions.

#### OTHER PROTECTIVE MEASURES

No special requirements.

### SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

#### COLOR

Varies

#### PRODUCT STATE

Liquid

#### ODOR

Orange

#### pH Range

12 - 13

#### ODOR THRESHOLD

Not available.

#### SOLUBILITY IN WATER

Complete

#### SPECIFIC GRAVITY (H<sub>2</sub>O = 1)

1.00

#### VAPOR DENSITY (AIR = 1)

Not Available

#### EVAPORATION RATE (BUTYL ACETATE = 1)

Not available

#### VAPOR PRESSURE (mm HG)

Not Available.

#### BOILING POINT

212 °F (100 °C)

#### FREEZING POINT

- 32 °F (0 °C)

## Material Safety Data Sheet

Name : **LA's Totally Awesome All Purpose Cleaner & Degreasers & Spot Remover**

Date Issued : 1/10/11

COEFFICIENT OF WATER / OIL

Not available.

VOLATILE ORGANIC COMPOUNDS(VOCs)

< 2%

### SECTION 10 - STABILITY AND REACTIVITY

STABILITY

Stable

STABILITY - CONDITIONS TO AVOID

Not applicable

INCOMPATIBILITY

None known.

HAZARDOUS POLYMERIZATION

Will not occur.

HAZARDOUS POLYMERIZATION - CONDITIONS TO AVOID

Not applicable

### SECTION 11 - TOXICOLOGY INFORMATION (Also see Section 3)

LD50 (ACUTE ORAL TOX)

Not available.

LD 50 (ACUTE DERMAL TOX)

Not available.

LD50 (ACUTE INHALATION TOX)

Not available.

EFFECTS OF CHRONIC EXPOSURE

None known.

CARCINOGENICITY

None known.

REPRODUCTIVE TOXICITY

None known.

TERATOGENICITY

None known.

MUTAGENICITY

None known.

### SECTION 12 - ECOLOGICAL INFORMATION

ENVIRONMENTAL DATA

Contains readily degradable surfactants.

Material Safety Data Sheet

Name : **LA's Totally Awesome All Purpose Cleaner & Degreasers & Spot Remover**

Date Issued : 1/10/11

**SECTION 13 - DISPOSAL CONSIDERATIONS**

WASTE DISPOSAL INFORMATION

Waste from normal product use may be sewered to a publicly-owned treatment works (POTW) in compliance with applicable Federal / Provincial / State / Local / Municipal pretreatment requirements.

**SECTION 14 - TRANSPORTATION INFORMATION**

US DOT INFORMATION

Not applicable.

CANADIAN SHIPPING NAME

\_\_\_\_\_

TDG CLASSIFICATION

Non-regulated.

PIN/NIP

Not applicable

PACKING GROUP

Not applicable.

EXEMPTION NAME

Not applicable.

**SECTION 15 -REGULATORY INFORMATION**

WHIMS CLASSIFICATION

Not applicable

All ingredients of this product are listed or are excluded from listing on the U.S. Toxic Substances control Act (TSCA) Chemical Substance Inventory.

All ingredients in this product comply with the New Substances Notification requirements under the Canadian Environmental Protection Act (CEPA).

This product is not subject to the reporting requirements under the California's Proposition 65.

**SECTION 16 - OTHER INFORMATION**

ADDITIONAL INFORMATION

Use as directed.

EPA REGISTRATION #

Not applicable.

PREPARATION INFORMATION -

PREPARED BY

Manufacturer's Technical Support Department. Refer to page 1 (Manufacturer) for contact information.

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PRINT DATE : January 10,2011

3202 PLASTIC BOTTLE  
STK # 200018

Updated: August 1, 1990

MATERIAL SAFETY DATA SHEET

THE PURDUE FREDERICK COMPANY  
100 CONNECTICUT AVENUE  
NORWALK, CONNECTICUT 06856

EMERGENCY TELEPHONE NO.: 1-800-877-0123  
IN CT.: 203-853-0123

SECTION I:

CHEMICAL NAMES AND SYNONYMS: Povidone Iodine Solution USP, PVP-I  
TRADE NAME: Betadine Whirlpool Concentrate  
CHEMICAL FAMILY: Polymer  
FORMULA:  $(C_6H_9NO)_n \times I$   
CAS REGISTRY NO.: 25655-41-8

SECTION II: INGREDIENTS

| NAME                | %   | TLV | TOXICOLOGICAL DATA  |
|---------------------|-----|-----|---|
| Povidone Iodine USP | 10. | *   | Mouse, Oral LD <sub>50</sub> > 8100mg/kg. Rat, IV LD <sub>50</sub> > 640mg/kg |
| Purified Water      | 90  |     |   |

\*Not Established

SECTION III: PHYSICAL DATA

SPECIFIC GRAVITY: 25°C. 1.02  
pH: < 6.0  
APPEARANCE & ODOR: Reddish brown, clear liquid, faint odor

PC  
E.H  
NURSING  
ST. RM  
Radio/isy

page 2.

**MATERIAL SAFETY DATA SHEET****SECTION IV: FIRE AND EXPLOSION HAZARD DATA**

**FLASHING POINT (method used):** not flammable  
**FLAMMABLE LIMITS:** none  
**Lel: N/A** Uel N/A  
**EXTINGUISHING MEDIA:** N/A  
**SPECIAL FIRE FIGHTING PROCEDURES:** N/A  
**UNUSUAL FIRE AND EXPLOSION HAZARDS:** None

**SECTION V: HEALTH HAZARD DATA**

**THRESHOLD LIMIT VALUE:** This product is generally recognized as safe when used as a topical antimicrobial agent. Overexposure may cause local irritation to the skin. Elevated concentrations of iodide in the serum may occur if excessive amounts of iodine are absorbed through broken skin, burns or deep wounds. Iodine may also be absorbed through the lungs and from the gastrointestinal tract. High concentrations of iodide in the serum may produce alterations in thyroid function, renal disturbances, acidosis and electrolyte disturbances.

**EMERGENCY AND FIRST AID PROCEDURES**

**FOR EYES:** Immediately wash with running water for 5 minutes. Get medical attention if irritation persists.

**FOR SKIN:** Avoid prolonged contact with excess solution. If irritation develops, get medical attention.

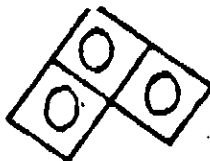
**FOR INGESTION:** If swallowed, DO NOT INDUCE VOMITING. Drink several glasses of water or milk. Get immediate medical attention.

**FOR INHALATION:** If fumes cause respiratory discomfort, move to fresh air. Get medical attention if respiratory discomfort persists.

SECTION VI: REACTIVITY DATA

**STABILITY:** Stable  
**STORAGE:** Store at room temperature  
**INCOMPATIBILITY:** Not stable toward reducing agents or strong alkalis  
**HAZARDOUS DECOMPOSITION PRODUCTS:** None  
**CONDITIONS TO AVOID:** None  
**CORROSIVE TO METAL:** Yes  
**TYPE:** Iron; can discolor gold or silver  
**OXIDIZER:** Yes

**NATIONAL FIRE PROTECTION ASSOCIATION (NFPA) RATING DEGREES OF HAZARD:**

SECTION VII: ENVIRONMENTAL DATA

**STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED:** Spills should be cleaned up as soon as possible; wash affected area with dilute ammonia or dilute sodium thio-sulfate and copious quantities of water.

**WASTE DISPOSAL METHOD:** Do not discharge into waterways or sewer systems. Neutralize with sodium thio-sulfate or ammonia solution prior to disposal.

**HAZARDOUS SUBSTANCE UNDER "SUPERFUND":** No

**HAZARDOUS WASTE, 40 CFR 261:** No

**HAZARDOUS WASTE NUMBER:** N/A

**CONTAINER DISPOSAL:** In similar manner as other plastic bottles

MATERIAL SAFETY DATA SHEETSECTION VIII: SPECIAL PROTECTION INFORMATION

**RESPIRATORY PROTECTION (Specify type):** Physiotherapists who remain in treatment room and experience discomfort should wear self contained breathing apparatus.

**VENTILATION:** Good ventilation will reduce potential for overexposure.

**LOCAL EXHAUST:** Recommended  
**MECHANICAL (general):** N/A

**SPECIAL:** N/A  
**OTHER:** N/A

**PROTECTIVE GLOVES:** N/A

**EYE PROTECTION:** N/A

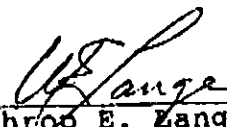
**OTHER PROTECTIVE EQUIPMENT:** N/A

SECTION IX: SPECIAL PRECAUTIONS

**PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING:** N/A

**OTHER PRECAUTIONS:** To prevent overexposure during use of Betadine Whirlpool Concentrate it is recommended that:  
 (1) Hydrotherapy tanks be covered as much as possible during patient use (2) Physiotherapists leave the room during treatment and (3) Betadine Whirlpool be used in the ratio specified in the labeling.

**SIGNATURE:**

  
 Winthrop E. Lange, Ph.D.

**TITLE:**

Director of Technical Services

"THE INFORMATION HEREIN IS GIVEN IN GOOD FAITH  
 BUT NO WARRANTY, EXPRESSED OR IMPLIED, IS MADE."



**MATERIAL SAFETY DATA SHEET**

**Ideal Stamp Ink (all colors)**

**Cosco 2000 Plus**

**Date of Preparation: January 11, 2006**

**SECTION 1 – CHEMICAL PRODUCT AND COMPANY IDENTIFICATION**

PRODUCT/CHEMICAL NAME: Ideal Stamp Ink (all colors)

GENERAL USE: Self inking stamp pads.

MANUFACTURER: M&R Marking Systems, Inc., 100 Springfield Ave., Piscataway, NJ 08855

EMERGENCY TELEPHONE NUMBER: (732) 562-9500

**SECTION 2 – COMPOSITION/INFORMATION ON INGREDIENTS**

| <b>COMPONENT</b>                  | <b>CAS NUMBER</b> | <b>ACGIH TWA</b>          | <b>OSHA PEL<br/>EXPOSURE LIMITS</b> |
|-----------------------------------|-------------------|---------------------------|-------------------------------------|
| <b>Ethylene Glycol</b><br><25.0%  | <b>107-21-1</b>   | <b>39 PPM (AS A MIST)</b> | <b>None listed.</b>                 |
| <b>Diethylene Glycol</b><br><6.0% | <b>111-46-6</b>   | <b>None Listed.</b>       | <b>None Listed.</b>                 |

No other ingredients identified by OSHA as hazardous are known to be present, or the ingredients present are below levels specified as hazardous by OSHA (29 CFR 1910.1200)

**SECTION 3 – HAZARDS IDENTIFICATION  
POTENTIAL HEALTH EFFECTS**

**ACUTE EFFECTS**

**INHALATION:** Room temperature vapors are minimal. At high temperatures, vapors may cause irritation to respiratory tract.

**EYE:** May cause irritation.

**SKIN:** May cause irritation or dermatitis.

**INGESTION:** Small amounts swallowed are not likely to cause serious injury. Large amounts may cause nausea, vomiting, intestinal distress, liver and/or kidney damage.

**CARCINOGENICITY:** IARC, NTP, and OSHA do not list any components of this product as a carcinogen.

**MEDICAL CONDITIONS AGGRAVATED BY LONG-TERM EXPOSURE:** Skin allergies, asthma, bronchitis and emphysema in susceptible individuals.

**CHRONIC EFFECTS OF OVEREXPOSURE:** Repeated skin contact may cause sensitization in some individuals.

*To help protect against expected or unforeseen irritations or reactions, wear all properly selected clothing and protective equipment as instructed in Section 8.*

**SECTION 4 – FIRST AID MEASURES**

**INHALATION:** If coughing, irritation or tightness in the chest is experienced, remove to fresh air. Get medical attention if symptoms persist. If not breathing, give artificial respiration. If breathing is difficult, give oxygen.

**EYE CONTACT:** Immediately wash the eyes with copious amounts of water, occasionally lifting the lower and upper eyelids. Continue for 15 minutes. If irritation persists, seek medical attention.

**SKIN CONTACT:** In case of skin contact, remove contaminated clothing and wash thoroughly with soap and water. Seek medical attention if rash develops. Launder contaminated clothing before reuse.

**INGESTION:** If victim is conscious and alert, give two to four cupfuls of water and immediately induce vomiting. Never give anything by mouth to an unconscious person. Contact physician immediately.

*After first aid, get appropriate in-plant, paramedic, or community medical support.*

## SECTION 5 – FIRE-FIGHTING MEASURES

**FLASH POINT:** None

**POINT METHOD:** Pensky-Martens Closed Cup

**FLAMMABILITY CLASSIFICATION:** Non-Flammable, Non-Combustible

**EXTINGUISHING MEDIA:** Dry chemical, and Carbon Dioxide Foam

**UNUSUAL FIRE OR EXPLOSION HAZARDS:** None

**FIRE-FIGHTING INSTRUCTIONS:** Fire fighters should wear self-contained breathing apparatus.

Do not release runoff from fire control methods to sewers or waterways.

**FIRE-FIGHTING EQUIPMENT:** As in any fire, wear a self-contained breathing apparatus (SCBA) with a full facepiece operated in pressure-demand or positive-pressure mode.

## SECTION 6 – ACCIDENTAL RELEASE MEASURES

**SPILL/LEAK PROCEDURES:** Dike and contain spill; absorb or scrape up excess into suitable container for disposal. Stop or reduce discharge if it can be done safely. Do not allow to enter waterways.

**REGULATORY REQUIREMENTS:** Follow applicable OSHA regulations (29 CFR 1910-120).

## SECTION 7 – HANDLING AND STORAGE

**HANDLING PRECAUTIONS:** Minimize breathing of vapors and avoid prolonged or repeated contact with skin. Wear proper protective equipment. If ventilation is not sufficient, wear proper respiratory equipment. Use good general housekeeping procedures. Wash hands after handling.

**STORAGE REQUIREMENTS:** Store in cool, dry, well-ventilated area away from sunlight. Protect from freezing during shipping and storage. Keep away from sources of ignition.

## SECTION 8 – EXPOSURE CONTROLS/PERSONAL PROTECTION

### ENGINEERING CONTROLS

**VENTILATION:** Provide general or local exhaust ventilation systems. Local exhaust ventilation is preferred because it prevents contaminant dispersion into the work area by controlling it at its source.

**RESPIRATORY PROTECTION:** Respiratory protection is not required under normal conditions of general or local ventilation. If respirators are used, seek professional advice prior to respirator selection and use. Follow OSHA respirator regulations (29 CFR 1910.133) and, if necessary, wear an MSHA/NIOSH-approved respirator. Select respirator based on its suitability to provide adequate worker protection for given working conditions, level of airborne contamination, and presence of sufficient oxygen. If respirators are used, OSHA required a written respiratory protection program that includes at least: medical certification, training, fit testing, periodic environmental monitoring, maintenance, inspection, cleaning, and convenient, sanitary storage areas.

**PROTECTIVE CLOTHING/EQUIPMENT:** Wear chemically protective gloves to prevent prolonged or repeated skin contact. Wear protective eyeglasses or chemical safety goggles, per OSHA eye-and face-protection regulations (29 CFR 1910-133). Contact lenses are not eye protective devices. Appropriate eye protection must be worn instead, of, or in conjunction with contact lenses.

**COMMENTS:** Emergency showers and eyewash stations should be made available. Never eat, drink, or smoke in work areas. Practice good personal hygiene after using this material, especially before eating, drinking, smoking, using the toilet, or applying cosmetics.

## SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

**PHYSICAL STATE:** Liquid

**APPEARANCE:** Pigmented

**ODOR:** No odor

**VAPOR PRESSURE:** <0.1 mm

**WATER SOLUBILITY:** Soluble in water

**BOILING POINT:** >250 DEGREE f (121C)

**FREEZING/MELTING POINT:** None

**VISCOSITY (25 DEG):** 15-30 CENTIPOIS

**Specific gravity (25 degree C): 1.1**

**EVAPORATION RATE:** <butyl acetate

## **SECTION 10 – STABILITY AND REACTIVITY**

**STABILITY:** This product is stable at room temperature in closed containers under normal storage and handling conditions.

**POLYMERIZATION:** Hazardous polymerization can not occur.

**CHEMICAL INCOMPATIBILITIES:** Strong acids, bases, oxidizers and reducing agents.

**CONDITIONS TO AVOID:** Extremely high or low temperatures: open flames.

**THERMAL DECOMPOSITION PRODUCTS:** Carbon monoxide and carbon dioxide

## **SECTION 11 – TOXICOLOGICAL INFORMATION**

**ACUTE INHALATION EFFECTS:** Human, inhalation, TCL: Not Determined

**ACUTE INGESTION EFFECTS:** Not Determined

**REPRODUCTIVE TOXICITY:** None established

**MUTAGENICITY:** None Est.

**TERATOGENICITY:** None est.

**SENSITIZATION:** None est.

## **SECTION 12 – ECOLOGICAL INFORMATION**

**ECOTOXICITY:** None Established

**ENVIRONMENTAL FATE:** None Established

**SOIL ABSORPTION/MOBILITY:** None Established

## **SECTION 13 – DISPOSAL CONSIDERATIONS**

**DISPOSAL:** This material must be disposed of in accordance with applicable federal, state and local regulations.

## **SECTION 14 – TRANSPORT INFORMATION**

**DOT**

Not classified

**IATA**

Not classified

**IMDG**

Not classified

## **SECTION 15 – REGULATORY INFORMATION**

### **EPA REGULATIONS**

**RCRA HAZARDOUS WASTE NUMBER:** None listed.

**CERCLA HAZARDOUS SUBSTANCE:** None listed.

**SARA EHS:** None listed.

**TSCA INVENTORY STATUS (40 CFR 710):** All components of this formulation are listed in the TSCA Inventory.

### **STATE REGULATIONS**

**CALIFORNIA PROPOSITION 65:** This product **does not contain** chemicals, which the State of California has found to cause cancer, birth defects or other reproductive harm.

## **SECTION 16 – OTHER INFORMATION**

**PREPARED BY:** Alexander R. Veress

**TITLE:** Technical Director, Research and Development

**DISCLAIMER:** the information furnished herein is believed to be accurate as of the version date and represents the best data currently available to M&R Marking Systems, Inc. However, no warranty is expressed or implied regarding the accuracy of the data and M&M Marking Systems, Inc. assumes no legal responsibility or liability resulting from use. Such data is offered solely for your consideration, investigation and verification.

## SAFETY DATA SHEET

|                      |                                |                        |                   |
|----------------------|--------------------------------|------------------------|-------------------|
| <b>MSDS Number:</b>  | 25, REV I<br>PITNEY BOWES INC. | <b>Effective Date:</b> | September 6, 1990 |
|                      |                                | <b>Revised Date:</b>   | May 18, 2010      |
| <b>Product Name:</b> | EZ Seal Solution               | <b>Page:</b>           | 1 of 4            |

|   |  |   |  |
|---|--|---|--|
| <b>SECTION 1 – IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING</b> |  |   |  |
| <b>Product Name:</b>  | EZ Seal Solution   |   |  |
| <b>Reorder Number:</b>  | 600-0, 601-0, 601-2, 601-5, 601-7, 601-9, 602-0, 602-7, 603-1, 603-2, 604-0, 604-1, 604-2, 605-0, 606-0, 607-0, 607-5, 608-0, SV92276, SV92278 |   |  |
| <b>Manufacturer:</b>  | Pitney Bowes Inc.  |   |  |
| <b>Address and Phone:</b>   | 1 Elmcroft Road<br>Stamford, CT 06926-0700<br>United States<br>800-243-7824  | Pitney Bowes Ltd<br>The Pinnacles<br>Harlow<br>Essex, CM19 5BD<br>+44(0) 8705 252 525 |  |
| <b>Emergency/Chemtrec:</b>  | 800-424-9300<br><i>North America</i>   | 00-1-703-527-3887<br><i>International (collect call)</i>                              |  |
| <b>For SDS Copies:</b>  | <a href="http://www.pb.com">www.pb.com</a> (go to search)  |   |  |
| <b>For Additional Information:</b>  | Email: <a href="mailto:ehs@pb.com">ehs@pb.com</a>  |   |  |
| <b>Product Use:</b>   | Sealing Solution for Mail Machines   |   |  |
| <b>MSDS Prepared By:</b>  | Chemical Review Board  |   |  |
| <b>WHMIS Reviewed</b>   | May 18, 2010   |   |  |

|  |  |
|--|--|
| <b>SECTION 2 – HAZARDS IDENTIFICATION</b>          |  |
| <b>Emergency Overview:</b>                         | Transparent blue liquid with no odor. This product is not combustible. Direct eye contact may cause mild discomfort. Not toxic by inhalation, skin contact or ingestion. |
| <b>EU Preparation Classification (1999/45/EC):</b> | Not Classified as Dangerous  |

| <b>SECTION 3 – COMPOSITION/INFORMATION ON INGREDIENTS</b>                                 |                    |     |  |
|---|--------------------|-----|--|
| INGREDIENT NAME   | CAS NO./EINECS NO. | %   | EC SUBSTANCE CLASSIFICATION (67/548/EEC) |
| Non-Hazardous Ingredients   | Mixture            | 100 | Not Applicable                           |
| This product is not hazardous as defined in international standards for workplace safety. |                    |     |  |

|                                       |   |
|---------------------------------------|---|
| <b>SECTION 4 – FIRST AID MEASURES</b> |   |
| <b>Eyes:</b>                          | Flush with plenty of running water for 15 minutes, holding eye lids open to assure thorough rinsing. Get medical attention if irritation persists.    |
| <b>Skin:</b>                          | Wash with soap and water.   |
| <b>Ingestion:</b>                     | If swallowed, DO NOT induce vomiting. Never give fluids or induce vomiting if the victim is unconscious or having convulsions. Get medical attention. |
| <b>Inhalation:</b>                    | Not an expected route of entry. If symptoms occur, remove person to fresh air. If irritation or pulmonary symptoms develop, consult a physician.      |

## SAFETY DATA SHEET

|                      |                                |                        |                   |
|----------------------|--------------------------------|------------------------|-------------------|
| <b>MSDS Number:</b>  | 25, REV H<br>PITNEY BOWES INC. | <b>Effective Date:</b> | September 6, 1990 |
| <b>Product Name:</b> | EZ Seal Solution               | <b>Revised Date:</b>   | May 18, 2010      |
|                      |                                | <b>Page:</b>           | 2 of 4            |

### SECTION 5 – FIRE FIGHTING PROCEDURES

|   |   |
|---|---|
| <b>Extinguishing Media:</b>                                   | Use any media that is appropriate to the surrounding fire.  |
| <b>Fire Fighting Instructions:</b>                            | Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes. Cool fire exposed containers with water. |
| <b>Unusual Fire and Explosion Hazards:</b>                    | None.   |
| <b>Known or Anticipated Hazardous Products of Combustion:</b> | None known.   |

### SECTION 6 – ACCIDENTAL RELEASE MEASURES

|                                     |   |
|-------------------------------------|---|
| <b>Accidental Release Measures:</b> | Wipe up and place into a container for disposal.                                  |
| <b>Personal Precautions:</b>        | Avoid contact with eyes.  |
| <b>Environmental Precautions:</b>   | No special precautions are needed.  |
| <b>Methods for Cleanup:</b>         |   |
| <b>Large Spill:</b>                 | Collect with absorbent material and place into a suitable container for disposal. |
| <b>Small Spill:</b>                 | Wipe up and place into a container for disposal.                                  |

### SECTION 7 – HANDLING AND STORAGE

|                           |  |
|---------------------------|--|
| <b>Handling:</b>          | Avoid contact with eyes. Wash hands after use. |
| <b>Storage:</b>           | Keep out of the reach of children.             |
| <b>Other Precautions:</b> | None required.                                 |

### SECTION 8 - EXPOSURE CONTROLS & PERSONAL PROTECTION

|                                      |                  |
|--------------------------------------|------------------|
| <b>Occupational Exposure Limits:</b> |                  |
| Non-Hazardous Ingredients            | None Established |

|  |                             |
|--|-----------------------------|
| <b>Engineering Controls:</b>                   | None required.              |
| <b>Ventilation Requirements:</b>               | General office ventilation. |
| <b>Personal Protective Equipment:</b>          |                             |
| <b>Eye/Face Protection:</b>                    | Avoid contact with eyes.    |
| <b>Skin Protection:</b>                        | None normally required.     |
| <b>Respiratory Protection:</b>                 | None required.              |
| <b>Other Protective Clothing or Equipment:</b> | None required.              |

### SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

|   |                                       |
|---|---------------------------------------|
| <b>Appearance:</b>                          | Transparent blue liquid with no odor. |
| <b>Boiling Point:</b>                       | >93.33°C (>200°F)                     |
| <b>Color:</b>                               | Blue                                  |
| <b>Freezing Point:</b>                      | Not determined                        |
| <b>Octanol/Water Partition Coefficient:</b> | Not determined                        |
| <b>Odor:</b>                                | No odor                               |

## SAFETY DATA SHEET

|                      |                                |                        |                   |
|----------------------|--------------------------------|------------------------|-------------------|
| <b>MSDS Number:</b>  | 25, REV H<br>PITNEY BOWES INC. | <b>Effective Date:</b> | September 6, 1990 |
| <b>Product Name:</b> | EZ Seal Solution               | <b>Revised Date:</b>   | May 18, 2010      |
|                      |                                | <b>Page:</b>           | 3 of 4            |

### SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

|   |                |
|---|----------------|
| <b>Percent Volatile:</b>                      | >99%           |
| <b>pH Value:</b>                              | Not determined |
| <b>Solubility in Water:</b>                   | Infinite       |
| <b>Specific Gravity or Density (Water=1):</b> | 1.002          |
| <b>Vapor Density:</b>                         | 1.0            |
| <b>Vapor Pressure:</b>                        | Not determined |
| <b>Volatile Organic Compounds:</b>            | Not determined |
| <b>Flammable Limits in Air (% by Volume):</b> | Not determined |
| <b>Flash Point:</b>                           | Not flammable  |
| <b>Autoignition Temperature:</b>              | Not determined |

### SECTION 10 – STABILITY AND REACTIVITY

|  |                 |
|--|-----------------|
| <b>Stability:</b>                            | Stable          |
| <b>Incompatibility With Other Materials:</b> | None.           |
| <b>Hazardous Decomposition Products:</b>     | None.           |
| <b>Hazardous Polymerization:</b>             | Will not occur. |

### SECTION 11 – TOXICOLOGICAL INFORMATION

|   |   |
|---|---|
| <b>Relevant Routes of Exposure:</b>                         | Not applicable  |
| <b>Potential Health Effects:</b>                            |   |
| <b>Eyes:</b>  | May cause mild discomfort.  |
| <b>Skin:</b>  | None adverse effects expected.  |
| <b>Ingestion:</b>   | No adverse effects expected. This product is not acutely toxic by ingestions.   |
| <b>Inhalation:</b>  | No adverse effects expected. This product is not acutely toxic by inhalation.   |
| <b>Medical Conditions Generally Aggravated By Exposure:</b> | None.   |
| <b>Carcinogenicity:</b>                                     | None of the components of this product are classified as carcinogens by IARC, OSHA, NTP, ACGIH, or the EU Directives. |

### Acute Toxicity Data

| VALUE              | ANIMAL | ROUTES | COMPONENTS |
|--------------------|--------|--------|------------|
| LD50: >5,000 mg/kg | Rat    | Oral   | Product    |

### SECTION 12 - ECOLOGICAL INFORMATION

|                                |                   |
|--------------------------------|-------------------|
| <b>Ecological Information:</b> | No data available |
|--------------------------------|-------------------|

### SECTION 13 - DISPOSAL CONSIDERATIONS

|                                 |  |
|---------------------------------|--|
| <b>Disposal Considerations:</b> | Dispose in accordance with local, state or provincial and federal or national regulations. |
|---------------------------------|--|

## SAFETY DATA SHEET

|                      |                                |                        |                   |
|----------------------|--------------------------------|------------------------|-------------------|
| <b>MSDS Number:</b>  | 25, REV H<br>PITNEY BOWES INC. | <b>Effective Date:</b> | September 6, 1990 |
| <b>Product Name:</b> | EZ Seal Solution               | <b>Revised Date:</b>   | May 18, 2010      |
|                      |                                | <b>Page:</b>           | 4 of 4            |

### SECTION 14 - TRANSPORT INFORMATION

Not regulated for transportation under IATA/ICAO, IMDG, US DOT, EU ADR, or Canadian TDG Regulations.

### SECTION 15 - REGULATORY INFORMATION

|                                |   |
|--------------------------------|---|
| <b>EU Regulations:</b>         | All of the components are listed on the EINECS inventory.   |
| <b>EU Labeling:</b>            | None Required   |
| <b>German WGK:</b>             | Not determined  |
| <b>Canadian Regulations:</b>   | Canada: Not a controlled product.<br>All of the components are listed in the Canadian DSL.  |
| <b>Japanese Regulations:</b>   | All of the components are listed on the METI inventory.   |
| <b>Australian Regulations:</b> | All of the components are listed in the AICS inventory.   |
| <b>US Federal Regulations:</b> | This product contains chemical or chemical compounds listed in the following SARA Title III categories:<br>Extremely Hazardous Substances (302): None<br>Toxic Chemical Release Reporting (313): None<br>SARA 311/312 Hazards: None<br>TSCA: All the components of this product are listed in the EPA TSCA Inventory. |
| <b>US State Regulations:</b>   | This product contains no chemicals subject to California Propositions 65.   |

### SECTION 16 - OTHER INFORMATION

|  |  |
|--|--|
| <b>NFPA Codes:</b>   | <b>Health: 0 Fire: 0 Reactivity: 0</b> |
| <b>HMIS Codes:</b>   | <b>Health: 0 Fire: 0 Reactivity: 0</b> |
| <b>EU Classes and Risk Phrases for Reference (See Sections 2 and 3):</b> | None                                   |
| <b>Other Information:</b>  | Keep out of reach of children.         |



**STAPLES BRAND CORRECTION  
TAPE (OOPS!)**

**MATERIAL SAFETY DATA SHEET**

NAME OF PRODUCT : Correction Tape

CE Item # CEB40144

MSDS Rev.DATE: 9/18/2007

---

**SECTION 1: PRODUCT AND COMPANY IDENTIFICATION**

---

PRODUCT NAME: CORRECTION TAPE  
SYNONYMS: PEN-STYLE CORRECTION TAPE  
PRODUCT CODES:

MANUFACTURER: Dongkee Enterprise Co.,Ltd  
DIVISION:  
ADDRESS: 140-14, Songhyun-Dong, Dong-Ku, Incheon, Korea

EMERGENCY PHONE: 82-32-582-8042  
CHEMTREC PHONE:  
OTHER CALLS: 82-32-582-8154  
FAX PHONE: 82-32-582-8154

CHEMICAL NAME:  
CHEMICAL FAMILY:  
CHEMICAL FORMULA:

PRODUCT USE: Correcting mistakes during typing , handwriting or in some forms  
PREPARED BY: DongKee

SECTION 1 NOTES:

---

**SECTION 2: COMPOSITION/INFORMATION ON INGREDIENTS**

---

| <u>INGREDIENT:</u> | <u>CAS NO.</u> | <u>% WT</u> | <u>% VOL</u> | <u>SARA 313 REPORTABL</u> |
|--------------------|----------------|-------------|--------------|---------------------------|
| Silica io2         | 7631-86-9      | 1           |              |                           |
| Titanium dioxide   | 13463-67-7     | 22          |              |                           |
| Magnesite          | 546-93-0       | 8           |              |                           |
| Resins             |                | 10          |              |                           |
| Additive           |                | 1           |              |                           |
| Separator          |                | 58          |              |                           |

ppm      mg/m3

OSHA PEL-TWA:  
OSHA PEL STEL :  
OSHA PEL CEILING:

ACGIH TLV-TWA:  
ACGIH TLV STEL:  
ACGIH TLV CEILING:

SECTION 2 NOTES:

---

**SECTION 3: HAZARDS IDENTIFICATION**

---

EMERGENCY OVERVIEW: THIS PRODUCT IS CONSIDERED SAFE UNDER NORMAL USE CONDITION

ROUTES OF ENTRY: N/A

POTENTIAL HEALTH EFFECTS

EYES: THIS PRODUCT IS CONSIDERED SAFE UNDER NORMAL USE CONDITION  
SKIN: THIS PRODUCT IS CONSIDERED SAFE UNDER NORMAL USE CONDITION  
INGESTION: THIS PRODUCT IS CONSIDERED SAFE UNDER NORMAL USE CONDITION  
INHALATION: THIS PRODUCT IS CONSIDERED SAFE UNDER NORMAL USE CONDITION

ACUTE HEALTH HAZARDS: NONE

CHRONIC HEALTH HAZARDS: NONE

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE: NO DATA AVAILABLE

CARCINOGENICITY

OSHA:      ACGIH:      NTP:      IARC:

OTHER:

SECTION 3 NOTES: THIS PRODUCT IS CONSIDERED SAFE UNDER NORMAL CONDITIONS

---

## SECTION 4: FIRST AID MEASURES

---

EYES: GENTLY LRINSE THE AFFECTED EYES WITH CLEAN WATER AND CONSULT A DOCTOR PROMPTLY

SKIN: WASH THE AFFETIVE SKIN AREAS UNDER RUNNING WATER USING A MILD SOAP

INGESTION: NOT APPLICABLE

INHALATION: NOT APPLICABLE

NOTES TO PHYSICIANS OR FIRST AID PROVIDERS:

SECTION 4 NOTES: THIS PRODUCT IS CONSIDERED SAFE UNDER NORMAL CONDITIONS

---

## SECTION 5: FIRE-FIGHTING MEASURES

---

FLAMMABLE LIMITS IN AIR, UPPER: N/A  
(% BY VOLUME) LOWER:

FLASH POINT: N/A

F:

C:

METHOD USED:

AUTOIGNITION TEMPERATURE: N/A

|F:

C:

NFPA HAZARD CLASSIFICATION

HEALTH: FLAMMABILITY: REACTIVITY:

OTHER:

HMIS HAZARD CLASSIFICATION

HEALTH: FLAMMABILITY: REACTIVITY:

PROTECTION:

EXTINGUISHING MEDIA: WATER MIST, DRY CHEMICAL, FORM, CO2 GAS

SPECIAL FIRE FIGHTING PROCEDURES: NONE

UNUSUAL FIRE AND EXPLOSION HAZARDS: NONE

HAZARDOUS DECOMPOSITION PRODUCTS: NONE

SECTION 5 NOTES:

---

## SECTION 6: ACCIDENTAL RELEASE MEASURES

---

ACCIDENTAL RELEASE MEASURES: NORMAL CLEAN UP

SECTION 6 NOTES:

---

## SECTION 7: HANDLING AND STORAGE

---

HANDLING AND STORAGE: STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED0

OTHER PRECAUTIONS: AVOID SUNSHINE, HUMID CONDITION AND ALL IGNITIOIN SOURCES.  
DO NOT STORE NEAR HEATERS OR OTHER SOURCES OF HEAT

SECTION 7 NOTES:

NO SPECIAL HANDLING AND STORAGE REQUIREMENTS

---

## SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

---

ENGINEERING CONTROLS: ACGH TLV : NOT ESTABLISHED, OSHA : NOT ESTABLISHED

VENTILATION : N/A

RESPIRATORY PROTECTION: NONE

EYE PROTECTION: N/A

SKIN PROTECTION: DESIRABLE IN SOME CASE

OTHER PROTECTIVE CLOTHING OR EQUIPMENT: N/A

WORK HYGIENIC PRACTICES: NONE

EXPOSURE GUIDELINES:

SECTION 8 NOTES:

---

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

---

APPEARANCE: WHITE FLIM

ODOR:NO ODOR

PHYSICAL STATE:

pH AS SUPPLIED: N/A

pH (Other):

BOILING POINT:

F:

C:

MELTING POINT: N/A

F:

C:

FREEZING POINT: N/A

F:

C:

VAPOR PRESSURE (mmHg): N/A

@

F:

C:

VAPOR DENSITY (AIR = 1): N/A

@

F:

C:

SPECIFIC GRAVITY (H<sub>2</sub>O = 1): N/A

@

F:

C:

EVAPORATION RATE: N/A

BASIS (=1):

SOLUBILITY IN WATER: NEGLIGIBLE

PERCENT SOLIDS BY WEIGHT: N/A

PERCENT VOLATILE: N/A

BY WT/

BY VOL @

F:

C:

VOLATILE ORGANIC COMPOUNDS (VOC): N/A

WITH WATER: LBS/GAL

WITHOUT WATER: LBS/GAL

MOLECULAR WEIGHT: N/A

VISCOSITY:

@

F:  
C:

SECTION 9 NOTES:

---

## SECTION 10: STABILITY AND REACTIVITY

---

STABLE      UNSTABLE  
STABILITY: STABLE

CONDITIONS TO AVOID (STABILITY): N/A

INCOMPATIBILITY (MATERIAL TO AVOID) N/A

HAZARDOUS DECOMPOSITION OR BY-PRODUCTS: WILL NOT OCCUR

HAZARDOUS POLYMERIZATION: WILL NOT OCCUR

CONDITIONS TO AVOID (POLYMERIZATION): N/A

SECTION 10 NOTES:

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## SECTION 11: TOXICOLOGICAL INFORMATION

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TOXICOLOGICAL INFORMATION: NEGATIVE IN THE AMES TEST

SECTION 11 NOTES:

---

## SECTION 12: ECOLOGICAL INFORMATION

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ECOLOGICAL INFORMATION: N/A

SECTION 12 NOTES:  
THIS SUBSTANCE IS NOT BIODEGRADABLE

---

## SECTION 13: DISPOSAL CONSIDERATIONS

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WASTE DISPOSAL METHOD:  
DISPOSAL IN ACCORDANCE WITH LOCAL, STATE AND FEDERAL REGULATIONS

RCRA HAZARD CLASS:

SECTION 13 NOTES:

---

## SECTION 14: TRANSPORT INFORMATION

---

U.S. DEPARTMENT OF TRANSPORTATION  
PROPER SHIPPING NAME:  
HAZARD CLASS:  
ID NUMBER:  
PACKING GROUP:  
LABEL STATEMENT:

WATER TRANSPORTATION  
PROPER SHIPPING NAME:  
HAZARD CLASS:  
ID NUMBER:  
PACKING GROUP:  
LABEL STATEMENTS:

AIR TRANSPORTATION  
PROPER SHIPPING NAME:

HAZARD CLASS:  
ID NUMBER:  
PACKING GROUP:  
LABEL STATEMENTS:

OTHER AGENCIES:

SECTION 14 NOTES:  
NOT REGULATED AS A HAZARDOUS MATERIAL. NO SPECIAL.

---

## SECTION 15: REGULATORY INFORMATION

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U.S. FEDERAL REGULATIONS  
TSCA (TOXIC SUBSTANCE CONTROL ACT):

CERCLA (COMPREHENSIVE RESPONSE COMPENSATION, AND LIABILITY ACT):

SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT):  
311/312 HAZARD CATEGORIES:  
313 REPORTABLE INGREDIENTS:

STATE REGULATIONS:

INTERNATIONAL REGULATIONS:

SECTION 15 NOTES:  
ENSURE THAT THIS SUBSTANCE IS IN CONFORMITY TO YOUR COUNTRY REQUIREMENTS AND LOCAL REGULATION

---

## SECTION 16: OTHER INFORMATION

---

OTHER INFORMATION:

PREPARATION INFORMATION:

DISCLAIMER:  
THE INFORMATION IN THE MSDS WAS OBTAINED FROM SOURCES WHICH WE BELIEVE ARE RELIABLE. HOWEVER, THE INFORMATION IS PROVIDED WITHOUT ANY WARRANTY, EXPRESS OR IMPLIED, REGARDING ITS CORRECTNESS.

THE CONDITIONS OR METHODS OF HANDLING, STORAGE, USE AND DISPOSAL OF THE PRODUCT ARE BEYOND OUR CONTROL AND MAY BE BEYOND OUR KNOWLEDGE. FOR THIS AND OTHER REASONS, WE DO NOT ASSUME RESPONSIBILITY AND EXPRESSLY DISCLAIM FOR LOSS, DAMAGE OR EXPENSE ARISING OUT OF OR IN ANY WAY CONNECTED WITH THE HANDLING, STORAGE, USE OR DISPOSAL OF THE PRODUCT.

THIS MSDS WAS PREPARED AND BE USED ONLY FOR THIS PRODUCT. IF THE PRODUCT IS USED AS A COMPONENT IN ANOTHER PRODUCT, THIS MSDS INFORMATION MAY NOT BE APPLICABLE.



# Material Safety Data Sheet

## Section 1: CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name/ Trade Name: OxiClean Active Stain Remover for Carpet  
HMIS codes: H 0, F 0, R 0, P ND

Supplier: Orange Glo International  
PO Box 3998  
Littleton, CO 80110 USA

MSDS preparation date: 12/30/03  
By: Eileen Koop

MSDS Revision date:  
MSDS Reviewed:

Emergency Phone: 303-740-1909  
Poison Control (US): 1-800-222-1222  
Transportation emergencies: ChemTrec 800-424-9300

Information Phone: 303-740-1909

## Section 2: COMPOSITION/INFORMATION ON INGREDIENTS

General Description: Multiple Purpose Carpet Stain Remover

Hazardous Ingredients:

*Ingredients not precisely identified are proprietary or nonhazardous*

| CAS #      | Chemical name                       | %'age range |
|------------|-------------------------------------|-------------|
| 7722-84-1  | Hydrogen Peroxide                   | 2 to 4      |
| 34590-94-8 | Dipropylene Glycol Monomethyl Ether | 2 to 5      |
|            |                                     |             |
|            |                                     |             |

## Section 3: HAZARDS IDENTIFICATION

*This product is a consumer product. To the extent the product is used in a fashion typical to that of a consumer, protective measures, with the exception of those indicated on the label, are not normally necessary. Where use conditions and/or extent and duration of exposure differ from typical consumer use, however, appropriate protective measures to prevent eye and prolonged skin contact (glasses, goggles, rubber gloves, protective clothing) and minimize inhalation exposure (engineering controls, NIOSH-approved respiratory protection appropriate for the hazard presented) are recommended.*

General:  
Emergency:  
Primary Route(s) of Entry: Eyes, Ingestion, Skin  
Effects of Overexposure-  
Inhalation: Not expected with normal use conditions.  
Effects of Overexposure-  
Ingestion: Irritation to blistering of mucosal membranes. Pain, vomiting, diarrhea, CNS depression.  
Effects of Overexposure-Eyes: Irritation, pain on brief exposure, corneal damage on extended exposure.  
Effects of Overexposure-Skin: No adverse effects expected on intact skin. Contact on a burn or other wound likely to cause stinging pain or irritation. Extended exposure may discolor skin, temporarily.

# Material Safety Data Sheet

Effects of Overexposure-Chronic Not expected.  
 Hazards:

|                   |                           |
|-------------------|---------------------------|
| <b>Section 4:</b> | <b>FIRST AID MEASURES</b> |
|-------------------|---------------------------|

- Skin: Not expected to require first aid measures. Wash exposed area promptly with soap and water, consult physician if irritation develops.
- Eyes: Immediately flush eyes with cool running water for at least 15 minutes, being sure to get under the eyelid. Get medical attention at once.
- Ingestion: Do not induce vomiting. Have only conscious individuals drink several glasses of water to dilute. Get medical attention.
- Inhalation: Not expected to require first aid measures. If individual has discomfort, remove to fresh air environment.

|                   |                               |
|-------------------|-------------------------------|
| <b>Section 5:</b> | <b>FIRE FIGHTING MEASURES</b> |
|-------------------|-------------------------------|

|   |  |                        |     |                        |     |
|---|--|------------------------|-----|------------------------|-----|
| Flashpoint and method used:                 | N/A  | Flammable limit: (LEL) | N/A | Flammable limit: (UEL) | N/A |
| Auto-ignition temperature:                  | N/A  |                        |     |                        |     |
| Extinguishing media:                        | Use any means suitable for surrounding fire.                         |                        |     |                        |     |
| Special fire-fighting protective equipment: | Always fight chemical fires with self contained breathing apparatus. |                        |     |                        |     |
| Unusual fire and explosion hazards:         | Not expected.  |                        |     |                        |     |
| Explosion data:                             | No explosion hazard expected.  |                        |     |                        |     |

|                   |                                    |
|-------------------|------------------------------------|
| <b>Section 6:</b> | <b>ACCIDENTAL RELEASE MEASURES</b> |
|-------------------|------------------------------------|

|                                |  |
|--------------------------------|--|
| Personal protective equipment: | None required  |
| Material release or spill:     | Small amounts may be rinsed to drain. Large spills should be ventilated, then absorbed on commercial material such as vermiculite. Do not use combustible absorbent, such as saw dust. |
| Other:                         |  |

|                   |                             |
|-------------------|-----------------------------|
| <b>Section 7:</b> | <b>HANDLING AND STORAGE</b> |
|-------------------|-----------------------------|

|  |   |
|--|---|
| Storage:                                 | Store in cool, ventilated area, away from light exposure. |
| Precautions during handling and storage: | Keep from eyes.   |

|                   |  |
|-------------------|--|
| <b>Section 8:</b> | <b>EXPOSURE CONTROLS/PERSONAL PROTECTION</b> |
|-------------------|--|



# Material Safety Data Sheet

Exposure limits: Hydrogen Peroxide, OSHA TWA, ACGIH TLV = 1 ppm

Engineering controls: N/A

Eye protection: Splash proof safety glasses.

Protective clothing: Impermeable gloves for more than incidental product use.

Respiratory protection: N/A

Other PPE: N/A

## Section 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Nearly colorless thin liquid

Odor: Very slight ammonia/ethereal

Physical state: Liquid

Boiling point: N/D

Vapor Pressure: N/D

Solubility in water: Complete

pH: 8.3

Melting point: N/A

% volatile by volume: N/A

Partition coefficient: N/D

Coefficient of water/oil distribution: N/D

Vapor density: N/D

Evaporation rate: N/D

Viscosity: N/A

Specific Gravity: 1.017

Cloud point: N/D

Freezing point: N/D

## Section 10: STABILITY AND REACTIVITY

Stability: Stable under ordinary conditions of storage and use.

Incompatibility: Do not contaminate product. Metals and their salts, and alkali materials are especially bad.

Conditions to avoid: High temperatures, contaminants.

Hazardous decomposition: Oxygen evolves from contaminated material. Can accordingly build significant pressure in containers, with possible rupture. Oxygen evolved can support nearby combustion.

Hazardous polymerization: None.

## Section 11: TOXICOLOGICAL PROPERTIES

Acute oral toxicity: ND

Carcinogenicity: Hydrogen Peroxide IARC category 3

Reproductive toxicity/ Teratogenicity: No components listed.

Mutagenicity: ND

Toxicologically synergistic products: None known.

## Section 12: ECOLOGICAL INFORMATION

Persistence and degradation: Not Established. All components are Readily Biodegradeable.

Toxicity: ND

Other:





# Material Safety Data Sheet

|                    |                                |
|--------------------|--------------------------------|
| <b>Section 13:</b> | <b>DISPOSAL CONSIDERATIONS</b> |
|--------------------|--------------------------------|

Disposal method: Rinse small amounts to drain (sewer).  
Container disposal: Rinse thoroughly, recycle if possible, otherwise landfill.

|                    |                              |
|--------------------|------------------------------|
| <b>Section 14:</b> | <b>TRANSPORT INFORMATION</b> |
|--------------------|------------------------------|

|                                  |                             |                     |     |
|----------------------------------|-----------------------------|---------------------|-----|
| DOT proper shipping name:        | Not regulated               | DOT technical name: | N/A |
| DOT Hazard class:                | N/A                         | Hazard subclass:    | N/A |
| UN Number, proper shipping name: | N/A                         | Packing group:      | N/A |
| Other Transport information:     | Not hazardous for transport |                     |     |

|                    |                               |
|--------------------|-------------------------------|
| <b>Section 15:</b> | <b>REGULATORY INFORMATION</b> |
|--------------------|-------------------------------|

|                                |  |
|--------------------------------|--|
| TSCA:                          | All components listed.   |
| DSL:                           | All components listed.   |
| OSHA Haz Com 29 CFR 1910.1200: | MSDS prepared pursuant to the Hazard Communication Standard (29 CFR 1910.1200) |
| WHMIS Classification:          | D2B - eye irritant   |
| CERCLA and SARA:               | No listed components.  |

|                    |                          |
|--------------------|--------------------------|
| <b>Section 16:</b> | <b>OTHER INFORMATION</b> |
|--------------------|--------------------------|

% Volatile Organic Compounds (VOCs) < 1%

|         |                     |                      |                     |
|---------|---------------------|----------------------|---------------------|
| Legend: | N.D. Not Determined | N.E. Not Established | N.A. Not Applicable |
|---------|---------------------|----------------------|---------------------|

*The information provided has been adapted from the manufacturer supplied MSDS. The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from use of MSDS information.*




## MSDS Addendum

**Always follow label instructions and warnings. Typical use of product is a guideline only.**

|                         |  |
|-------------------------|--|
| Typical Use of Product: | Stain treatment, carpet, other household applications. |
|-------------------------|--|

# Material Safety Data Sheet

| NFPA  | HMIS  | PPE           | Transport Symbol |             |   |            |   |  |  |
|---|---|---------------|------------------|-------------|---|------------|---|--|--|
|  | <table border="1"> <tr> <td>Health Hazard</td> <td>1</td> </tr> <tr> <td>Fire Hazard</td> <td>0</td> </tr> <tr> <td>Reactivity</td> <td>0</td> </tr> </table> | Health Hazard | 1                | Fire Hazard | 0 | Reactivity | 0 |  |  |
| Health Hazard   | 1   |               |                  |             |   |            |   |  |  |
| Fire Hazard   | 0   |               |                  |             |   |            |   |  |  |
| Reactivity  | 0   |               |                  |             |   |            |   |  |  |

Issuing Date 28-Jul-2009

Revision Date 28-Jul-2009

Revision Number 1

## 1. PRODUCT AND COMPANY IDENTIFICATION

**Product Name** Moisturizing Hand Soap  
**Recommended Use** Simply Right  
 Liquid hand soap. Personal care.

**Supplier Address**  
 APOLLO HEALTH AND BEAUTY  
 CARE  
 20 GRANITERIDGE ROAD,  
 CONCORD, ONTARIO, L4K 5M8  
 CA  
 Phone:905 695 3700  
 Fax:905 695 3701  
 Contact:Derek Sanderson  
 Contact Phone:905-695-3700-203  
 Emergency Phone: 905 695 3700

**Company Emergency Phone Number** 905 695 3700

## 2. HAZARDS IDENTIFICATION

### CAUTION!

### Emergency Overview

May cause eye irritation

**Appearance** White      **Physical State** Liquid, Viscous liquid.      **Odor** Slight

**Potential Health Effects**  
**Principle Routes of Exposure** Eye contact, Skin contact, Inhalation.

**Acute Toxicity**  
**Eyes** May cause irritation.  
**Skin** No known effect based on information supplied.  
**Inhalation** No known effect based on information supplied.  
**Ingestion** No hazard from product as supplied.

**Chronic Effects** No known effect based on information supplied.

**Aggravated Medical Conditions** None known.

**Environmental Hazard** See Section 12 for additional Ecological Information.

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

| Chemical Name          | CAS-No     | Weight % |
|------------------------|------------|----------|
| Water                  | 7732-18-5  | 60-100   |
| Sodium laureth sulfate | 1335-72-4  | 7-13     |
| Sodium chloride (NaCl) | 7647-14-5  | 3-7      |
| Glycol distearate      | 627-83-8   | 1-5      |
| Cocamidopropyl betaine | 83138-08-3 | 1-5      |

### 4. FIRST AID MEASURES

|                           |  |
|---------------------------|--|
| <b>Eye Contact</b>        | Rinse thoroughly with plenty of water, also under the eyelids. If irritation persists, call a physician.                       |
| <b>Skin Contact</b>       | Wash skin with soap and water. In the case of skin irritation or allergic reactions see a physician.                           |
| <b>Inhalation</b>         | Move to fresh air in case of accidental inhalation of vapors or decomposition products. If symptoms persist, call a physician. |
| <b>Ingestion</b>          | Do NOT induce vomiting. Rinse mouth. Drink plenty of water. If symptoms persist, call a physician.                             |
| <b>Notes to Physician</b> | Treat symptomatically.   |

### 5. FIRE-FIGHTING MEASURES

|   |   |
|---|---|
| <b>Flammable Properties</b>             | Not flammable.  |
| <b>Flash Point</b>                      | 250°C / 482°F   |
| <b>Suitable Extinguishing Media</b>     | Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. |
| <b>Hazardous Combustion Products</b>    | Carbon oxides.  |
| <b>Explosion Data</b>                   |   |
| <b>Sensitivity to Mechanical Impact</b> | No.   |
| <b>Sensitivity to Static Discharge</b>  | No.   |

#### Protective Equipment and Precautions for Firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

|             |                 |                |             |                                 |
|-------------|-----------------|----------------|-------------|---------------------------------|
| <b>NFPA</b> | Health Hazard 1 | Flammability 0 | Stability 0 | Physical and Chemical Hazards - |
|-------------|-----------------|----------------|-------------|---------------------------------|

### 6. ACCIDENTAL RELEASE MEASURES

|                                  |  |
|----------------------------------|--|
| <b>Personal Precautions</b>      | Avoid contact with eyes.   |
| <b>Environmental Precautions</b> | Refer to protective measures listed in Sections 7 and 8.   |
| <b>Methods for Containment</b>   | Prevent further leakage or spillage if safe to do so.  |
| <b>Methods for Cleaning Up</b>   | Dam up. Soak up with inert absorbent material. Pick up and transfer to properly labeled containers. Clean contaminated surface thoroughly. |



## 7. HANDLING AND STORAGE

|                 |   |
|-----------------|---|
| <b>Handling</b> | Handle in accordance with good industrial hygiene and safety practice. Avoid contact with eyes. |
| <b>Storage</b>  | Keep container tightly closed.  |

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

|                                      |  |
|--------------------------------------|--|
| <b>Exposure Guidelines</b>           | This product does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.                            |
| <b>Engineering Measures</b>          | Showers<br>Eyewash stations<br>Ventilation systems   |
| <b>Personal Protective Equipment</b> |  |
| <b>Eye/Face Protection</b>           | No special protective equipment required.  |
| <b>Skin and Body Protection</b>      | No special protective equipment required.  |
| <b>Respiratory Protection</b>        | No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required. |
| <b>Hygiene Measures</b>              | Handle in accordance with good industrial hygiene and safety practice.   |

## 9. PHYSICAL AND CHEMICAL PROPERTIES

|   |                          |                                 |                          |
|---|--------------------------|---------------------------------|--------------------------|
| <b>Appearance</b>                             | White.                   | <b>Odor</b>                     | Slight.                  |
| <b>Odor Threshold</b>                         | No information available | <b>Physical State</b>           | Liquid, Viscous liquid   |
| <b>pH</b>                                     | 7                        |                                 |                          |
| <b>Flash Point</b>                            | 482°F / 250°C            | <b>Autoignition Temperature</b> | No information available |
| <b>Decomposition Temperature</b>              | No information available | <b>Boiling Point/Range</b>      | No information available |
| <b>Melting Point/Range</b>                    | No information available |                                 |                          |
| <b>Flammability Limits in Air</b>             | No information available | <b>Explosion Limits</b>         | No information available |
| <b>Water Solubility</b>                       | Soluble in water.        | <b>Solubility</b>               | No information available |
| <b>Evaporation Rate</b>                       | No information available | <b>Vapor Pressure</b>           | No data available        |
| <b>Vapor Density</b>                          | No data available        | <b>VOC Content</b>              | Not applicable           |
| <b>Partition Coefficient: n-octanol/water</b> |                          |                                 |                          |

## 10. STABILITY AND REACTIVITY

|   |  |
|---|--|
| <b>Stability</b>                        | Stable under recommended storage conditions. |
| <b>Incompatible Products</b>            | None known.                                  |
| <b>Conditions to Avoid</b>              | None known.                                  |
| <b>Hazardous Decomposition Products</b> | Carbon oxides.                               |
| <b>Hazardous Polymerization</b>         | Hazardous polymerization does not occur.     |

## 11. TOXICOLOGICAL INFORMATION

### Acute Toxicity

**Product Information**                      Product does not present an acute toxicity hazard based on known or supplied information.

| Chemical Name          | LD50 Oral          | LD50 Dermal        | LC50 Inhalation                    |
|------------------------|--------------------|--------------------|------------------------------------|
| Sodium laureth sulfate | 1288 mg/kg ( Rat ) | -                  | 3900 mg/m <sup>3</sup> ( Rat ) 1 h |
| Sodium chloride (NaCl) | -                  | 10 g/kg ( Rabbit ) | 42 g/m <sup>3</sup> ( Rat ) 1 h    |

**Chronic Toxicity**

**Chronic Toxicity** No known effect based on information supplied.

**Target Organ Effects** None known.

## 12. ECOLOGICAL INFORMATION

**Ecotoxicity**

The environmental impact of this product has not been fully investigated.

## 13. DISPOSAL CONSIDERATIONS

**Waste Disposal Methods** This material, as supplied, is not a hazardous waste according to Federal regulations (40 CFR 261). This material could become a hazardous waste if it is mixed with or otherwise comes in contact with a hazardous waste, if chemical additions are made to this material, or if the material is processed or otherwise altered. Consult 40 CFR 261 to determine whether the altered material is a hazardous waste. Consult the appropriate state, regional, or local regulations for additional requirements.

**Contaminated Packaging** Dispose of in accordance with local regulations.

**California Hazardous Waste Codes** 561

## 14. TRANSPORT INFORMATION

**DOT** Not regulated

**TDG** Not regulated

**MEX** Not regulated

**ICAO** Not regulated

**IATA** Not regulated

**IMDG/IMO** Not regulated

**RID** Not regulated

**ADR** Not regulated

**ADN** Not regulated



## 15. REGULATORY INFORMATION

### International Inventories

|               |                 |
|---------------|-----------------|
| TSCA          | Complies        |
| DSL           | Does not Comply |
| EINECS/ELINCS | Does not Comply |
| ENCS          | Does not Comply |
| IECSC         | Does not Comply |
| KECL          | Does not Comply |
| PICCS         | Does not Comply |
| AICS          | Does not Comply |

### U.S. Federal Regulations

#### **SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

#### **SARA 311/312 Hazard Categories**

|                                   |    |
|-----------------------------------|----|
| Acute Health Hazard               | No |
| Chronic Health Hazard             | No |
| Fire Hazard                       | No |
| Sudden Release of Pressure Hazard | No |
| Reactive Hazard                   | No |

#### **Clean Water Act**

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

#### **Clean Air Act, Section 112 Hazardous Air Pollutants (HAPs) (see 40 CFR 61)**

This product does not contain any substances regulated as hazardous air pollutants (HAPS) under Section 112 of the Clean Air Act Amendments of 1990.

#### **CERCLA**

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

### U.S. State Regulations

#### **California Proposition 65**

This product does not contain any Proposition 65 chemicals.

### U.S. State Right-to-Know Regulations

#### International Regulations

**Mexico - Grade** Minimum risk, Grade 0

**Canada**

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR.

#### **WHMIS Hazard Class**

Non-controlled

**16. OTHER INFORMATION**

|                      |                          |
|----------------------|--------------------------|
| <b>Issuing Date</b>  | 28-Jul-2009              |
| <b>Revision Date</b> | 28-Jul-2009              |
| <b>Revision Note</b> | No information available |

**Disclaimer**

The information provided on this MSDS is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.

**End of Safety Data Sheet**



# TOSHIBA MATERIAL SAFETY DATA SHEET

Date of Preparation : January 6, 2006  
Date of Revised :

MSDS : T1640KU1W  
Page 1 of 6

## SECTION 1 CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name : T-1640 Black Toner  
Used for : Toshiba Copiers, e-STUDIO 163, 165, 203 and 205  
Company Name : Toshiba TEC Corporation  
Address : 2-17-2, Higashigotanda, Shinagawa-ku, Tokyo, 141-8664, Japan  
Telephone Number : +81-3-6422-7753  
Manufacturer Name : (1) Toshiba Copying Machine Co.,LTD  
District No. 27 Bao An  
ShenZhen China 518101

Contact : (1) Toshiba America Business Solutions, Inc.  
Emergency Telephone. No. : +1-800-424-9300  
For calls within the U.S. only.  
(2) Toshiba of Canada Limited  
Telephone. No. : +1-905-405-3500  
For calls within Canada only.

## SECTION 2 COMPOSITION/INFORMATION ON INGREDIENTS

| <u>INGREDIENT(S)</u>  | <u>CAS No.</u> | <u>wt.%</u> |
|-----------------------|----------------|-------------|
| Polyester resin       | ---            | 85-95       |
| Carbon black          | 1333-86-4      | 4-8         |
| Wax                   | ---            | 3-6         |
| Silica                | ---            | <1          |
| Organic Metal Complex | ---            | <1          |

--- TRADE SECRET

## SECTION 3 HAZARDS IDENTIFICATION

Emergency Overview : If used as intended, the product does not present acute or chronic health hazard.  
Physical Hazards : This product is not classified as flammable or combustible.  
It will burn in case of fire.  
Avoid contact with strong oxidizers such as chromate, bromate and nitrates.  
Routes of Exposure : Inhalation, dermal contact, incidental ingestion

# MATERIAL SAFETY DATA SHEET

Product Identity : T-1640 Black Toner

MSDS : T1640KU1W  
Page 2 of 6

- 
- Inhalation : Excessive inhalation may cause irritation of the nose, throat and respiratory tract.
- Eye Contact : Non-irritant.
- Dermal Contact : Non-irritant, non-sensitiser.
- Ingestion : Not currently known.
- Chronic Effects : See Section 11 Supplemental Health Information.
- Carcinogenicity : See Section 11 Supplemental Health Information.
- Reproductive/Developmental : Not identified.
- Target Organs : Prolonged breathing of high concentrations may cause adverse effects on the respiratory system.
- Signs and Symptoms of Exposure : Prolonged exposure to dusts of this product may irritate the respiratory system.
- Medical Conditions Aggravated by Exposure to This Product : Respiratory disorders, such as asthma, may be aggravated by prolonged exposure to high concentrations of this product.

## SECTION 4 FIRST AID MEASURES

- Eye Contact : Immediately flush eyes with plenty of water for at least 15 minutes. If irritation persists, call a physician.
- Skin Contact : Wash with soap and water. Wash clothing before reuse. If irritation occurs or is persistent, seek medical attention.
- Ingestion : Dilute stomach contents with several glasses of water.
- Inhalation : Remove from exposure area to fresh air immediately. Contact a physician if there is any difficulty in breathing or other signs of distress.

## SECTION 5 FIRE FIGHTING MEASURES

- General Hazard : Product will burn in case of fire.
- Flash Point : Not applicable
- Flammable Limits : Not applicable
- Autoignition Temperature : Not applicable
- Flammability classification : Not applicable
- Extinguishing Media : Foam, halon, carbon dioxide, dry chemical & water fog.
- Unusual Fire & Explosion Hazard : Combustible powder. Dust of this product at sufficient concentrations can form explosive mixtures with air.
- Fire Fighting Procedures : None
- Hazardous Combustion Products : Carbon monoxide, carbon dioxide and smoke.

## SECTION 6 ACCIDENTAL RELEASE MEASURES

- Spills or Leaks : Vacuum-clean spilled toner and carefully transfer into sealable waste container. If no vacuum-cleaner is available, sweep slowly to minimize generation of dust during clean-up. Residue can be removed with soap and cold water.
-

# MATERIAL SAFETY DATA SHEET

Product Identity : T-1640 Black Toner

MSDS : T1640KU1W  
Page 3 of 6

## SECTION 7 HANDLING AND STORAGE

- Handling : Avoid dust, keep away from ignition sources.
- Prevention of Fire and Explosion : This material is capable of creating a dust explosion.  
Keep away from heat, sparks & flame.
- Storage : Keep container in cool and dry area.
- Hygienic Practices : Avoid inhalation and ingestion. Avoid getting in eyes, on skin or clothing.  
Wash hands thoroughly after handling, and before eating, drinking, or smoking.

## SECTION 8 EXPOSURE CONTROLS/PERSONAL PROTECTION

### Exposure Limits

- OSHA PELs (TWA)  
as the product : 15mg/m<sup>3</sup> (Total dust)  
5mg/m<sup>3</sup> (Respirable fraction)
- Carbon black : 3.5 mg/m<sup>3</sup>
- Other substances : Not listed
- ACGIH TLVs (TWA)  
as the product : 10mg/m<sup>3</sup> (Total dust)  
3mg/m<sup>3</sup> (Respirable fraction)
- Carbon black : 3.5 mg/m<sup>3</sup>
- Other substances : Not listed
- DFG-MAK (TWA)  
as the product : 4mg/m<sup>3</sup> (Inhalable fraction)  
1.5mg/m<sup>3</sup> (Respirable fraction)
- All substances : Not listed
- NOHSC (TWA)  
All substances : Not listed
- Engineering Controls : Maintain adequate ventilation.
- Eye Protection : Not required under intended use.
- Skin Protection : Not required under intended use.
- Respiratory Protection : Not required under intended use.

## SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

- Appearance : Fine solid powder
- Color : Black
- Scent : Odorless
- Melting Point : 110 - 150 degree (Softening point)
- Specific Gravity(H<sub>2</sub>O=1) : 1.1 - 1.5
- Vapor Pressure : Not applicable
- Vapor Density (Air=1) : Not applicable
- Evaporation Rate : Not applicable
- Solubility in Water : Negligible
- pH Value : Not a water-based product, therefore not applicable.

# MATERIAL SAFETY DATA SHEET

Product Identity : T-1640 Black Toner

MSDS : T1640KU1W

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## SECTION 10 STABILITY AND REACTIVITY

Stability : Stable  
Incompatibility : Not Identified.  
Hazardous Decomposition Products : Carbon monoxide and carbon dioxide.  
Hazardous Polymerization: : Will not occur.

## SECTION 11 SUPPLEMENTAL HEALTH INFORMATION

Acute oral toxicity : LD50 is greater than 2,000mg/kg.  
(This was the highest attainable mass.)  
Acute inhalation : LC50(4H) is in excess of 5.16mg/l.  
(This was the highest attainable concentration.)  
Eye irritation : Non-irritant.  
Skin irritation : Non-irritant.  
Skin sensitization : Non-sensitiser.  
Mutagenicity : Negative in the Ames test.  
Carcinogenicity : : In 1996, the IARC classified carbon black as a Group 2B carcinogen  
(possible human carcinogen).  
Chronic Effects : : In a study in rats by chronic inhalation exposure to a typical toner, a mild  
to moderate degree of lung fibrosis was observed in 92 % of the rats in  
the high concentration (16 mg/m<sup>3</sup>) exposure group, and a minimal to mild  
degree of fibrosis was noted in 22% of the animals in the middle (4  
mg/m<sup>3</sup>) exposure group. These findings are attributed to "lung  
overloading", a general response to excessive amounts of any dust  
retained in the lungs for a prolonged period.

## SECTION 12 ECOLOGICAL INFORMATION

Aquatic environment : LC50 is greater than 0.7mg/L (fish)  
: EC50 is greater than 0.7mg/L (daphnia)  
(This was the highest attainable mass.)

## SECTION 13 DISPOSAL CONSIDERATION

Dispose of in accordance with local, state and federal regulation.  
Empty plastic container may be recycled.

## SECTION 14 TRANSPORTATION INFORMATION

Special Precautions : None  
International Transport Information  
UN Classification Number : Not applicable  
DOT Identification Number : Not applicable  
Domestic Transportation : Not applicable  
Other Information : Not applicable

# MATERIAL SAFETY DATA SHEET

Product Identity : T-1640 Black Toner

MSDS : T1640KU1W  
Page 5 of 6

## SECTION 15 REGULATORY INFORMATION

IARC : See section 11.

### US/Canada Information

OSHA Hazard Communication Standard, 29CFR 1910. 1200

: Not regulated.

Toxic Substance Control Act (TSCA)

: All chemical substances in this product comply with all applicable rules or orders under TSCA.

RCRA (40 CFR 261) : Product or components not listed.

CERCLA/SARA Information : Not regulated.

NTP Annual Report on Carcinogens

: Not listed as an NTP carcinogen.

California Proposition 65 : Neither toner, or any of the components, are listed as chemicals known to the State of California to cause cancer or reproductive system effects.

Controlled Products Regulations(Canada)

: This product has been classified in accordance with the hazard criteria of the CPR.

Workplace Hazardous Materials Information System(Canada)

: No toxicology information available

Other State Regulations : Carbon black is listed in the New Jersey Right to Know List, Pennsylvania Hazardous Substance List, and Massachusetts Substance List.

U.S./Canada Label Statements

: LOW HAZARD FOR RECOMMENDED HANDLING. Minimize dust generation and accumulation. Use with adequate ventilation.

### EU Information

Label Information According to Directives 67/548 EEC & 1999/45 EC

Symbol & Indication : Not required

Risk Phrase : Not required

Safety Advise Phrase : Not required

76/769/EEC : All chemical substances in this product comply with all applicable rules or order under 76/769/EEC.

National requirement : : No specific regulations or restrictions.

## SECTION 16 OTHER INFORMATION

National Fire Protection Association (NFPA) Classification :

Flammability : 1

Reactivity : 0

Health : 0

( 0 = insignificant, 1 = slight )

Hazardous Materials Information Systems (HMIS) :

Red (Flammability) : 1

Yellow (Reactivity) : 0

Blue (Acute Effects) : 0

( 0 = insignificant, 1 = slight )

# MATERIAL SAFETY DATA SHEET

Product Identity

: T-1640 Black Toner

MSDS : T1640KU1W

Page 6 of 6

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- Notice** : Judgments as to the suitability of information herein for purchaser's purposes are necessarily purchaser's responsibility. Therefore, although reasonable care has been taken in the preparation of such information, Toshiba Corporation extends no warranties, makes no representations, and assumes no responsibility as to the accuracy or suitability of such information for application to purchaser's intended purposes or for consequences of its use.
- References** : IARC (1996) IARC Monographs on the Evaluation of the Carcinogenic Risks of Chemicals to Humans, Vol. 65, Printing Processes and Printing Inks, Carbon Black and Some Nitro Compounds, Lyon, pp. 149-261.  
H. Muhle, B. Bellmann, O. Creutzenberg, C. Dasenbrock, H. Ernst, R. Kilpper, J. C. MacKenzie, P. Morrow, U. Mohr, S. Takenaka, and R. Mermelstein (1991).  
Pulmonary Response to Toner upon Chronic Inhalation Exposure in Rats, *Fundamental and Applied Toxicology* 17, pp. 280-299.
- Abbreviation** : (1) OSHA PEL stands for Permissible Exposure Limit under Occupational Safety and Health Administration (USA).  
(2) ACGIH TLV stands for Threshold Limit Value under American Conference of Governmental Industrial Hygienists (USA).  
(3) DFG-MAK stands for Maximale Arbeitsplatzkonzentrationen under Deutsche Forschungsgemeinschaft.  
(4) TWA stands for Time Weighted Average.  
(5) IARC stands for International Agency for Research on Cancer.  
(6) NTP stands for National Toxicology Program (USA).  
(7) NIOSH stands for National Institute for Occupational Safety and Health (USA).  
(8) DOT stands for Department of Transportation (USA).  
(9) NOHSC stands for National Occupational Health and Safety Commission (Australia).
- Prepared by** : Toshiba TEC Corporation  
Quality Assurance Department  
6-78 Minami-cho, Mishima-shi, Shizuoka-ken,  
411-8520 Japan
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# TOSHIBA MATERIAL SAFETY DATA SHEET

Date of Preparation : January 1, 2008  
Date of Revised :

MSDS : T4520KJ1J  
Page 1 of 6

## SECTION 1 CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name : T-4520 Black Toner  
Used for : Toshiba Copiers, e-STUDIO 353 and 453  
Company Name : Toshiba TEC Corporation  
Address : 2-17-2, Higashigotanda, Shinagawa-ku, Tokyo, 141-8664, Japan  
Telephone Number : +81-3-6422-7753  
Manufacturer Name : (1) Toshiba America Business Solutions, Inc.  
Toner Products Division (Mitchell Plant)  
901 North Foster Street, Mitchell, SD. 57301-0070 U.S.A.

Contact : (1) Toshiba America Business Solutions, Inc.  
Emergency Telephone. No. : +1-800-424-9300  
For calls within the U.S. only.  
(2) Toshiba of Canada Limited  
Telephone. No. : +1-905-470-3500  
For calls within Canada only.

## SECTION 2 COMPOSITION/INFORMATION ON INGREDIENTS

| <u>INGREDIENT(S)</u>       | <u>CAS No.</u> | <u>wt. %</u> |
|----------------------------|----------------|--------------|
| Styrene acrylate copolymer | -----          | 90-95        |
| Carbon black               | 1333-86-4      | 4-6          |
| Organic Pigment            | -----          | <5           |
| Amorphous Silica           | 7631-86-9      | <1           |
|                            | -----          | Trade Secret |

## SECTION 3 HAZARDS IDENTIFICATION

Emergency Overview : If used as intended, the product does not present acute or chronic health hazard.  
Physical Hazards : This product is not classified as flammable or combustible.  
It will burn in case of fire.  
Avoid contact with strong oxidizers such as chromate, bromate and nitrates.  
Routes of Exposure : Inhalation, dermal contact, incidental ingestion

# MATERIAL SAFETY DATA SHEET

Product Identity : T-4520 Black Toner

MSDS : T4520KJ1J  
Page 2 of 6

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- Inhalation : Excessive inhalation may cause irritation of the nose, throat and respiratory tract.
- Eye Contact : Non-irritant.
- Dermal Contact : Non-irritant, non-sensitiser.
- Ingestion : Not currently known.
- Chronic Effects : See Section 11 Supplemental Health Information.
- Carcinogenicity : See Section 11 Supplemental Health Information.
- Reproductive/Developmental : Not identified.
- Target Organs : Prolonged breathing of high concentrations may cause adverse effects on the respiratory system.
- Signs and Symptoms of Exposure : Prolonged exposure to dusts of this product may irritate the respiratory system.
- Medical Conditions Aggravated by Exposure to This Product : Respiratory disorders, such as asthma, may be aggravated by prolonged exposure to high concentrations of this product.

## SECTION 4 FIRST AID MEASURES

- Eye Contact : Immediately flush eyes with plenty of water for at least 15 minutes. If irritation persists, call a physician.
- Skin Contact : Wash with soap and water. Wash clothing before reuse. If irritation occurs or is persistent, seek medical attention.
- Ingestion : Dilute stomach contents with several glasses of water.
- Inhalation : Remove from exposure area to fresh air immediately. Contact a physician if there is any difficulty in breathing or other signs of distress.

## SECTION 5 FIRE FIGHTING MEASURES

- General Hazard : Product will burn in case of fire.
- Flash Point : Not applicable
- Flammable Limits : Not applicable
- Autoignition Temperature : Not applicable
- Flammability classification : Not applicable
- Extinguishing Media : Foam, halon, carbon dioxide, dry chemical & water fog.
- Unusual Fire & Explosion Hazard : Combustible powder. Dust of this product at sufficient concentrations can form explosive mixtures with air.
- Fire Fighting Procedures : None
- Hazardous Combustion Products : Carbon monoxide, carbon dioxide and smoke.

## SECTION 6 ACCIDENTAL RELEASE MEASURES

- Spills or Leaks : Vacuum-clean spilled toner and carefully transfer into sealable waste container. If no vacuum-cleaner is available, sweep slowly to minimize generation of dust during clean-up. Residue can be removed with soap and cold water.
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# MATERIAL SAFETY DATA SHEET

Product Identity : T-4520 Black Toner

MSDS : T4520KJ1J

Page 3 of 6

## SECTION 7 HANDLING AND STORAGE

- Handling : Avoid dust, keep away from ignition sources.
- Prevention of Fire and Explosion : This material is capable of creating a dust explosion.  
Keep away from heat, sparks & flame.
- Storage : Keep container in cool and dry area.
- Hygienic Practices : Avoid inhalation and ingestion. Avoid getting in eyes, on skin or clothing.  
Wash hands thoroughly after handling, and before eating, drinking, or smoking.

## SECTION 8 EXPOSURE CONTROLS/PERSONAL PROTECTION

### Exposure Limits

- OSHA PELs (TWA)  
as the product : 15mg/m<sup>3</sup> (Total dust)  
5mg/m<sup>3</sup> (Respirable fraction)
- Carbon black : 3.5 mg/m<sup>3</sup>
- Other substances : Not listed
- ACGIH TLVs (TWA)  
as the product : 10mg/m<sup>3</sup> (Total dust)  
3mg/m<sup>3</sup> (Respirable fraction)
- Carbon black : 3.5 mg/m<sup>3</sup>
- Other substances : Not listed
- DFG-MAK (TWA)  
as the product : 4mg/m<sup>3</sup> (Inhalable fraction)  
1.5mg/m<sup>3</sup> (Respirable fraction)
- All substances : Not listed
- NOHSC (TWA)  
All substances : Not listed
- Engineering Controls : Maintain adequate ventilation.
- Eye Protection : Not required under intended use.
- Skin Protection : Not required under intended use.
- Respiratory Protection : Not required under intended use.

## SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

- Appearance : Fine solid powder
- Color : Black
- Scent : Odorless
- Melting Point : 110 - 150 degree (Softening point)
- Specific Gravity(H<sub>2</sub>O=1) : 1.1 - 1.5
- Vapor Pressure : Not applicable
- Vapor Density (Air=1) : Not applicable
- Evaporation Rate : Not applicable
- Solubility in Water : Negligible
- pH Value : Not a water-based product, therefore not applicable.

# MATERIAL SAFETY DATA SHEET

Product Identity : T-4520 Black Toner

MSDS : T4520KJ1J

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## SECTION 10 STABILITY AND REACTIVITY

Stability : Stable  
Incompatibility : Not Identified.  
Hazardous Decomposition Products : Carbon monoxide and carbon dioxide.  
Hazardous Polymerization: : Will not occur.

## SECTION 11 SUPPLEMENTAL HEALTH INFORMATION

Acute oral toxicity : LD50 is greater than 5,000mg/kg.  
(This was the highest attainable mass.)  
Acute inhalation : LC50(4H) is in excess of 5.31mg/l.  
(This was the highest attainable concentration.)  
Eye irritation : Non-irritant.  
Skin irritation : Non-irritant.  
Skin sensitization : Non-sensitiser.  
Mutagenicity : Negative in the Ames test.  
Carcinogenicity : : In 1996, the IARC classified carbon black as a Group 2B carcinogen  
(possible human carcinogen).  
Chronic Effects : : In a study in rats by chronic inhalation exposure to a typical toner, a mild  
to moderate degree of lung fibrosis was observed in 92 % of the rats in  
the high concentration (16 mg/m<sup>3</sup>) exposure group, and a minimal to mild  
degree of fibrosis was noted in 22% of the animals in the middle (4  
mg/m<sup>3</sup>) exposure group. These findings are attributed to "lung  
overloading", a general response to excessive amounts of any dust  
retained in the lungs for a prolonged period.

## SECTION 12 ECOLOGICAL INFORMATION

This material has not been tested concerning environmental effects  
(fish toxicity, bird toxicity, invertebrate toxicity, phyto-toxicity and environmental fate).

## SECTION 13 DISPOSAL CONSIDERATION

Dispose of in accordance with local, state and federal regulation.  
Empty plastic container may be recycled.

## SECTION 14 TRANSPORTATION INFORMATION

Special Precautions : None  
International Transport Information  
UN Classification Number : Not applicable  
DOT Identification Number : Not applicable  
Domestic Transportation : Not applicable  
Other Information : Not applicable

# MATERIAL SAFETY DATA SHEET

Product Identity : T-4520 Black Toner

MSDS : T4520KJ1J  
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## SECTION 15 REGULATORY INFORMATION

- IARC : See section 11.
- US/Canada Information
- OSHA Hazard Communication Standard, 29CFR 1910. 1200  
: Not regulated.
- Toxic Substance Control Act (TSCA)  
: All chemical substances in this product comply with all applicable rules or orders under TSCA.
- RCRA (40 CFR 261) : Product or components not listed.
- CERCLA/SARA Information : Not regulated.
- NTP Annual Report on Carcinogens  
: Not listed as an NTP carcinogen.
- California Proposition 65 : Neither toner, or any of the components, are listed as chemicals known to the State of California to cause cancer or reproductive system effects.
- Controlled Products Regulations(Canada)  
: This product has been classified in accordance with the hazard criteria of the CPR.
- Workplace Hazardous Materials Information System(Canada)  
: No toxicology information available
- Other State Regulations : Carbon black is listed in the New Jersey Right to Know List, Pennsylvania Hazardous Substance List, and Massachusetts Substance List.
- U.S./Canada Label Statements  
: LOW HAZARD FOR RECOMMENDED HANDLING. Minimize dust generation and accumulation. Use with adequate ventilation.

### EU Information

- Label Information According to Directives 67/548 EEC & 1999/45 EC
- Symbol & Indication : Not required
- Risk Phrase : Not required
- Safety Advise Phrase : Not required
- 76/769/EEC : All chemical substances in this product comply with all applicable rules or order under 76/769/EEC.
- National requirement : : No specific regulations or restrictions.

## SECTION 16 OTHER INFORMATION

- National Fire Protection Association (NFPA) Classification :
- Flammability : 1
- Reactivity : 0
- Health : 0
- ( 0 = insignificant, 1 = slight )
- Hazardous Materials Information Systems (HMIS) :
- Red (Flammability) : 1
- Yellow (Reactivity) : 0
- Blue (Acute Effects) : 0
- ( 0 = insignificant, 1 = slight )

# MATERIAL SAFETY DATA SHEET

Product Identity : T-4520 Black Toner

MSDS : T4520KJ1J

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- References** : IARC (1996) IARC Monographs on the Evaluation of the Carcinogenic Risks of Chemicals to Humans, Vol. 65, Printing Processes and Printing Inks, Carbon Black and Some Nitro Compounds, Lyon, pp. 149-261.  
H. Muhle, B. Bellmann, O. Creutzenberg, C. Dasenbrock, H. Ernst, R. Kilpper, J. C. MacKenzie, P. Morrow, U. Mohr, S. Takenaka, and R. Mermelstein (1991).  
Pulmonary Response to Toner upon Chronic Inhalation Exposure in Rats, Fundamental and Applied Toxicology 17, pp. 280-299.
- Abbreviation** : (1) OSHA PEL stands for Permissible Exposure Limit under Occupational Safety and Health Administration (USA).  
(2) ACGIH TLV stands for Threshold Limit Value under American Conference of Governmental Industrial Hygienists (USA).  
(3) DFG-MAK stands for Maximale Arbeitsplatzkonzentrationen under Deutsche Forschungsgemeinschaft.  
(4) TWA stands for Time Weighted Average.  
(5) IARC stands for International Agency for Research on Cancer.  
(6) NTP stands for National Toxicology Program (USA).  
(7) NIOSH stands for National Institute for Occupational Safety and Health (USA).  
(8) DOT stands for Department of Transportation (USA).  
(9) NOHSC stands for National Occupational Health and Safety Commission (Australia).
- 
- Prepared by** : Toshiba TEC Corporation  
Quality Assurance Div.  
Document Processing & Telecommunication Systems Company  
6-78 Minami-cho, Mishima-shi, Shizuoka-ken,  
411-8520 Japan
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# TOSHIBA MATERIAL SAFETY DATA SHEET

Date of Preparation : February 15, 2005  
Date of Revised :

MSDS : T6000KWU1W  
Page 1 of 6

## SECTION 1 CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name : T-6000 Black Toner  
Used for : Toshiba Copiers, e-STUDIO 520, 600, 720 and 850  
Company Name : Toshiba TEC Corporation  
Address : 2-17-2, Higashigotanda, Shinagawa-ku, Tokyo, 141-8664, Japan  
Telephone Number : +81-3-6422-7753  
Manufacturer Name : (1) Toshiba America Business Solutions, Inc.  
Toner Products Division (Mitchell Plant)  
901 North Foster Street, Mitchell, SD. 57301-0070 U.S.A.

Contact : (1) Toshiba America Information Systems, Inc.  
Emergency Telephone. No. : +1-800-424-9300  
For calls within the U.S. only.  
(2) Toshiba of Canada Limited  
Telephone. No. : +1-905-405-3500  
For calls within Canada only.

## SECTION 2 COMPOSITION/INFORMATION ON INGREDIENTS

| <u>INGREDIENT(S)</u> | <u>CAS No.</u> | <u>wt. %</u> |
|----------------------|----------------|--------------|
| Polyester resin      | ---            | 85-95        |
| Carbon black         | 1333-86-4      | 4-8          |
| Wax                  | ---            | <5           |
| Organic pigment      | ---            | <1           |
|                      | -----          | Trade Secret |

## SECTION 3 HAZARDS IDENTIFICATION

Emergency Overview : If used as intended, the product does not present acute or chronic health hazard.  
Physical Hazards : This product is not classified as flammable or combustible.  
It will burn in case of fire.  
Avoid contact with strong oxidizers such as chromate, bromate and nitrates.  
Routes of Exposure : Inhalation, dermal contact, incidental ingestion

# MATERIAL SAFETY DATA SHEET

Product Identity : T-6000 Black Toner

MSDS : T6000KWU1W

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Inhalation : Excessive inhalation may cause irritation of the nose, throat and respiratory tract.

Eye Contact : Non-irritant.

Dermal Contact : Non-irritant, non-sensitiser.

Ingestion : Not currently known.

Chronic Effects : See Section 11 Supplemental Health Information.

Carcinogenicity : See Section 11 Supplemental Health Information.

Reproductive/Developmental : Not identified.

Target Organs : Prolonged breathing of high concentrations may cause adverse effects on the respiratory system.

Signs and Symptoms of Exposure : Prolonged exposure to dusts of this product may irritate the respiratory system.

Medical Conditions Aggravated by Exposure to This Product : Respiratory disorders, such as asthma, may be aggravated by prolonged exposure to high concentrations of this product.

## SECTION 4 FIRST AID MEASURES

Eye Contact : Immediately flush eyes with plenty of water for at least 15 minutes. If irritation persists, call a physician.

Skin Contact : Wash with soap and water. Wash clothing before reuse. If irritation occurs or is persistent, seek medical attention.

Ingestion : Dilute stomach contents with several glasses of water.

Inhalation : Remove from exposure area to fresh air immediately. Contact a physician if there is any difficulty in breathing or other signs of distress.

## SECTION 5 FIRE FIGHTING MEASURES

General Hazard : Product will burn in case of fire.

Flash Point : Not applicable

Flammable Limits : Not applicable

Autoignition Temperature : Not applicable

Flammability classification : Not applicable

Extinguishing Media : Foam, halon, carbon dioxide, dry chemical & water fog.

Unusual Fire & Explosion Hazard : Combustible powder. Dust of this product at sufficient concentrations can form explosive mixtures with air.

Fire Fighting Procedures : None

Hazardous Combustion Products : Carbon monoxide, carbon dioxide and smoke.

## SECTION 6 ACCIDENTAL RELEASE MEASURES

Spills or Leaks : Vacuum-clean spilled toner and carefully transfer into sealable waste container. If no vacuum-cleaner is available, sweep slowly to minimize generation of dust during clean-up. Residue can be removed with soap and cold water.

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# MATERIAL SAFETY DATA SHEET

Product Identity : T-6000 Black Toner

MSDS : T6000KWU1W

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## SECTION 7 HANDLING AND STORAGE

- Handling : Avoid dust, keep away from ignition sources.
- Prevention of Fire and Explosion : This material is capable of creating a dust explosion.  
Keep away from heat, sparks & flame.
- Storage : Keep container in cool and dry area.
- Hygienic Practices : Avoid inhalation and ingestion. Avoid getting in eyes, on skin or clothing.  
Wash hands thoroughly after handling, and before eating, drinking, or smoking.

## SECTION 8 EXPOSURE CONTROLS/PERSONAL PROTECTION

- Exposure Limits
- OSHA PELs (TWA)  
as the product : 15mg/m<sup>3</sup> (Total dust)  
5mg/m<sup>3</sup> (Respirable fraction)
- Carbon black : 3.5 mg/m<sup>3</sup>
- Other substances : Not listed
- ACGIH TLVs (TWA)  
as the product : 10mg/m<sup>3</sup> (Total dust)  
3mg/m<sup>3</sup> (Respirable fraction)
- Carbon black : 3.5 mg/m<sup>3</sup>
- Other substances : Not listed
- DFG-MAK (TWA)  
as the product : 4mg/m<sup>3</sup> (Inhalable fraction)  
1.5mg/m<sup>3</sup> (Respirable fraction)
- All substances : Not listed
- NOHSC (TWA)  
All substances : Not listed
- Engineering Controls : Maintain adequate ventilation.
- Eye Protection : Not required under intended use.
- Skin Protection : Not required under intended use.
- Respiratory Protection : Not required under intended use.

## SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

- Appearance : Fine solid powder
- Color : Black
- Scent : Odorless
- Melting Point : 110 - 150 degree (Softening point)
- Specific Gravity(H<sub>2</sub>O=1) : 1.1 - 1.5
- Vapor Pressure : Not applicable
- Vapor Density (Air=1) : Not applicable
- Evaporation Rate : Not applicable
- Solubility in Water : Negligible
- pH Value : Not a water-based product, therefore not applicable.

# MATERIAL SAFETY DATA SHEET

Product Identity : T-6000 Black Toner

MSDS : T6000KWU1W

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## SECTION 10 STABILITY AND REACTIVITY

Stability : Stable  
Incompatibility : Not identified.  
Hazardous Decomposition Products : Carbon monoxide and carbon dioxide.  
Hazardous Polymerization: : Will not occur.

## SECTION 11 SUPPLEMENTAL HEALTH INFORMATION

Acute oral toxicity : LD50 is greater than 2,500mg/kg.  
(This was the highest attainable mass.)  
Acute inhalation : LC50(4H) is in excess of 5.18mg/l.  
(This was the highest attainable concentration.)  
Eye Irritation : Non-irritant.  
Skin Irritation : Non-irritant.  
Skin sensitization : Non-sensitizer.  
Mutagenicity : Negative in the Ames test.  
Carcinogenicity : In 1996, the IARC classified carbon black as a Group 2B carcinogen  
(possible human carcinogen).  
Chronic Effects : In a study in rats by chronic inhalation exposure to a typical toner, a mild to moderate degree of lung fibrosis was observed in 92 % of the rats in the high concentration (16 mg/m<sup>3</sup>) exposure group, and a minimal to mild degree of fibrosis was noted in 22% of the animals in the middle (4 mg/m<sup>3</sup>) exposure group. These findings are attributed to "lung overloading", a general response to excessive amounts of any dust retained in the lungs for a prolonged period.

## SECTION 12 ECOLOGICAL INFORMATION

Aquatic environment : LC50 is greater than limit of saturation (fish)  
: EC50 is greater than limit of saturation (daphnia)  
: Algal Growth Inhibitor limit of saturation

## SECTION 13 DISPOSAL CONSIDERATION

Dispose of in accordance with local, state and federal regulation.  
Empty plastic container may be recycled.

## SECTION 14 TRANSPORTATION INFORMATION

Special Precautions : None  
International Transport Information  
UN Classification Number : Not applicable  
DOT Identification Number : Not applicable  
Domestic Transportation : Not applicable  
Other Information : Not applicable



# MATERIAL SAFETY DATA SHEET

Product Identity : T-6000 Black Toner

MSDS : T6000KWU1W

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## SECTION 15 REGULATORY INFORMATION

IARC : See section 11.

### US/Canada Information

OSHA Hazard Communication Standard, 29CFR 1910. 1200

: Not regulated.

### Toxic Substance Control Act (TSCA)

: All chemical substances in this product comply with all applicable rules or orders under TSCA.

RCRA (40 CFR 261) : Product or components not listed.

CERCLA/SARA Information : Not regulated.

### NTP Annual Report on Carcinogens

: Not listed as an NTP carcinogen.

California Proposition 65 : Neither toner, or any of the components, are listed as chemicals known to the State of California to cause cancer or reproductive system effects.

### Controlled Products Regulations(Canada)

: This product has been classified in accordance with the hazard criteria of the CPR.

### Workplace Hazardous Materials Information System(Canada)

: No toxicology information available

Other State Regulations : Carbon black is listed in the New Jersey Right to Know List, Pennsylvania Hazardous Substance List, and Massachusetts Substance List.

### U.S./Canada Label Statements

: LOW HAZARD FOR RECOMMENDED HANDLING. Minimize dust generation and accumulation. Use with adequate ventilation.

### EU Information

Label Information According to Directives 67/548 EEC & 88/379 EEC

Symbol & Indication : Not required

Risk Phrase : Not required

Safety Advise Phrase : Not required

EEC Directive(76/548 EEC, 79/831 EEC, 92/32 EEC)

: All chemical substances in this product comply with all applicable rules or order under EEC Directive.

The Subject of Specific Provisions in Relation to Protection of Man or the Environment.Directive 76/769/EEC

: Not required

National requirement : No specific regulations or restrictions.

## SECTION 16 OTHER INFORMATION

National Fire Protection Association (NFPA) Classification :

Flammability : 1

Reactivity : 0

Health : 0

( 0 = insignificant, 1 = slight )

Hazardous Materials Information Systems (HMIS) :

Red (Flammability) : 1

Yellow (Reactivity) : 0

Blue (Acute Effects) : 0

( 0 = insignificant, 1 = slight )

# MATERIAL SAFETY DATA SHEET

Product Identity

: T-6000 Black Toner

MSDS : T6000KWU1W

Page 6 of 6

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**Notice**

: Judgments as to the suitability of information herein for purchaser's purposes are necessarily purchaser's responsibility. Therefore, although reasonable care has been taken in the preparation of such information, Toshiba Corporation extends no warranties, makes no representations, and assumes no responsibility as to the accuracy or suitability of such information for application to purchaser's intended purposes or for consequences of its use.

**References**

: IARC (1996) IARC Monographs on the Evaluation of the Carcinogenic Risks of Chemicals to Humans, Vol. 65, Printing Processes and Printing Inks, Carbon Black and Some Nitro Compounds, Lyon, pp. 149-261.  
H. Muhle, B. Bellmann, O. Creutzenberg, C. Dasenbrock, H. Ernst, R. Kilpper, J. C. MacKenzie, P. Morrow, U. Mohr, S. Takenaka, and R. Mermelstein (1991).  
Pulmonary Response to Toner upon Chronic Inhalation Exposure in Rats, *Fundamental and Applied Toxicology* 17, pp. 280-299.

**Abbreviation**

- : (1) OSHA PEL stands for Permissible Exposure Limit under Occupational Safety and Health Administration (USA).
- (2) ACGIH TLV stands for Threshold Limit Value under American Conference of Governmental Industrial Hygienists (USA).
- (3) DFG-MAK stands for Maximale Arbeitsplatzkonzentrationen under Deutsche Forschungsgemeinschaft.
- (4) TWA stands for Time Weighted Average.
- (5) IARC stands for International Agency for Research on Cancer.
- (6) NTP stands for National Toxicology Program (USA).
- (7) NIOSH stands for National Institute for Occupational Safety and Health (USA).
- (8) DOT stands for Department of Transportation (USA).
- (9) NOHSC stands for National Occupational Health and Safety Commission (Australia).

**Prepared by**

: Toshiba TEC Corporation  
Quality Assurance Department  
6-78 Minami-cho, Mishima-shi, Shizuoka-ken,  
411-8520 Japan

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# TOSHIBA MATERIAL SAFETY DATA SHEET

Date of Preparation : March 20, 2008  
Date of Revised :

MSDS : TFC28YU1W  
Page 1 of 6

## SECTION 1 CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name : T-FC28 -Y Yellow Toner  
Used for : Toshiba Copiers, e-STUDIO 2330C,2820C,2830C,3520C,3530C and 4520C  
Company Name : Toshiba TEC Corporation  
Address : 2-17-2, Higashigotanda, Shinagawa-ku, Tokyo, 141-8664, Japan  
Telephone Number : +81-3-6422-7753  
Manufacturer Name : (1) Toshiba America Business Solutions, Inc  
Toner Products Division (Mitchell Plant)  
901 North Foster Street, Mitchell, SD. 57301-0070 U.S.A.

Contact : (1) Toshiba America Business Solutions, Inc.  
Emergency Telephone. No. : +1-800-424-9300  
For calls within the U.S. only.  
(2) Toshiba of Canada Limited  
Telephone. No. : +1 905 470 3500  
For calls within Canada only.

## SECTION 2 COMPOSITION/INFORMATION ON INGREDIENTS

| <u>INGREDIENT(S)</u> | <u>CAS No.</u> | <u>wt. %</u> |
|----------------------|----------------|--------------|
| Polyester resin      | ---            | 80-90        |
| Organic Pigment      | ---            | <10          |
| Wax                  | ---            | <10          |
| Amorphous Silica     | 7631-86-9      | <5           |
| Titanium dioxide     | 13463-67-7     | <2           |

--- TRADE SECRET

## SECTION 3 HAZARDS IDENTIFICATION

Emergency Overview : If used as intended, the product does not present acute or chronic health hazard.  
Physical Hazards : This product is not classified as flammable or combustible.  
It will burn in case of fire.  
Avoid contact with strong oxidizers such as chromate, bromate and nitrates.  
Routes of Exposure : Inhalation, dermal contact, incidental ingestion  
Inhalation : Excessive inhalation may cause irritation of the nose,  
throat and respiratory tract.  
Eye Contact : Non-irritant.  
Dermal Contact : Non-irritant, non-sensitiser.  
Ingestion : Not currently known.  
Chronic Effects : See Section 11 Supplemental Health Information.  
Carcinogenicity : See Section 11 Supplemental Health Information.

# MATERIAL SAFETY DATA SHEET

Product Identity : T-FC28 -Y. Yellow Toner

MSDS : TFC28YU1W

Page 2 of 6

Reproductive/Developmental : Not identified.

Target Organs : Prolonged breathing of high concentrations may cause adverse effects on the respiratory system.

Signs and Symptoms of Exposure

: Prolonged exposure to dusts of this product may irritate the respiratory system.

Medical Conditions Aggravated by Exposure to This Product

: Respiratory disorders, such as asthma, may be aggravated by prolonged exposure to high concentrations of this product.

## SECTION 4 FIRST AID MEASURES

Eye Contact : Immediately flush eyes with plenty of water for at least 15 minutes.

: If irritation persists, call a physician.

Skin Contact

: Wash with soap and water. Wash clothing before reuse.

: If irritation occurs or is persistent, seek medical attention.

Ingestion

: Dilute stomach contents with several glasses of water.

Inhalation

: Remove from exposure area to fresh air immediately.

: Contact a physician if there is any difficulty in breathing or other signs of distress.

## SECTION 5 FIRE FIGHTING MEASURES

General Hazard : Product will burn in case of fire.

Flash Point : Not applicable

Flammable Limits : Not applicable

Autoignition Temperature : Not applicable

Flammability classification : Not applicable

Extinguishing Media : Foam, halon, carbon dioxide, dry chemical & water fog.

Unusual Fire & Explosion Hazard

: Combustible powder. Dust of this product at sufficient concentrations can form explosive mixtures with air.

Fire Fighting Procedures : None

Hazardous Combustion Products

: Carbon monoxide, carbon dioxide and smoke.

## SECTION 6 ACCIDENTAL RELEASE MEASURES

Spills or Leaks : Vacuum-clean spilled toner and carefully transfer into sealable waste container. If no vacuum-cleaner is available, sweep slowly to minimize generation of dust during clean-up. Residue can be removed with soap and cold water.

## SECTION 7 HANDLING AND STORAGE

Handling : Avoid dust, keep away from ignition sources.

Prevention of Fire and Explosion

: This material is capable of creating a dust explosion.

: Keep away from heat, sparks & flame.

Storage

: Keep container in cool and dry area.

Hygienic Practices

: Avoid Inhalation and ingestion. Avoid getting in eyes, on skin or clothing. Wash hands thoroughly after handling, and before eating, drinking, or smoking.

# MATERIAL SAFETY DATA SHEET

Product Identity

: T-FC28 -Y Yellow Toner

MSDS : TFC28YU1W

Page 3 of 6

## SECTION 8 EXPOSURE CONTROLS/PERSONAL PROTECTION

### Exposure Limits

|                        |   |
|------------------------|---|
| OSHA PELs (TWA)        |   |
| as the product         | : 15mg/m <sup>3</sup> (Total dust)<br>5mg/m <sup>3</sup> (Respirable fraction)          |
| Other substances       | : Not listed  |
| ACGIH TLVs (TWA)       |   |
| as the product         | : 10mg/m <sup>3</sup> (Total dust)<br>3mg/m <sup>3</sup> (Respirable fraction)          |
| Other substances       | : Not listed  |
| DFG-MAK (TWA)          |   |
| as the product         | : 4mg/m <sup>3</sup> (Inhalable fraction)<br>1.5mg/m <sup>3</sup> (Respirable fraction) |
| All substances         | : Not listed  |
| NOHSC (TWA)            |   |
| All substances         | : Not listed  |
| Engineering Controls   | : Maintain adequate ventilation.  |
| Eye Protection         | : Not required under intended use.  |
| Skin Protection        | : Not required under intended use.  |
| Respiratory Protection | : Not required under intended use.  |

## SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

|                                      |  |
|--------------------------------------|--|
| Appearance                           | : Fine solid powder                                    |
| Color                                | : Yellow   |
| Scent                                | : Odorless   |
| Melting Point                        | : 110 - 150 degree (Softening point)                   |
| Specific Gravity(H <sub>2</sub> O=1) | : 1.1 - 1.5  |
| Vapor Pressure                       | : Not applicable                                       |
| Vapor Density (Air=1) :              | : Not applicable                                       |
| Evaporation Rate                     | : Not applicable                                       |
| Solubility in Water                  | : Negligible   |
| pH Value                             | : Not a water-based product, therefore not applicable. |

## SECTION 10 STABILITY AND REACTIVITY

|                                  |                                       |
|----------------------------------|---------------------------------------|
| Stability                        | : Stable                              |
| Incompatibility                  | : Not identified.                     |
| Hazardous Decomposition Products |                                       |
|                                  | : Carbon monoxide and carbon dioxide. |
| Hazardous Polymerization:        | : Will not occur.                     |

# MATERIAL SAFETY DATA SHEET

Product Identity

: T-FC28 -Y Yellow Toner

MSDS : TFC28YU1W

Page 4 of 6

## SECTION 11 SUPPLEMENTAL HEALTH INFORMATION

Acute oral toxicity : LD50 is greater than 2,000mg/kg.  
(This was the highest attainable mass.)  
Acute Inhalation : LC50(4H) is in excess of 5.30mg/l.  
(This was the highest attainable concentration.)  
Eye Irritation : Non-irritant.  
Skin Irritation : Non-irritant.  
Skin sensitization : Non-sensitizer.  
Mutagenicity : Negative in the Ames test.  
Carcinogenicity : None known  
Chronic Effects : None known

## SECTION 12 ECOLOGICAL INFORMATION

Aquatic environment : LC50 is greater than 1000mg/L (fish)  
: EC50 is greater than 1000mg/L (daphnia)  
: EC50 is greater than 1000mg/L (Algal)  
(This was the highest attainable mass.)

## SECTION 13 DISPOSAL CONSIDERATION

Dispose of in accordance with local, state and federal regulation.  
Empty plastic container may be recycled.

## SECTION 14 TRANSPORTATION INFORMATION

Special Precautions : None  
International Transport Information  
UN Classification Number : Not applicable  
DOT Identification Number : Not applicable  
Domestic Transportation : Not applicable  
Other Information : Not applicable

## SECTION 15 REGULATORY INFORMATION

IARC : See section 11.  
US/Canada Information  
OSHA Hazard Communication Standard, 29CFR 1910. 1200  
: Not regulated.  
Toxic Substance Control Act (TSCA)  
: All chemical substances in this product comply with  
all applicable rules or orders under TSCA.  
RCRA (40 CFR 261) : Product or components not listed.  
CERCLA/SARA Information : Not regulated.  
NTP Annual Report on Carcinogens  
: Not listed as an NTP carcinogen.  
California Proposition 65 : Neither toner, or any of the components, are listed as chemicals known  
to the State of California to cause cancer or reproductive system effects.  
Controlled Products Regulations(Canada)  
: This product has been classified in accordance with the hazard criteria  
of the CPR.

# MATERIAL SAFETY DATA SHEET

Product Identity : T-FC28 -Y Yellow Toner

MSDS : TFC28YU1W  
Page 5 of 6

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## Workplace Hazardous Materials Information System(Canada)

: No toxicology information available

Other State Regulations : Not listed in the New Jersey Right to Know List,  
Pennsylvania Hazardous Substance List, and Massachusetts Substance List.

## U.S./Canada Label Statements

: LOW HAZARD FOR RECOMMENDED HANDLING. Minimize dust generation and accumulation. Use with adequate ventilation.

## EU Information

### Label Information According to Directives 67/548 EEC & 1999/45 EC

Symbol & Indication : Not required

Risk Phrase : Not required

Safety Advise Phrase : Not required

76/769/EEC : All chemical substances in this product comply with all applicable rules or order under 76/769/EEC.

National requirement : No specific regulations or restrictions.

## SECTION 16 OTHER INFORMATION

### National Fire Protection Association (NFPA) Classification :

Flammability : 1

Reactivity : 0

Health : 0

( 0 = insignificant, 1 = slight )

### Hazardous Materials Information Systems (HMIS) :

Red (Flammability) : 1

Yellow (Reactivity) : 0

Blue (Acute Effects) : 0

( 0 = insignificant, 1 = slight )

### Notice

: Judgments as to the suitability of information herein for purchaser's purposes are necessarily purchaser's responsibility. Therefore, although reasonable care has been taken in the preparation of such information, Toshiba Corporation extends no warranties, makes no representations, and assumes no responsibility as to the accuracy or suitability of such information for application to purchaser's intended purposes or for consequences of its use.

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# MATERIAL SAFETY DATA SHEET

Product Identity

: T-FC28 -Y Yellow Toner

MSDS : TFC28YU1W

Page 6 of 6

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Abbreviation

- : (1) OSHA PEL stands for Permissible Exposure Limit under Occupational Safety and Health Administration (USA).
- (2) ACGIH TLV stands for Threshold Limit Value under American Conference of Governmental Industrial Hygienists (USA).
- (3) DFG-MAK stands for Maximale Arbeitsplatzkonzentrationen under Deutsche Forschungsgemeinschaft.
- (4) TWA stands for Time Weighted Average.
- (5) NTP stands for National Toxicology Program (USA).
- (6) NIOSH stands for National Institute for Occupational Safety and Health (USA).
- (7) DOT stands for Department of Transportation (USA).
- (8) NOHSC stands for National Occupational Health and Safety Commission (Australia).

Prepared by

: Toshiba TEC Corporation  
Quality Assurance Div.  
Document Processing & Telecommunication Systems Company  
6-78 Minami-cho, Mishima-shi, Shizuoka-ken,  
411-8520 Japan

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# TOSHIBA MATERIAL SAFETY DATA SHEET

Date of Preparation : March 20, 2008  
Date of Revised :

MSDS : TFC28MU1W  
Page 1 of 6

## SECTION 1 CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name : T-FC28 -M Magenta Toner  
Used for : Toshiba Copiers, e-STUDIO 2330C,2820C,2830C,3520C,3530C and 4520C  
Company Name : Toshiba TEC Corporation  
Address : 2-17-2, Higashigotanda, Shinagawa-ku, Tokyo, 141-8664, Japan  
Telephone Number : +81-3-6422-7753  
Manufacturer Name : (1) Toshiba America Business Solutions, Inc  
Toner Products Division (Mitchell Plant)  
901 North Foster Street, Mitchell, SD. 57301-0070 U.S.A.

Contact : (1) Toshiba America Business Solutions, Inc.  
Emergency Telephone. No. : +1-800-424-9300  
For calls within the U.S. only.  
(2) Toshiba of Canada Limited  
Telephone. No. : +1 905 470 3500  
For calls within Canada only.

## SECTION 2 COMPOSITION/INFORMATION ON INGREDIENTS

| <u>INGREDIENT(S)</u> | <u>CAS No.</u> | <u>wt. %</u> |
|----------------------|----------------|--------------|
| Polyester resin      | ---            | 80-90        |
| Organic Pigment      | ---            | <10          |
| Wax                  | ---            | <10          |
| Amorphous Silica     | 7631-86-9      | <5           |
| Titanium dioxide     | 13463-67-7     | <2           |

--- TRADE SECRET

## SECTION 3 HAZARDS IDENTIFICATION

Emergency Overview : If used as intended, the product does not present acute or chronic health hazard.

Physical Hazards : This product is not classified as flammable or combustible.  
It will burn in case of fire.  
Avoid contact with strong oxidizers such as chromate, bromate and nitrates.

Routes of Exposure : Inhalation, dermal contact, incidental ingestion

Inhalation : Excessive inhalation may cause irritation of the nose, throat and respiratory tract.

Eye Contact : Non-Irritant.

Dermal Contact : Non-irritant, non-sensitiser.

Ingestion : Not currently known.

Chronic Effects : See Section 11 Supplemental Health Information.

Carcinogenicity : See Section 11 Supplemental Health Information.

# MATERIAL SAFETY DATA SHEET

Product Identity : T-FC28 -M Magenta Toner

MSDS : TFC28MU1W

Page 2 of 6

- 
- Reproductive/Developmental : Not identified.  
Target Organs : Prolonged breathing of high concentrations may cause adverse effects on the respiratory system.  
Signs and Symptoms of Exposure : Prolonged exposure to dusts of this product may irritate the respiratory system.  
Medical Conditions Aggravated by Exposure to This Product : Respiratory disorders, such as asthma, may be aggravated by prolonged exposure to high concentrations of this product.

## SECTION 4 FIRST AID MEASURES

- Eye Contact : Immediately flush eyes with plenty of water for at least 15 minutes. If irritation persists, call a physician.  
Skin Contact : Wash with soap and water. Wash clothing before reuse. If irritation occurs or is persistent, seek medical attention.  
Ingestion : Dilute stomach contents with several glasses of water.  
Inhalation : Remove from exposure area to fresh air immediately. Contact a physician if there is any difficulty in breathing or other signs of distress.

## SECTION 5 FIRE FIGHTING MEASURES

- General Hazard : Product will burn in case of fire.  
Flash Point : Not applicable  
Flammable Limits : Not applicable  
Autoignition Temperature : Not applicable  
Flammability classification : Not applicable  
Extinguishing Media : Foam, halon, carbon dioxide, dry chemical & water fog.  
Unusual Fire & Explosion Hazard : Combustible powder. Dust of this product at sufficient concentrations can form explosive mixtures with air.  
Fire Fighting Procedures : None  
Hazardous Combustion Products : Carbon monoxide, carbon dioxide and smoke.

## SECTION 6 ACCIDENTAL RELEASE MEASURES

- Spills or Leaks : Vacuum-clean spilled toner and carefully transfer into sealable waste container. If no vacuum-cleaner is available, sweep slowly to minimize generation of dust during clean-up. Residue can be removed with soap and cold water.

## SECTION 7 HANDLING AND STORAGE

- Handling : Avoid dust, keep away from ignition sources.  
Prevention of Fire and Explosion : This material is capable of creating a dust explosion. Keep away from heat, sparks & flame.  
Storage : Keep container in cool and dry area.  
Hygienic Practices : Avoid inhalation and ingestion. Avoid getting in eyes, on skin or clothing. Wash hands thoroughly after handling, and before eating, drinking, or smoking.
-

# MATERIAL SAFETY DATA SHEET

Product Identity

: T-FC28 -M Magenta Toner

MSDS : TFC28MU1W

Page 3 of 6

## SECTION 8 EXPOSURE CONTROLS/PERSONAL PROTECTION

### Exposure Limits

|                        |   |
|------------------------|---|
| OSHA PELs (TWA)        |   |
| as the product         | : 15mg/m <sup>3</sup> (Total dust)<br>5mg/m <sup>3</sup> (Respirable fraction)          |
| Other substances       | : Not listed  |
| ACGIH TLVs (TWA)       |   |
| as the product         | : 10mg/m <sup>3</sup> (Total dust)<br>3mg/m <sup>3</sup> (Respirable fraction)          |
| Other substances       | : Not listed  |
| DFG-MAK (TWA)          |   |
| as the product         | : 4mg/m <sup>3</sup> (Inhalable fraction)<br>1.5mg/m <sup>3</sup> (Respirable fraction) |
| All substances         | : Not listed  |
| NOHSC (TWA)            |   |
| All substances         | : Not listed  |
| Engineering Controls   | : Maintain adequate ventilation.  |
| Eye Protection         | : Not required under intended use.  |
| Skin Protection        | : Not required under intended use.  |
| Respiratory Protection | : Not required under intended use.  |

## SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

|                                      |  |
|--------------------------------------|--|
| Appearance                           | : Fine solid powder                                    |
| Color                                | : Magenta  |
| Scent                                | : Odorless   |
| Melting Point                        | : 110 - 150 degree (Softening point)                   |
| Specific Gravity(H <sub>2</sub> O=1) | : 1.1 - 1.5  |
| Vapor Pressure                       | : Not applicable                                       |
| Vapor Density (Air=1) :              | : Not applicable                                       |
| Evaporation Rate                     | : Not applicable                                       |
| Solubility in Water                  | : Negligible   |
| pH Value                             | : Not a water-based product, therefore not applicable. |

## SECTION 10 STABILITY AND REACTIVITY

|                                  |                                       |
|----------------------------------|---------------------------------------|
| Stability                        | : Stable                              |
| Incompatibility                  | : Not identified.                     |
| Hazardous Decomposition Products |                                       |
|                                  | : Carbon monoxide and carbon dioxide. |
| Hazardous Polymerization:        | : Will not occur.                     |

# MATERIAL SAFETY DATA SHEET

Product Identity : T-FC28 -M Magenta Toner

MSDS : TFC28MU1W

Page 4 of 6

## SECTION 11 SUPPLEMENTAL HEALTH INFORMATION

Acute oral toxicity : LD50 is greater than 2,000mg/kg.  
(This was the highest attainable mass.)  
Acute Inhalation : LC50(4H) is in excess of 5.13mg/l.  
(This was the highest attainable concentration.)  
Eye irritation : Non-irritant.  
Skin irritation : Non-irritant.  
Skin sensitization : Non-sensitizer.  
Mutagenicity : Negative in the Ames test.  
Carcinogenicity : None known  
Chronic Effects : None known

## SECTION 12 ECOLOGICAL INFORMATION

Aquatic environment : LC50 is greater than 1000mg/L (fish)  
: EC50 is greater than 1000mg/L (daphnia)  
: EbC50 is greater than 1000mg/L (Algal)  
(This was the highest attainable mass.)

## SECTION 13 DISPOSAL CONSIDERATION

Dispose of in accordance with local, state and federal regulation.  
Empty plastic container may be recycled.

## SECTION 14 TRANSPORTATION INFORMATION

Special Precautions : None  
International Transport Information  
UN Classification Number : Not applicable  
DOT Identification Number : Not applicable  
Domestic Transportation : Not applicable  
Other Information : Not applicable

## SECTION 15 REGULATORY INFORMATION

IARC : See section 11.  
US/Canada Information  
OSHA Hazard Communication Standard, 29CFR 1910. 1200  
: Not regulated.  
Toxic Substance Control Act (TSCA)  
: All chemical substances in this product comply with  
all applicable rules or orders under TSCA.  
RCRA (40 CFR 261) : Product or components not listed.  
CERCLA/SARA Information : Not regulated.  
NTP Annual Report on Carcinogens  
: Not listed as an NTP carcinogen.  
California Proposition 65 : Neither toner, or any of the components, are listed as chemicals known  
to the State of California to cause cancer or reproductive system effects.  
Controlled Products Regulations(Canada)  
: This product has been classified in accordance with the hazard criteria  
of the CPR.

# MATERIAL SAFETY DATA SHEET

Product Identity : T-FC28 -M Magenta Toner

MSDS : TFC28MU1W

Page 5 of 6

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## Workplace Hazardous Materials Information System(Canada)

: No toxicology information available

Other State Regulations : Not listed in the New Jersey Right to Know List,

Pennsylvania Hazardous Substance List, and Massachusetts Substance List.

## U.S./Canada Label Statements

: LOW HAZARD FOR RECOMMENDED HANDLING. Minimize dust generation and accumulation. Use with adequate ventilation.

## EU Information

Label Information According to Directives 67/548 EEC & 1999/45 EC

Symbol & Indication : Not required

Risk Phrase : Not required

Safety Advise Phrase : Not required

76/769/EEC : All chemical substances in this product comply with all applicable rules or order under 76/769/EEC.

National requirement : No specific regulations or restrictions.

## SECTION 16 OTHER INFORMATION

National Fire Protection Association (NFPA) Classification :

Flammability : 1

Reactivity : 0

Health : 0

( 0 = insignificant, 1 = slight )

Hazardous Materials Information Systems (HMIS) :

Red (Flammability) : 1

Yellow (Reactivity) : 0

Blue (Acute Effects) : 0

( 0 = insignificant, 1 = slight )

## Notice

: Judgments as to the suitability of information herein for purchaser's purposes are necessarily purchaser's responsibility. Therefore, although reasonable care has been taken in the preparation of such information, Toshiba Corporation extends no warranties, makes no representations, and assumes no responsibility as to the accuracy or suitability of such information for application to purchaser's intended purposes or for consequences of its use.

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# MATERIAL SAFETY DATA SHEET

Product Identity

: T-FC28 -M Magenta Toner

MSDS : TFC28MU1W

Page 6 of 6

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Abbreviation

- : (1) OSHA PEL stands for Permissible Exposure Limit under Occupational Safety and Health Administration (USA).
- (2) ACGIH TLV stands for Threshold Limit Value under American Conference of Governmental Industrial Hygienists (USA).
- (3) DFG-MAK stands for Maximale Arbeitsplatzkonzentrationen under Deutsche Forschungsgemeinschaft.
- (4) TWA stands for Time Weighted Average.
- (5) NTP stands for National Toxicology Program (USA).
- (6) NIOSH stands for National Institute for Occupational Safety and Health (USA).
- (7) DOT stands for Department of Transportation (USA).
- (8) NOHSC stands for National Occupational Health and Safety Commission (Australia).

Prepared by

: Toshiba TEC Corporation  
Quality Assurance Div.  
Document Processing & Telecommunication Systems Company  
6-78 Minami-cho, Mishima-shi, Shizuoka-ken,  
411-8520 Japan

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# TOSHIBA MATERIAL SAFETY DATA SHEET

Date of Preparation : March 20, 2008  
Date of Revised :

MSDS : TFC28KU1W  
Page 1 of 6

## SECTION 1 CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name : T-FC28 -K Black Toner  
Used for : Toshiba Copiers, e-STUDIO 2330C,2820C,2830C,3520C,3530C and 4520C  
Company Name : Toshiba TEC Corporation  
Address : 2-17-2, Higashigotanda, Shinagawa-ku, Tokyo, 141-8664, Japan  
Telephone Number : +81-3-6422-7753  
Manufacturer Name : (1) Toshiba America Business Solutions, Inc  
Toner Products Division (Mitchell Plant)  
901 North Foster Street, Mitchell, SD. 57301-0070 U.S.A.

Contact : (1) Toshiba America Business Solutions, Inc.  
Emergency Telephone. No. : +1-800-424-9300  
For calls within the U.S. only.  
(2) Toshiba of Canada Limited  
Telephone. No. : +1 905 470 3500  
For calls within Canada only.

## SECTION 2 COMPOSITION/INFORMATION ON INGREDIENTS

| <u>INGREDIENT(S)</u> | <u>CAS No.</u> | <u>wt. %</u> |
|----------------------|----------------|--------------|
| Polyester resin      | ---            | 80-90        |
| Carbon black         | 1333-86-4      | 3-8          |
| Wax                  | ---            | <10          |
| Amorphous Silica     | 7631-86-9      | <5           |
| Titanium dioxide     | 13463-67-7     | <2           |

--- TRADE SECRET

## SECTION 3 HAZARDS IDENTIFICATION

Emergency Overview : If used as intended, the product does not present acute or chronic health hazard.  
Physical Hazards : This product is not classified as flammable or combustible. It will burn in case of fire. Avoid contact with strong oxidizers such as chromate, bromate and nitrates.  
Routes of Exposure : Inhalation, dermal contact, incidental ingestion

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Product Identity

: T-FC28 -K Black Toner

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- 
- Inhalation : Excessive inhalation may cause irritation of the nose, throat and respiratory tract.
- Eye Contact : Non-irritant.
- Dermal Contact : Non-irritant, non-sensitiser.
- Ingestion : Not currently known.
- Chronic Effects : See Section 11 Supplemental Health Information.
- Carcinogenicity : See Section 11 Supplemental Health Information.
- Reproductive/Developmental : Not identified.
- Target Organs : Prolonged breathing of high concentrations may cause adverse effects on the respiratory system.
- Signs and Symptoms of Exposure : Prolonged exposure to dusts of this product may irritate the respiratory system.
- Medical Conditions Aggravated by Exposure to This Product : Respiratory disorders, such as asthma, may be aggravated by prolonged exposure to high concentrations of this product.

## SECTION 4 FIRST AID MEASURES

- Eye Contact : Immediately flush eyes with plenty of water for at least 15 minutes. If irritation persists, call a physician.
- Skin Contact : Wash with soap and water. Wash clothing before reuse. If irritation occurs or is persistent, seek medical attention.
- Ingestion : Dilute stomach contents with several glasses of water.
- Inhalation : Remove from exposure area to fresh air immediately. Contact a physician if there is any difficulty in breathing or other signs of distress.

## SECTION 5 FIRE FIGHTING MEASURES

- General Hazard : Product will burn in case of fire.
- Flash Point : Not applicable
- Flammable Limits : Not applicable
- Autoignition Temperature : Not applicable
- Flammability classification : Not applicable
- Extinguishing Media : Foam, halon, carbon dioxide, dry chemical & water fog.
- Unusual Fire & Explosion Hazard : Combustible powder. Dust of this product at sufficient concentrations can form explosive mixtures with air.
- Fire Fighting Procedures : None
- Hazardous Combustion Products : Carbon monoxide, carbon dioxide and smoke.

## SECTION 6 ACCIDENTAL RELEASE MEASURES

- Spills or Leaks : Vacuum-clean spilled toner and carefully transfer into sealable waste container. If no vacuum-cleaner is available, sweep slowly to minimize generation of dust during clean-up. Residue can be removed with soap and cold water.
-



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## SECTION 7 HANDLING AND STORAGE

- Handling : Avoid dust, keep away from ignition sources.
- Prevention of Fire and Explosion : This material is capable of creating a dust explosion.  
Keep away from heat, sparks & flame.
- Storage : Keep container in cool and dry area.
- Hygienic Practices : Avoid inhalation and ingestion. Avoid getting in eyes, on skin or clothing.  
Wash hands thoroughly after handling, and before eating, drinking, or smoking.

## SECTION 8 EXPOSURE CONTROLS/PERSONAL PROTECTION

- Exposure Limits
- OSHA PELs (TWA)  
as the product : 15mg/m<sup>3</sup> (Total dust)  
5mg/m<sup>3</sup> (Respirable fraction)
- Carbon black : 3.5 mg/m<sup>3</sup>
- Other substances : Not listed
- ACGIH TLVs (TWA)  
as the product : 10mg/m<sup>3</sup> (Total dust)  
3mg/m<sup>3</sup> (Respirable fraction)
- Carbon black : 3.5 mg/m<sup>3</sup>
- Other substances : Not listed
- DFG-MAK (TWA)  
as the product : 4mg/m<sup>3</sup> (Inhalable fraction)  
1.5mg/m<sup>3</sup> (Respirable fraction)
- All substances : Not listed
- NOHSC (TWA)  
All substances : Not listed
- Engineering Controls : Maintain adequate ventilation.
- Eye Protection : Not required under intended use.
- Skin Protection : Not required under intended use.
- Respiratory Protection : Not required under intended use.

## SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

- Appearance : Fine solid powder
- Color : Black
- Scent : Odorless
- Melting Point : 110 - 150 degree (Softening point)
- Specific Gravity(H<sub>2</sub>O=1) : 1.1 - 1.5
- Vapor Pressure : Not applicable
- Vapor Density (Air=1) : Not applicable
- Evaporation Rate : Not applicable
- Solubility in Water : Negligible
- pH Value : Not a water-based product, therefore not applicable.

# MATERIAL SAFETY DATA SHEET

Product Identity : T-FC28 -K Black Toner

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## SECTION 10 STABILITY AND REACTIVITY

Stability : Stable  
Incompatibility : Not identified.  
Hazardous Decomposition Products : Carbon monoxide and carbon dioxide.  
Hazardous Polymerization: : Will not occur.

## SECTION 11 SUPPLEMENTAL HEALTH INFORMATION

Acute oral toxicity : LD50 is greater than 2,000mg/kg.  
(This was the highest attainable mass.)  
Acute Inhalation : LC50(4H) is in excess of 5.13mg/l.  
(This was the highest attainable concentration.)  
Eye irritation : Non-irritant.  
Skin irritation : Non-irritant.  
Skin sensitization : Non-sensitizer.  
Mutagenicity : Negative in the Ames test.  
Carcinogenicity : In 1996, the IARC classified carbon black as a Group 2B carcinogen  
(possible human carcinogen).  
Chronic Effects : In a study in rats by chronic inhalation exposure to a typical toner, a mild to moderate degree of lung fibrosis was observed in 92 % of the rats in the high concentration (16 mg/m<sup>3</sup>) exposure group, and a minimal to mild degree of fibrosis was noted in 22% of the animals in the middle (4 mg/m<sup>3</sup>) exposure group. These findings are attributed to "lung overloading", a general response to excessive amounts of any dust retained in the lungs for a prolonged period.

## SECTION 12 ECOLOGICAL INFORMATION

Aquatic environment : LC50 is greater than 1000mg/L (fish)  
: EC50 is greater than 1000mg/L (daphnia)  
: EbC50 is greater than 1000mg/L (Algal)  
(This was the highest attainable mass.)

## SECTION 13 DISPOSAL CONSIDERATION

Dispose of in accordance with local, state and federal regulation.  
Empty plastic container may be recycled.

## SECTION 14 TRANSPORTATION INFORMATION

Special Precautions : None  
International Transport Information  
UN Classification Number : Not applicable  
DOT Identification Number : Not applicable  
Domestic Transportation : Not applicable  
Other Information : Not applicable

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## SECTION 15 REGULATORY INFORMATION

- IARC : See section 11.
- US/Canada Information
- OSHA Hazard Communication Standard, 29CFR 1910. 1200  
: Not regulated.
- Toxic Substance Control Act (TSCA)  
: All chemical substances in this product comply with all applicable rules or orders under TSCA.
- RCRA (40 CFR 261) : Product or components not listed.
- CERCLA/SARA Information : Not regulated.
- NTP Annual Report on Carcinogens  
: Not listed as an NTP carcinogen.
- California Proposition 65 : Neither toner, or any of the components, are listed as chemicals known to the State of California to cause cancer or reproductive system effects.
- Controlled Products Regulations(Canada)  
: This product has been classified in accordance with the hazard criteria of the CPR.
- Workplace Hazardous Materials Information System(Canada)  
: No toxicology information available
- Other State Regulations : Carbon black is listed in the New Jersey Right to Know List, Pennsylvania Hazardous Substance List, and Massachusetts Substance List.
- U.S./Canada Label Statements  
: LOW HAZARD FOR RECOMMENDED HANDLING. Minimize dust generation and accumulation. Use with adequate ventilation.

### EU Information

- Label Information According to Directives 67/548 EEC & 1999/45 EC
- Symbol & Indication : Not required
- Risk Phrase : Not required
- Safety Advise Phrase : Not required
- 76/769/EEC : All chemical substances in this product comply with all applicable rules or order under 76/769/EEC.
- National requirement : : No specific regulations or restrictions.

## SECTION 16 OTHER INFORMATION

- National Fire Protection Association (NFPA) Classification :
- Flammability : 1
- Reactivity : 0
- Health : 0
- ( 0 = insignificant, 1 = slight )
- Hazardous Materials Information Systems (HMIS) :
- Red (Flammability) : 1
- Yellow (Reactivity) : 0
- Blue (Acute Effects) : 0
- ( 0 = Insignificant, 1 = slight )

# MATERIAL SAFETY DATA SHEET

Product Identity

: T-FC28 -K Black Toner

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Notice

: Judgments as to the suitability of information herein for purchaser's purposes are necessarily purchaser's responsibility. Therefore, although reasonable care has been taken in the preparation of such information, Toshiba Corporation extends no warranties, makes no representations, and assumes no responsibility as to the accuracy or suitability of such information for application to purchaser's intended purposes or for consequences of its use.

References

: IARC (1996) IARC Monographs on the Evaluation of the Carcinogenic Risks of Chemicals to Humans, Vol. 65; Printing Processes and Printing Inks, Carbon Black and Some Nitro Compounds, Lyon, pp. 149-261.  
H. Muhle, B. Bellmann, O. Creutzenberg, C. Dasenbrock, H. Ernst, R. Kilpper, J. C. MacKenzie, P. Morrow, U. Mohr, S. Takenaka, and R. Mermelstein (1991).  
Pulmonary Response to Toner upon Chronic Inhalation Exposure in Rats, Fundamental and Applied Toxicology 17, pp. 280-299.

Abbreviation

- : (1) OSHA PEL stands for Permissible Exposure Limit under Occupational Safety and Health Administration (USA).
- (2) ACGIH TLV stands for Threshold Limit Value under American Conference of Governmental Industrial Hygienists (USA).
- (3) DFG-MAK stands for Maximale Arbeitsplatzkonzentrationen under Deutsche Forschungsgemeinschaft.
- (4) TWA stands for Time Weighted Average.
- (5) IARC stands for International Agency for Research on Cancer.
- (6) NTP stands for National Toxicology Program (USA).
- (7) NIOSH stands for National Institute for Occupational Safety and Health (USA).
- (8) DOT stands for Department of Transportation (USA).
- (9) NOHSC stands for National Occupational Health and Safety Commission (Australia).

Prepared by

: Toshiba TEC Corporation  
Quality Assurance Div.  
Document Processing & Telecommunication Systems Company  
6-78 Minami-cho, Mishima-shi, Shizuoka-ken,  
411-8520 Japan

# TOSHIBA MATERIAL SAFETY DATA SHEET

Date of Preparation : March 20, 2008  
Date of Revised :

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## SECTION 1 CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name : T-FC28 -C Cyan Toner  
Used for : Toshiba Copiers, e-STUDIO 2330C,2820C,2830C,3520C,3530C and 4520C  
Company Name : Toshiba TEC Corporation  
Address : 2-17-2, Higashigotanda, Shinagawa-ku, Tokyo, 141-8664, Japan  
Telephone Number : +81-3-6422-7753  
Manufacturer Name : (1) Toshiba America Business Solutions, Inc  
Toner Products Division (Mitchell Plant)  
901 North Foster Street, Mitchell, SD, 57301-0070 U.S.A.

Contact : (1) Toshiba America Business Solutions, Inc.  
Emergency Telephone. No. : +1-800-424-9300  
For calls within the U.S. only.  
(2) Toshiba of Canada Limited  
Telephone. No. : +1 905 470 3500  
For calls within Canada only.

## SECTION 2 COMPOSITION/INFORMATION ON INGREDIENTS

| <u>INGREDIENT(S)</u> | <u>CAS No.</u> | <u>wt. %</u> |
|----------------------|----------------|--------------|
| Polyester resin      | ---            | 80-90        |
| Organic Pigment      | ---            | <10          |
| Wax                  | ---            | <10          |
| Amorphous Silica     | 7631-86-9      | <5           |
| Titanium dioxide     | 13463-67-7     | <2           |

--- TRADE SECRET

## SECTION 3 HAZARDS IDENTIFICATION

Emergency Overview : If used as intended, the product does not present acute or chronic health hazard.

Physical Hazards : This product is not classified as flammable or combustible.  
It will burn in case of fire.  
Avoid contact with strong oxidizers such as chromate, bromate and nitrates.

Routes of Exposure : Inhalation, dermal contact, incidental ingestion  
Inhalation : Excessive inhalation may cause irritation of the nose, throat and respiratory tract.

Eye Contact : Non-irritant.  
Dermal Contact : Non-irritant, non-sensitiser.  
Ingestion : Not currently known.

Chronic Effects : See Section 11 Supplemental Health Information.  
Carcinogenicity : See Section 11 Supplemental Health Information.

# MATERIAL SAFETY DATA SHEET

Product Identity : T-FC28 -C Cyan Toner

MSDS : TFC28CU1W  
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- Reproductive/Developmental : Not identified.  
Target Organs : Prolonged breathing of high concentrations may cause adverse effects on the respiratory system.  
Signs and Symptoms of Exposure : Prolonged exposure to dusts of this product may irritate the respiratory system.  
Medical Conditions Aggravated by Exposure to This Product : Respiratory disorders, such as asthma, may be aggravated by prolonged exposure to high concentrations of this product.

## SECTION 4 FIRST AID MEASURES

- Eye Contact : Immediately flush eyes with plenty of water for at least 15 minutes. If irritation persists, call a physician.  
Skin Contact : Wash with soap and water. Wash clothing before reuse. If irritation occurs or is persistent, seek medical attention.  
Ingestion : Dilute stomach contents with several glasses of water.  
Inhalation : Remove from exposure area to fresh air immediately. Contact a physician if there is any difficulty in breathing or other signs of distress.

## SECTION 5 FIRE FIGHTING MEASURES

- General Hazard : Product will burn in case of fire.  
Flash Point : Not applicable  
Flammable Limits : Not applicable  
Autoignition Temperature : Not applicable  
Flammability classification : Not applicable  
Extinguishing Media : Foam, halon, carbon dioxide, dry chemical & water fog.  
Unusual Fire & Explosion Hazard : Combustible powder. Dust of this product at sufficient concentrations can form explosive mixtures with air.  
Fire Fighting Procedures : None  
Hazardous Combustion Products : Carbon monoxide, carbon dioxide and smoke.

## SECTION 6 ACCIDENTAL RELEASE MEASURES

- Spills or Leaks : Vacuum-clean spilled toner and carefully transfer into sealable waste container. If no vacuum-cleaner is available, sweep slowly to minimize generation of dust during clean-up. Residue can be removed with soap and cold water.

## SECTION 7 HANDLING AND STORAGE

- Handling : Avoid dust, keep away from ignition sources.  
Prevention of Fire and Explosion : This material is capable of creating a dust explosion. Keep away from heat, sparks & flame.  
Storage : Keep container in cool and dry area.  
Hygienic Practices : Avoid inhalation and ingestion. Avoid getting in eyes, on skin or clothing. Wash hands thoroughly after handling, and before eating, drinking, or smoking.
-

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Product Identity

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MSDS : TFC28CU1W

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## SECTION 8 EXPOSURE CONTROLS/PERSONAL PROTECTION

### Exposure Limits

|                        |   |
|------------------------|---|
| OSHA PELs (TWA)        |   |
| as the product         | : 15mg/m <sup>3</sup> (Total dust)<br>5mg/m <sup>3</sup> (Respirable fraction)          |
| Other substances       | : Not listed  |
| ACGIH TLVs (TWA)       |   |
| as the product         | : 10mg/m <sup>3</sup> (Total dust)<br>3mg/m <sup>3</sup> (Respirable fraction)          |
| Other substances       | : Not listed  |
| DFG-MAK (TWA)          |   |
| as the product         | : 4mg/m <sup>3</sup> (Inhalable fraction)<br>1.5mg/m <sup>3</sup> (Respirable fraction) |
| All substances         | : Not listed  |
| NOHSC (TWA)            |   |
| All substances         | : Not listed  |
| Engineering Controls   | : Maintain adequate ventilation.  |
| Eye Protection         | : Not required under intended use.  |
| Skin Protection        | : Not required under intended use.  |
| Respiratory Protection | : Not required under intended use.  |

## SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

|                                      |  |
|--------------------------------------|--|
| Appearance                           | : Fine solid powder                                    |
| Color                                | : Cyan   |
| Scent                                | : Odorless   |
| Melting Point                        | : 110 - 150 degree (Softening point)                   |
| Specific Gravity(H <sub>2</sub> O=1) | : 1.1 - 1.5  |
| Vapor Pressure                       | : Not applicable                                       |
| Vapor Density (Air=1) :              | : Not applicable                                       |
| Evaporation Rate                     | : Not applicable                                       |
| Solubility in Water                  | : Negligible   |
| pH Value                             | : Not a water-based product, therefore not applicable. |

## SECTION 10 STABILITY AND REACTIVITY

|                                  |                                       |
|----------------------------------|---------------------------------------|
| Stability                        | : Stable                              |
| Incompatibility                  | : Not identified.                     |
| Hazardous Decomposition Products |                                       |
|                                  | : Carbon monoxide and carbon dioxide. |
| Hazardous Polymerization:        | : Will not occur.                     |

# MATERIAL SAFETY DATA SHEET

Product Identity : T-FC28 -C Cyan Toner

MSDS : TFC28CU1W

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## SECTION 11 SUPPLEMENTAL HEALTH INFORMATION

Acute oral toxicity : LD50 is greater than 2,000mg/kg.  
(This was the highest attainable mass.)  
Acute inhalation : LC50(4H) is in excess of 5.27mg/l.  
(This was the highest attainable concentration.)  
Eye irritation : Minimal irritant  
Skin irritation : Non-irritant.  
Skin sensitization : Non-sensitiser.  
Mutagenicity : Negative in the Ames test.  
Carcinogenicity : None known  
Chronic Effects : None known

## SECTION 12 ECOLOGICAL INFORMATION

Aquatic environment : LC50 is greater than 1000mg/L (fish)  
: EC50 is greater than 1000mg/L (daphnia)  
: EbC50 is greater than 1000mg/L (Algal)  
(This was the highest attainable mass.)

## SECTION 13 DISPOSAL CONSIDERATION

Dispose of in accordance with local, state and federal regulation.  
Empty plastic container may be recycled.

## SECTION 14 TRANSPORTATION INFORMATION

Special Precautions : None  
International Transport Information  
UN Classification Number : Not applicable  
DOT Identification Number : Not applicable  
Domestic Transportation : Not applicable  
Other Information : Not applicable

## SECTION 15 REGULATORY INFORMATION

IARC : See section 11.  
US/Canada Information  
OSHA Hazard Communication Standard, 29CFR 1910. 1200  
: Not regulated.  
Toxic Substance Control Act (TSCA)  
: All chemical substances in this product comply with  
all applicable rules or orders under TSCA.  
RCRA (40 CFR 261) : Product or components not listed.  
CERCLA/SARA Information : Not regulated.  
NTP Annual Report on Carcinogens  
: Not listed as an NTP carcinogen.  
California Proposition 65 : Neither toner, or any of the components, are listed as chemicals known  
to the State of California to cause cancer or reproductive system effects.  
Controlled Products Regulations(Canada)  
: This product has been classified in accordance with the hazard criteria  
of the CPR.



# MATERIAL SAFETY DATA SHEET

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## Workplace Hazardous Materials Information System(Canada)

: No toxicology information available

Other State Regulations : Not listed in the New Jersey Right to Know List,  
Pennsylvania Hazardous Substance List, and Massachusetts Substance List.

## U.S./Canada Label Statements

: LOW HAZARD FOR RECOMMENDED HANDLING. Minimize dust generation and accumulation. Use with adequate ventilation.

## EU Information

Label Information According to Directives 67/548 EEC & 1999/45 EC

Symbol & Indication : Not required

Risk Phrase : Not required

Safety Advise Phrase : Not required

76/769/EEC : All chemical substances in this product comply with all applicable rules or order under 76/769/EEC.

National requirement : No specific regulations or restrictions.

## SECTION 16 OTHER INFORMATION

National Fire Protection Association (NFPA) Classification :

Flammability : 1

Reactivity : 0

Health : 0

( 0 = insignificant, 1 = slight )

Hazardous Materials Information Systems (HMIS) :

Red (Flammability) : 1

Yellow (Reactivity) : 0

Blue (Acute Effects) : 0

( 0 = insignificant, 1 = slight )

Notice : Judgments as to the suitability of information herein for purchaser's purposes are necessarily purchaser's responsibility. Therefore, although reasonable care has been taken in the preparation of such information, Toshiba Corporation extends no warranties, makes no representations, and assumes no responsibility as to the accuracy or suitability of such information for application to purchaser's intended purposes or for consequences of its use.

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# MATERIAL SAFETY DATA SHEET

Product Identity

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Abbreviation

- : (1) OSHA PEL stands for Permissible Exposure Limit under Occupational Safety and Health Administration (USA).
- (2) ACGIH TLV stands for Threshold Limit Value under American Conference of Governmental Industrial Hygienists (USA).
- (3) DFG-MAK stands for Maximale Arbeitsplatzkonzentrationen under Deutsche Forschungsgemeinschaft.
- (4) TWA stands for Time Weighted Average.
- (5) NTP stands for National Toxicology Program (USA).
- (6) NIOSH stands for National Institute for Occupational Safety and Health (USA).
- (7) DOT stands for Department of Transportation (USA).
- (8) NOHSC stands for National Occupational Health and Safety Commission (Australia).

Prepared by

: Toshiba TEC Corporation  
Quality Assurance Div.  
Document Processing & Telecommunication Systems Company  
6-78 Minami-cho, Mishima-shi, Shizuoka-ken,  
411-8520 Japan

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