

Date of Preparation

: 17.July. 2002

MSDS : T1200KEJ2W

Date of Revised

: March 03, 2005

Page 1 of 6

---

**SECTION 1 CHEMICAL PRODUCT AND COMPANY IDENTIFICATION**

Product Name : T-1200E  
Used for : Toshiba Copiers, e-STUDIO 12, 15, 120, 150, 151 and 162  
Company Name : Toshiba TEC Corporation  
Address : 2-17-2, Higashigotanda, Shinagawa-ku, Tokyo, 141-8664, Japan  
Telephone Number : +81-3-6422-7753

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.  
(3) Toshiba TEC Germany Imaging Systems GmbH  
Telephone. No. : +49-2131-1245-0  
(European Headquarter)  
(4) Toshiba (Australia) Pty, Ltd.  
Telephone. No. : +61-2-98873322

**SECTION 2 COMPOSITION/INFORMATION ON INGREDIENTS**

<u>INGREDIENT(S)</u>	<u>CAS No.</u>	<u>wt.%</u>
Styrene acrylate copolymer	-----	85-95
Carbon black	1333-86-4	5-10
Inorganic Pigment	-----	1-5
Metal Complex dye	109125-51-1	1-5
	109125-50-0	
	84179-66-8	
	-----	Trade Secret

**SECTION 3 HAZARDS IDENTIFICATION**

Most Important Hazards and Effects of the Products

Human Health Effects : There are no anticipated carcinogenic effects from exposure based on animal tests performed using toner. When used as intended according to instructions, studies do not indicate any symptoms of fibrosis will occur.

Environmental Effects : No data are available.

Specific hazards : Dust explosion (like most finely divided organic powders)

---

# MATERIAL SAFETY DATA SHEET

Product Identity : T-1200E

MSDS : T1200KEJ2W

Page 2 of 6

---

## SECTION 4 FIRST AID MEASURES

### Route(s) of Entry

- Inhalation? : Yes  
Skin? : No  
Ingestion ? : Possible but very unusual.
- Inhalation : Remove to fresh air . If symptoms occur, consult medical personnel.  
Skin Contact : Wash with soap and water for 15 minutes or until particle is removed.  
If irritation does occur, consult medical personnel.  
Eye Contact : Flush eyes immediately with water for 15 minutes.  
If irritation does occur, consult medical personnel.  
Ingestion : Rinse with water and drink several glasses of water .  
If irritation or discomfort does occur, consult medicate personnel.

## SECTION 5 FIRE FIGHTING MEASURES

- Extinguishing Media : Water , CO<sub>2</sub>, foam and dry chemicals  
Special Fire fighting Procedur : None  
Fire & Explosion Hazards : Toner material, like most finely divided organic powders, may form an explosive mixture.

## SECTION 6 ACCIDENTAL RELEASE MEASURES

- Personal Precautions : None  
Environmental Precautions : None  
Methods for Cleaning Up : Wipe off with paper or cloth. Do not use vacuum cleaner when a large amount is released. it, like most finely divided organic powders, is capable of creating a dust explosion.

## SECTION 7 HANDLING AND STORAGE

### Handling

- Technical Measures : None  
Precautions : None  
Safe Handling Advice : Use of a dust mask is recommended when handling a large quantity of toner or during long term exposure, as with any non-toxic dust.  
Try not to disperse the particles.

### Storage

- Technical h4easupes : None  
Storage Conditions : Keep container closed and store in a cool and dry place.  
Keep out of the reach of children.  
Incompatible Products : None
-

# MATERIAL SAFETY DATA SHEET

Product Identity : T-1200E

MSDS : T1200KEJ2W

Page 3 of 6

---

## SECTION 8 EXPOSURE CONTROLS/PERSONAL PROTECTION

### Engineering Measures

Ventilation : None required with intended use.

### 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>

Metal Complex dye : 0.5 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>

Metal Complex dye : 0.5 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

### Personal Protective Equipment

Respiratory Protection : Not required under intended use.

Hand Protection : Not required under intended use.

Eye Protection : Not required under intended use.

Skin Protection : Not required under intended use.

Other Protective Equipmen : Not required under intended use.

---

## SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

### Appearance

Physical State : Solid

Form : Powder

Color : Black

Scent : Odorless

Melting Point : Not applicable

Softening point : 111 - 130 degree

Flash Point : Not applicable

Ignition Point : >350 degree

Specific Gravity(H<sub>2</sub>O=1) : 1.1 - 1.5

Explosion Properties : No data

Solubility in Water : Negligible

pH Value : Not a water-based product, therefore not applicable.

# MATERIAL SAFETY DATA SHEET

Product Identity : T-1200E

MSDS : T1200KEJ2W

Page 4 of 6

---

## SECTION 10 STABILITY AND REACTIVITY

Stability : Stable  
Hazardous Reactions : Dust explosion, like most finely divided organic powders.  
Conditions to avoid : Electric discharge, throwing into fire.  
Materials to avoid : Oxidizing Materials  
Hazardous Decomposition Products : CO,CO<sub>2</sub> and NO<sub>x</sub>  
Further Information : None

## 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 4.97mg/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

No data available.

## SECTION 13 DISPOSAL CONSIDERATION

Waste from residues : Waste material may be dumped or incinerated under conditions which meet all federal, state and local environmental regulations.  
Contaminated Packaging : Waste may be disposed or incinerated under conditions which meet all federal, state and local environmental regulations.

## SECTION 14 TRANSPORTATION INFORMATION

UN Classification Number : None  
Land DOT(USA) : None  
Sea IMDG : None  
Air ICAO-TI : None

---

# MATERIAL SAFETY DATA SHEET

Product Identity : T-1200E

MSDS : T1200KEJ2W

Page 5 of 6

---

## SECTION 15 REGULATORY INFORMATION

### US Information

#### Toxic Substance Control Act (TSCA)

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

#### SARA(Superfund Amendments and Reauthorization Act) Title III

##### 302 Extreme Hazardous Substance

: None

##### 311/312 Hazard Classification

: None

### EU Information

#### 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.

---

## SECTION 16 OTHER INFORMATION

### National Fire Protection Association (NFPA) Classification

Flammability : 1

Reactivity : 0

Health : 1

( 0 = insignificant, 1 = slight )

WHMIS Legislation (Canada) : This product is not a controlled product.

---

# MATERIAL SAFETY DATA SHEET

Product Identity : T-1200E

MSDS : T1200KEJ2W

Page 6 of 6

---

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
- 
-