

Material Safety Data Sheet

Day of Issue: October 12, 2001

Section 1. Chemical Product and Company Identification

Product Name: TN-03M toner Mfr. Ref.: HM-102
Description: Toner Powder for Laser Beam Printer
Manufacturer: Hitachi Taga Electronics Co., Ltd.
Address: 1-1 Higashitaga-cho 1-chome, Hitachi-shi, Ibaraki-ken 316-8502, Japan
Telephone No.: +81-294-36-8754
Fax No.: +81-294-36-8979
Emergency Telephone No.: +81-294-36-8617
Supplier: Brother Industries, Ltd.
Address: 1-1-1, Kawagishi, Mizuho-ku, Nagoya 467-8562, Japan
Telephone No.: +81-52-824-2545

Section 2. Composition / Information on Ingredients

| Components | Cas# | mass % |
|------------------------|-------------|--------|
| Polyester Resin | 41259-36-3 | >80 |
| Polypropylene Wax | 9003-07-0 | 0.5-5 |
| Organic Boron Compound | 114803-11-1 | 0.1-3 |
| Organic Pigment | 980-26-7 | 3-10 |
| Silica | 68909-20-6 | 0.1-3 |
| Total | | 100 |

Section 3. Hazardous Identification

Emergency Overview:

Magenta (red) fine combustible Powder

Potential Acute Health Effects

Inhalation: Minimal respiratory tract irritation may occur as with exposure to large amounts of any non-toxic dust.

Ingestion: Ingestion is not applicable route of entry for intended use.

Eye Contact: May cause eye irritation.

Skin Contact: Essentially nonirritating to skin

Potential Chronic Health Effects

Carcinogenic Effects: No data

Section 4. First Aid Measure

Inhalation: Remove to fresh air. Treat any irritation symptomatically. Call a physician.

Ingestion: If swallowed, give water to wash in the mouth. Call a physician.

Eye Contact: Flash eyes immediately with large amounts of water until irritation subsides.

Call a physician.

Skin Contact: Immediately wash thoroughly with soap and plenty of water.

Section 5. Fire Fighting Measures

Toner is combustible.

Flash Point: N.A.(Not applicable) Method Used: Not determined

Flammable Limits: No data available

Auto-ignition Temperature: No data available

Extinguish Media: Carbon dioxide, foam and dry chemical powder.

Fire Fighting Instructions: Wear positive pressure self-contained breathing apparatus.
Wear full protective clothing.

Section 6. Accidental Release Measures

Small Spill and Leak: Sweep up and discard to a waste container.

Large Spill and Leak:

Dispose of waste in accordance with applicable federal, state and local regulations.

Section 7. Handling and Storage

Handling: Do not contact it with eyes, skin or clothing. Wash thoroughly after handling.

Provide adequate ventilation to avoid dust.

Storage: Keep container closed. Store in cool and dark place and keep away from heat open flame and sparks.

Section 8. Exposure Controls/Personal Protection

Exposure guideline: Not established

Engineering Controls: Use of local exhaust ventilation.

Personal Protection

Respiratory: In dusty atmospheres, use an approved dust respirator.

Eyes/Face: None (under normal use) Large exposure: Protective goggles/dust mask.

Skin: None (under normal use) Large exposure: Protective clothing and globes.

Other Protective Devices: None

| Components | OSHA PEL | ACGIH TLV |
|------------------------|-----------------------|-----------------------|
| Polyester Resin | - | - |
| Polypropylene Wax | - | - |
| Organic Boron Compound | - | - |
| Organic Pigment | - | - |
| Silica | 15.0mg/m ³ | 10.0mg/m ³ |

Section 9. Physical and Chemical Properties

Physical State and Appearance: Magenta (red) and fine powder

pH: Not relevant

Boiling Point: N.A.

Softening Point: ca. 110°C

Melting / Freezing Point: N.A.

Vapor Pressure: N.A.

Volatile: N.A.

Specific Gravity: 1.1 (H₂O=1)

Odor: Faint odor

Solubility in Water: No data

Solubility in Other: No data

Section 10. Stability and Reactivity

Stability: Stable

Incompatibilities with Other Materials: None

Hazardous Decomposition Products: None

Hazardous Polymerization: Will not occur

Section 11. Toxicological Information

Animal Data:

Ames test of HM-102 is analogized from the result of similar toner. (Negative)

Irritant effect on skin: No data

Irritant effect on eyes: No data

Acute inhalation toxicity: No data

Chronic Effects to Humans

Carcinogenic Effects: None

Other Toxic Effects on Humans: None

Section 12. Ecological Information

Aquatic toxicity: No data available

Biodegradation: No data available

Section 13. Disposal Considerations

Do not dump into sewers, on the ground or into any body of water.

Dispose of waste in accordance with applicable federal, state and local regulations.

Section 14. Transportation Information

DOT Classification: None

Marine Pollutant: None

IMO / IMDG Classification: None

ICAO / IATA Classification : None

UN No.: None

Packaging Group: None

Section 15. Regulatory Information

OSHA Status: None

US Federal Regulations

TSCA Status: Listed on Inventory.

CERCLA : None

SARA: None

EINECS: Listed on EINECS or ELINCS (CasNo.114803-11-1) Inventory

Section 16. Other Information

None

To best of our knowledge, the information contained herein is accurate. However, we cannot assume any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is sole responsibility of the user. All material may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are only hazards that exist.