

Product Name

Issue Date: Nov. 9, 2000

TN-7600 Toner

MSDS No.: ZLHTE001

1. Identification of substance / preparation and of the company / undertaking**1.1 Product details**

Product name: TN-7600 Toner

Material name: ZEoglobule PT402

These products are black toner in a cartridge for Brother industries Ltd. laser printers and fax receivers. The cartridge prevents the toner from spilling in normal use.

1.2 Company details**Manufacturer:**

Brother Industries, Ltd.

Information & Document Company

1-1-1, Kawagishi, Mizuho-ku, Nagoya 467-8562, Japan

Telephone (for information): +81-52-824-2337

Importer in Europe:

Brother International Europe Ltd.

Brother House, 1 Tame Street, Guide Bridge, Audenshaw, Manchester M34 5JE, UK

Telephone (for information): +44-161-330-6531

We do not provide 24 hour cover for information contact. Please telephone to the above office appropriate to you during our business hours.

2. Composition / information on ingredients**2.1 Chemical characterization**

Chemical name: Styrene-acrylate Toner (Mixture)

CAS number: See 2.2 for ingredients.

Identification No.: Not applicable

2.2 Chemical characterization (Preparation)

Description: Mixture of styrene acrylate copolymer, carbon black and silicone dioxides

Ingredients:	<u>Name</u>	<u>CAS Number</u>	<u>%Wt</u>
	Styrene-acrylate copolymer	25767-47-9	-
	Carbon black	1333-86-4	5-7
	Paraffin wax	8002-74-2	1-5
	Silicon dioxides (Amorphous)	7631-86-9	-

3. Hazards identification

3.1 Special hazard information: R-phrase: Not required

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Eye contact: Flush eyes with plenty of water for a minimum of 15 minutes, and seek medical attention.

Skin contact: Wash material off of skin with plenty of soap and water.

Ingestion: If the material is swallowed, get immediate medical attention or advice.

Inhalation: Remove person to fresh air and seek medical attention. If not breathing, give artificial respiration. If breathing is difficult, give oxygen.

5. Fire-fighting measures**5.1 Suitable extinction medium**

Water, ABC dry chemical or protein type air foams are recommended.

6. Accidental release measures**6.1 Personal precautionary measures**

Toner spill does not occur in normal use of the printer/fax receiver and in normal handling of the cartridge. In case of accidental spill, avoid dust inhalation, ingestion and contact. Review "Exposure controls / personal protection (Section 8)".

6.2 Environmental protection measure

Will not cause any serious environmental influence.

6.3 Clean up measure

Ventilate the room and collect toner spill as much as possible for disposal. Sprinkle water over the spilled and/or leaked materials and then clean up into a container.

In case of a small quantity of spill, a vacuum cleaner with safety features to prevent dust-explosion and with a bag that will contain very small size of particles (8 – 9 μ m) can be used.

6.4 Additional information

None

7. Handling and storage**7.1 Handling**

Safety data: The toner material is generally non-hazardous when it is NOT a toner dust floating in the air. The cartridge is designed to prevent toner spillage.

In case that some accident causes considerable spillage, refer to Section 8 for personal protective measures.

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Fire and explosion hazard data: In case of considerable spill, control airborne concentrations below the lower limit and keep out of ignition source. (Explosion limits: Lower=40g/m³, Upper = unknown) Thermal decomposition of organic components may result in occurrence of oxides of carbon.

7.2 Storage

Storage details: Store in dry cool place. Keep away from sparks and open flame. Use with adequate ventilation.

Storage classification: Not applicable

8. Exposure controls / personal protection

8.1 Personal safety

No personal protective device is required under normal use. In case that some accident causes considerable spill, the following measures are recommended.

Breathing protection: Use respirator.

Hand protection: Use protective gloves.

Eye protection: Use safety goggles.

Body protection: Not necessary especially.

9. Physical and chemical properties

9.1 Appearance

Physical state: Solid, fine granule

Color: Black

Odor: Odorless

9.2 Relevant safety data

Change of state: Not applicable

Solubility: Negligible in water.

Melting Point/area: 110°C

pH-value: Not applicable

Boiling Point/area: Not applicable

Viscosity: Not applicable

Flash point: Not available

Solvent content: Not applicable

Specific gravity: 1.15 (H₂O=1)

Particle size: 8 - 9 μm

9.3 Additional information

None

10. Stability and reactivity

10.1 Storage conditions to avoid:

Do not expose to temperature above 200°C.

10.2 Products to avoid:

Strong oxidizers

10.3 Dangerous decomposition products:

Carbon Oxide

10.4 Additional information:

None

11. Toxicological information

11.1 Classification of LD₅₀ value: ≥2000 mg/kg

11.2 Primary irritation: Eye: Minimal irritant

Dermal: Non-irritant

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11.3 Carcinogenicity: Carbon black has been classified as a group 2B by IARC, however inhalation test using a typical toner containing carbon black has not demonstrated an association between toner exposure and animal tumors.

11.4 Mutagenicity: Negative in Ames test.

12. Ecological information

Not available.

13. Disposal

13.1 Recommended Method of disposal: Landfill or incinerate little by little in accordance with federal, state and local regulations.

13.2 Disposal code number: Not applicable

14. Transport

14.1 General comment: No specific precautionary transport measures.

15. Regulatory information

15.1 In accordance with EC regulations

Classification, packaging and labeling description: Not required

R-phrases: Not required

S-phrases: Not required

15.2 In accordance with national regulations

Water hazard class: Not applicable

Additional information: None

16. Other information

16.1 Change of the material safety data sheet

Reason for change: First edition

Date of change: Not applicable

16.2 Others

This document is based on our knowledge at the time of preparation. While Brother Industries, Ltd. believes that the data contained herein are accurate, many of the data have been derived from outside sources and we cannot assume any liability as to the accuracy of the data. They are offered solely for your information.

This document covers only normal conditions of use and handling. When using product under unintended conditions, user is responsible to examine proper precautions for any particular use.