

Product name: TN-310C, TN-315C, TN-318C, TN-320C, TN-325C, TN-328C, TN-340C, TN-345C, TN-348C, TN-370C, TN-375C, TN-378C Toner

Issuing Date: 18-May-2010 Revision Date: 10-November-2012 Version: 3 SDS No: CT403-01-EUUSOTHER

# SECTION 1: Identification of the substance/mixture and of the company/undertaking

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1.2 Relevant identified uses of the	substance or mixture and uses advised against
Relevant Identified Use(s)	These products are cyan toner in a cartridge for Brother Industries, Ltd. laser printers, multifunction devices and fax receivers. The cartridge should be used as supplied by Brother and for use in the products stated. Information provided on this SDS is only consistent with the use specified by

#### 1.3 Details of the supplier of the safety data sheet

Brother.

Manufacturer	Brother Industries, Ltd. 15-1 Naeshiro-cho, Mizuho-ku, Nagoya 467-8561, Japan Telephone (for information): +81-52-824-2735
Importer (USA)	Brother International Corporation 200 Crossing Boulevard, Bridgewater, NJ 08807, USA Telephone (for information): +1-800-284-4329
Importer (Canada)	Brother International Corporation (Canada) Ltd. 1 Hotel de Ville, Dollard des Ormeaux, Quebec, H9B 3H6, Canada Telephone (for information): +1-514-685-0600
Importer (Europe)	Brother International Europe Ltd. Brother House, 1 Tame Street, Guide Bridge, Audenshaw, Manchester M34 5JE, UK Telephone (for information): +44-161-330-6531
Importer (Australia)	Brother International (Aust.) Pty. Ltd. ACN 001 393 835 Level 3, Building A, 11 Talavera Road, Macquarie Park, NSW 2113, Australia Telephone (for information): +61-2-9887-4344
E-mail Address	sds.info@brother.co.jp
1.4 Emergency telephone number	
Emergency Telephone (24 hours)	CHEMTREC +1-703-527-3887 (International) +1-800-424-9300 (North America)

For France only: Antipoison Center telephone number: ORFILA +33-1-45-425-959



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### **SECTION 2: Hazards identification**

#### 2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008

Not classified as hazardous

#### Classification according to Directive 1999/45/EC

Not classified as hazardous

#### Australia Classification

Not classified as hazardous according to the criteria of NOHSC

#### 2.2 Label elements

Labelling according to Regulation (EC) No. 1272/2008

Hazard pictograms None

Signal Word None

Hazard Statements None

Precautionary statements None

#### 2.3 Other hazards

This product contains no substance considered to be persistent, bioaccumulating nor toxic (PBT). This product contains no substance considered to be very persistent nor very bioaccumulating (vPvB).

#### SECTION 3: Composition/information on ingredients

#### 3.2 Mixtures

Description of the mixture: Styrene-acrylate Toner (Mixture).

Chemical Name	CAS-No	EC-No	w/w%	Classification (67/548/EEC)	Classification (EU Reg. 1272/2008)
Styrene-acrylate copolymer	25767-47-9	-	84-86	Not classified	Not classified
Pigment	**	**	4-5	Not classified	Not classified
Paraffin wax	8002-74-2	232-315-6	4-5	Not classified	Not classified
PMMA	9011-14-7	-	1-2	Not classified	Not classified
Fatty Acid Ester	**	-	1-2	Not classified	Not classified
Silicon Dioxide (amorphous)	112945-52-5	231-545-4	1-2	Not classified	Not classified
Silicon Dioxide (amorphous)	844491-94-7	430-570-1	0.5-1.5	Not classified	Not classified
Styrene-acrylate Resin	**	-	0.1-1	Not classified	Not classified

For the full text of R-phrases and H-Statements see Section 16

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## SECTION 4: First aid measures

#### 4.1 Description of first aid measures

General advice	If symptoms persist, obtain medical attention.
Inhalation	Obtain immediate medical attention. In case of accident by inhalation remove casualty to fresh air and keep at rest.
Skin contact	Remove contaminated clothing immediately and wash affected skin with plenty of water or soap and water.
Eye contact	Obtain medical attention. If substance has got into the eyes, immediately wash out with plenty of water for at least 15 minutes.
Ingestion	Obtain immediate medical attention. Wash out mouth with water and give 100-200 ml of water to drink.
4.2 Most important symptoms and effects, both acute and delayed	Inhalation (dust): For large quantities: May cause irritation to the respiratory system. Increased difficulty in breathing. Sneezing. Coughing.
	Eye contact: May cause eye irritation.
	Ingestion: May cause stomach ache. Unlikely route of exposure.
4.3 Indication of any immediate medical attention and special treatment needed	Treat symptomatically.

### **SECTION 5: Firefighting measures**

5.1 Extinguishing media Suitable Extinguishing Media	Extinguish preferably with dry chemical, carbon dioxide, water spray, foam.
Unsuitable Extinguishing Media	Do not use water jet.
5.2 Special hazards arising from the substance or mixture	May form explosible dust clouds in air.
5.3 Advice for firefighters	Do not use high-pressure water in order to prevent creating a dust cloud and spreading fire dust. Use appropriate respirator for carbon monoxide and carbon dioxide. Wear positive pressure self-contained breathing apparatus (SCBA) during the attack phase of firefighting operations and during cleanup in enclosed or poorly ventilated areas immediately after a fire. Personnel not having suitable respiratory protection must leave the area to prevent significant exposure to toxic

combustion gases from any source.



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### **SECTION 6: Accidental release measures**

6.1 Personal precautions, protective equipment and emergency procedures	Avoid generation of dust. Do not breathe dust. A suitable dust mask or dust respirator with filter type A/P may be appropriate.	
6.2 Environmental precautions	Prevent substance entering sewers. Washings must be prevented from entering surface water drains.	
6.3 Methods and materials for containment and cleaning up	Sweep the spilt toner or remove it with a vacuum cleaner and transfer into a sealed container carefully. Sweep slowly to minimize generation of dust during cleanup. If a vacuum cleaner is used, the motor must be rated as dust explosion proof. Potential for very fine particles to be taken into the vacuum only to be passed back into the environment due to pore size in the bag or filter.	
6.4 Reference to other sections	For personal protection: See section 8. For disposal considerations: See section 13.	
SECTION 7: Handling and storage		

7.1 Precautions for safe handling	Keep out of the reach of children. Avoid generation of dust. Avoid inhalation of high concentrations of dust. Avoid contact with eyes.
7.2 Conditions for safe storage, including any incompatibilities	Keep away from oxidizing agents.
7.3 Specific end use(s)	These products are cyan toner in a cartridge for Brother Industries, Ltd. laser printers, multifunction devices and fax receivers. This cartridge should be used as supplied by Brother and for use in the products stated.

# SECTION 8: Exposure controls/personal protection

#### 8.1 Control Parameters

#### **Occupational Exposure Limits**

Chemical Name	Paraffin wax 8002-74-2
ACGIH TLV	TWA: 2 mg/m <sup>3</sup> fume
OSHA PEL	<u> </u>
European Union	-
The United Kingdom	STEL: 6 mg/m <sup>3</sup>
_	TWA: 2 mg/m <sup>3</sup>
France	TWA: 2 mg/m <sup>3</sup>
Spain	TWA: 2 mg/m <sup>3</sup>
Portugal	TWA: 2 mg/m <sup>3</sup>
Finland	TWA: 1 mg/m <sup>3</sup>
Denmark	TWA: 2 mg/m <sup>3</sup>
Switzerland	TWA: 2 mg/m <sup>3</sup>
Poland	TWA: 2 mg/m <sup>3</sup>
Norway	TWA: 2 mg/m <sup>3</sup>
	STEL: 4 mg/m <sup>3</sup>
Ireland	TWA: 2 mg/m <sup>3</sup>
	STEL: 6 mg/m <sup>3</sup>
Chemical Name	Silicon Dioxide (amorphous)
	112945-52-5
ACGIH TLV	-
OSHA PEL	20mppcf 80(mg/m <sup>3</sup> )/%SiO <sub>2</sub>



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European Union	-
Austria	TWA: 4 mg/m <sup>3</sup>
Chemical Name	Silicon Dioxide (amorphous) 844491-94-7
ACGIH TLV	-
OSHA PEL	20mppcf 80(mg/m <sup>3</sup> )/%SiO <sub>2</sub>
European Union	-
Additional information	USA OSHA PEL (TWA): 15 mg/m <sup>3</sup> (Total Dust) 5mg/m <sup>3</sup> (Respirable Fraction). ACGIH TLV (TWA): 10 mg/m <sup>3</sup> (Inhalable particles) 3 mg/m <sup>3</sup> (Respirable particles)
8.2 Exposure controls	
Appropriate engineering controls	Good general ventilation should be sufficient under normal use.
Personal protective equipment	Not normally required. For use other than in normal operating procedures (such as in the event of large spill), the following should be applied:
Eye Protection	Safety goggles.
Hand Protection	Protective gloves.
Skin and body protection	Long sleeved clothing and long pants.
Respiratory protection	Dust mask. (Large spillages: Respirator).
Respiratory protection	Dust mask. (Large spillages: Respirator).

### Environmental Exposure Controls Avoid release to the environment.

### SECTION 9: Physical and chemical properties

#### 9.1 Information on basic physical and chemical properties

Appearance	
Physical state	Powder
Color	Cyan
Odor Odor Threshold pH Melting point/freezing point Initial boiling point and boiling range Flash Point Evaporation rate Flammability (solid, gas) Upper/lower flammability or explosive limits Vapor pressure Vapor density Relative density Solubility(ies) Partition coefficient: n-octanol/water Auto-ignition temperature Decomposition temperature Viscosity	Cyan Odorless No information available Not applicable 110 °C (Melting point) Not applicable Not applicable Not applicable 95 - 100 g/m <sup>3</sup> (lower) Not applicable Not applicable Not applicable Not applicable Not applicable Not applicable Not applicable Not applicable Not applicable Not applicable No information available No information available No information available No information available No information available
Explosive properties Oxidizing properties	Explosive limits of toner particles suspended in air approximately equal to that of coal dust. No information available

#### 9.2 Other information

No information available.



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SECTION 10: Stability and reactivity		
10.1 Reactivity	No information available.	
10.2 Chemical stability	Stable.	
10.3 Possibility of hazardous reactions	No information available.	
10.4 Conditions to avoid	Keep at a temperature not exceeding 200 °C. Avoid friction, sparks, or other means of ignition.	
10.5 Incompatible materials	Strong oxidizing agents.	
10.6 Hazardous decomposition products	Contains: Carbon monoxide, Carbon dioxide and Nitrogen oxides.	

# **SECTION 11: Toxicological information**

#### 11.1 Information on toxicological effects

#### Acute toxicity

Inhalation Eye contact Skin contact Ingestion	Acute $LC_{50} > 5.17$ mg/l (Method OECD#403) No information available. No information available. Acute $LD_{50} > 2000$ mg/kg (Method OECD#420)
Skin corrosion/irritation	Non-irritant. (Method: OECD#404)
Serious eye damage/irritation	Slight irritant to the eye (Method: OECD#405)
Respiratory or skin sensitisation	It is not a skin sensitizer. (Method: OECD#429)
Mutagenicity	Ames test: Negative. (Method: OECD#471)
Carcinogenicity	Ingredients of this product have not been classified as carcinogens according to IARC monographs, NTP and OSHA.



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### SECTION 12: Ecological information

12.1 Toxicity	No information available.
12.2 Persistance and degradability	No information available.
12.3 Bioaccumulative potential	No information available.
12.4 Mobility in soil	No information available.
12.5 Results of PBT and vPvB assessment	This product contains no substance considered to be persistent, bioaccumulating nor toxic (PBT). This product contains no substance considered to be very persistent nor very bioaccumulating (vPvB).
12.6 Other adverse effects	No information available.

### SECTION 13: Disposal considerations

13.1 Waste treatment methods

Do not put toner or toner cartridges into a fire, this can cause fire to spread with the risk of causing burn injuries. Shred toner cartridges in a dust/explosion controlled environment. Finely dispersed particles may form explosive mixtures in the air. Dispose of in accordance with Federal, State, and local regulations.

### **SECTION 14: Transport information**

Not classified according to the United Nations "Recommendations on the Transport of Dangerous Goods"

14.1 UN Number	None
14.2 UN proper shipping name	None
14.3 Transport hazard class(es)	None
14.4 Packing Group	None
14.5 Environmental hazards	None
14.6 Special precautions for user	None
14.7 Transport in bulk according to	Not applicable

Annex II of Marpol 73/78 and the IBC Code

Not regulated under DOT, IMDG, ADR, RID, IATA.



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# SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture	<b>o i i j</b>
	Canada: WHMIS: Not applicable. (Manufactured article)

#### 15.2 Chemical Safety Assessment

SECTION 16: Other information		
Full text of R-phrases referred to under sections 2 and 3	None	
Full text of H-Statements referred to under sections 2 and 3	None	
Additional information	The information relates only to this product. It may not be valid, if used in combination with any other materials or in any other process, and it is based on our best knowledge as of the date of preparation (revision).	
Revision Note	Updated for compliance with EU Regulations 453/2010 and 172/2008 (CLP).	
References:	U.S. 29CFR Part 1910 ACGIH Threshold Limit Values for Chemical Substances and Physical Agents and Biological Exposure Indices IARC Monographs on the Evaluation Carcinogenic Risks to Humans World Health Organization EU Directive 91/322/EEC and 2000/39/EC NTP 11th Report on Carcinogens	
Abbreviations:	ACGIH: American Conference of Governmental Industrial Hygienists ADR: European Agreement concerning the International carriage of Dangerous goods by Road (EU) DOT: Department Of Transportation (US) IARC: International Agency for Research on Cancer IATA: International Air Transport Association IMDG: International Maritime Dangerous Goods NOHSC: National Occupational Health and Safety Commission (Australia) NTP: National Toxicology Program (US) OSHA: Occupational Safety and Health Administration (US) PEL: Permissible Exposure Limit RID: Regulations concerning the International carriage of goods by Rail (EU) STEL: Short Term Exposure Limit TLV: Threshold Limit Value (ACGIH) TSCA: Toxic Substances Control Act (US) TWA: Time Weighted Average WHMIS: Workplace Hazardous Material Information System (Canada)	