

#### Product name: TN-411M, TN-413M, TN-416M, TN-419M, TN-421M, TN-423M, TN-426M, TN-431M, TN-433M, TN-436M, TN-439M, TN-441M, TN-443M, TN-446M, TN-449M, TN-451M, TN-456M, TN-459M, TN-461M, TN-466M, TN-469M, TN-471M, TN-476M, TN-491M, TN-493M, TN-499M, TN-910M Toner

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

1.1.	Product identifier	
Product name		: TN-411M, TN-413M, TN-416M, TN-419M, TN-421M, TN-423M, TN-426M, TN-431M, TN-433M, TN-436M, TN-439M, TN-441M, TN-443M, TN-446M, TN-449M, TN-451M, TN-456M, TN-459M, TN-461M, TN-466M, TN-469M, TN-471M, TN-476M, TN-491M, TN-493M, TN-499M, TN-910M Toner
1.2.	Relevant identified uses of the substance or mixture and uses advised against	
1.2.1.	Relevant identified uses	
Use of th	ne substance/mixture	: These products are magenta 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 Brother
<b>1.2.2.</b> No addit	Uses advised against ional information available	
1.3.	Details of the supplier of the safety da	ata sheet
Manufac	turer	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): +1-877-276-8437
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 A	ddress	sds.info@brother.co.jp
<b>1.4.</b> Emerger	Emergency telephone number ncy number	: CHEMTREC +1-703-527-3887 (International) +1-800-424-9300 (North America) +61-290372994 (Australia) +61-290372994 (Australia)

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

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

#### 2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP] Not classified

#### **Classification according to OSHA GHS**

Not classified

#### Australia Classification

Not classified as hazardous according to the criteria of NOHSC



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#### 2.2. Label elements

Labeling according to Regulation (EC) No. 1272/2008 [CLP]

No labeling applicable

#### 2.3. Other hazards

This substance/mixture does not meet the PBT criteria of REACH, annex XIII This substance/mixture does not meet the vPvB criteria of REACH, annex XIII

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

#### 3.2. Mixture

Name	Product identifier	%	Classification according to Directive 67/548/EEC	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Styrene-acrylate copolymer	(CAS No) 25767-47-9 (EC no) -	75 - 85	Not classified	Not classified
Fatty Acid Ester	(CAS No) ** (EC no) -	4 - 10	Not classified	Not classified
Pigment	(CAS No) ** (EC no) **	2 - 5	Not classified	Not classified
Fatty Acid Ester	(CAS No) ** (EC no) -	1 - 4	Not classified	Not classified
РММА	(CAS No) 9011-14-7 (EC no) -	1 - 3	Not classified	Not classified
Silicon Dioxide (amorphous)	(CAS No) 112945-52-5 (EC no) 231-545-4	1 - 3	Not classified	Not classified
Styrene-acrylate Resin	(CAS No) ** (EC no) -	1 - 3	Not classified	Not classified
Pigment	(CAS No) ** (EC no) **	1 - 3	Not classified	Not classified
Silicon Dioxide (amorphous)	(CAS No) 844491-94-7 (EC no) 430-570-1	< 2	Not classified	Not classified
Pigment	(CAS No) ** (EC no) **	< 2	Not classified	Not classified

#### \*\* CONFIDENTIAL

Full text of R- and H- phrases: see section 16

SECTION 4: First aid measures			
4.1. Description of first aid measures	5		
First-aid measures general	: If symptoms persist, obtain medical attention.		
First-aid measures after inhalation	: Obtain medical attention. In case of accident by inhalation : remove casualty to fresh air and keep at rest.		
First-aid measures after skin contact	: Remove contaminated clothing immediately and wash affected skin with plenty of water or soap and water.		
First-aid measures after eye contact	: Obtain medical attention. If substance has got into the eyes, immediately wash out with plenty of water for at least 15 minutes.		
First-aid measures after 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			
Symptoms/injuries after inhalation	: For large quantities: May cause irritation to the respiratory system. Increased difficulty in breathing. Sneezing. Coughing.		
Symptoms/injuries after eye contact	: May cause eye irritation.		
Symptoms/injuries after ingestion	: May cause stomach ache. Unlikely route of exposure.		
4.2 Indication of any immediate made	licel attention and exected treatment needed		

#### 4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.



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SECTION 5: Firefighting measures			
5.1. Extinguishing media			
6 6	: Extinguish preferably with dry chemical, carbon dioxide, water, foam.		
Unsuitable extinguishing media	: Do not use water jet.		
5.2. Special hazards arising from the subs	stance or mixture		
Explosion hazard	: May form explosible dust clouds in air.		
5.3. Advice for firefighters			
Firefighting instructions	: 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.		
<b>SECTION 6: Accidental release</b>	measures		
6.1. Personal precautions, protective equi	pment and emergency procedures		
6.1.1. For non-emergency personnel			
Emergency procedures	: Ensure adequate ventilation. Avoid contact with skin and eyes.		
6.1.2. For emergency responders			
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 mu	st be prevented from entering surface water drains.		
6.3. Methods and material for containment and cleaning up			
Methods for 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			
SECTION 8: Exposure controls/personal protection. SECTION 13: Disposal considerations.			
SECTION 7: Handling and storage			
7.1. Precautions for safe handling			
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	2. Conditions for safe storage, including any incompatibilities		
Storage conditions	: Keep away from oxidizing agents.		
7.2 Specific and use(a)			

#### 7.3. Specific end use(s)

These products are magenta 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

Silicon Dioxide (amorphous) (112945-52-5)		
USA - OSHA	OSHA PEL (TWA) (mg/m³)	20 mg/m <sup>3</sup> 20mppcf 80%SiO2
Silicon Dioxide (amorphous) (844491-94-7)		
USA - OSHA	OSHA PEL (TWA) (mg/m³)	20 mg/m <sup>3</sup> 20mppcf 80%SiO2

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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:
Hand protection	: protective gloves.
Eye protection	: Safety goggles.
Skin and body protection	: Long sleeved clothing and long pants.
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			
Physical state	: Solid		
Appearance	: Powder		
Color	: Magenta		
Odor	: odorless		
Odor threshold	: No information available		
рН	: Not applicable		
Relative evaporation rate (butyl acetate=1)	: No information available		
Relative evaporation rate (ether=1)	: Not available		
Melting point	: No information available		
Freezing point	: No information available		
Boiling point	: Not applicable		
Flash point	: Not applicable		
Auto-ignition temperature	: No information available		
Decomposition temperature	: Not available		
Flammability (solid, gas)	: Not applicable		
Vapor pressure	: Not applicable		
Relative vapor density at 20 °C	: Not applicable		
Relative density	: No information available		
Relative density of saturated gas/air mixture	: No information available		
Solubility	: Insoluble in water		
Log Pow	: No information available		
Log Kow	: No information available		
Viscosity, kinematic	: Not applicable		
Viscosity, dynamic	: Not applicable		
Explosive properties	: Explosive limits of toner particles suspended in air approximately equal to that of coal dust		
Oxidizing properties	: No information available		
Explosion limits	: No information available		
9.2. Other information			

No additional information available

#### **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.

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#### 10.4. Conditions to avoid

Keep at 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

Carbon monoxide. Carbon dioxide. Nitrogen oxides.

#### **SECTION 11: Toxicological information**

11.1. Information on toxicological effects			
Acute toxicity	: Not classified		
LD <sub>50</sub> oral rat LC <sub>50</sub> inhalation rat (mg/l)	> 2000 mg/kg (OECD 420 method) > 5.2 mg/l/4h (OECD 436 method)		
Skin corrosion/irritation	: Non-irritant. (OECD 404 method) pH: Not applicable		
Serious eye damage/irritation	: Minimal irritant to the eye. (OECD 405 method) pH: Not applicable		
Respiratory or skin sensitization	: It is not a skin sensitizer. (OECD 429 method)		
Germ cell mutagenicity	: AMES test : Negative. (OECD 471 method)		
Carcinogenicity	<ul> <li>Ingredients of this product have not been classified as carcinogens according to IARC monographs, NTP and OSHA</li> </ul>		
Reproductive toxicity	: Not classified		
Specific target organ toxicity (single exposure)	: Not classified		
Specific target organ toxicity (repeated exposure)	: Not classified		
Aspiration hazard	: Not classified		

### **SECTION 12: Ecological information**

<b>12.1.</b> Ecology	Toxicity - general	No information available.
<b>12.2.</b> Persist	Persistence and degradability ence and degradability	No information available.
12.3.	Bioaccumulative potential	
Log Pow		No information available
Log Ko	W	No information available
12.4.	Mobility in soil	
Ecology - soil		No information available.
12.5.	Results of PBT and vPvB assessment	:
This substance/mixture does not meet the PBT criteria of REACH, annex XIII This substance/mixture does not meet the vPvB criteria of REACH, annex XIII		

#### 12.6. Other adverse effects

Other adverse effects

: No information available.

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#### SECTION 13: Disposal considerations

#### 13.1. Waste treatment methods

Waste disposal recommendations

: 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 in accordance with federal, state and local regulations.

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

In accordance with ADR / IMDG / IATA / DOT / UN		
14.1. UN number		
Not regulated for transport		
14.2. UN proper shipping name		
Proper Shipping Name (ADR/RID)	: None	
Proper Shipping Name (IATA)	: None	
Proper Shipping Name (IMDG)	: None	
14.3. Transport hazard class(es)		
Not applicable		
14.4. Packing group		
Not applicable		
14.5. Environmental hazards		
Other information	: None	
	None	
14.6. Special precautions for user		
Special transport precautions	: None	
14.6.1. Overland transport		
No additional information available		
14.6.2. Transport by sea		
No additional information available		
14.6.3. Air transport		
No additional information available		
	ex II of MARPOL 73/78 and the IBC Code	
IBC code	: Not applicable	

**SECTION 15: Regulatory information** 

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

#### 15.1.1. **EU-Regulations**

No REACH Annex XVII restrictions Contains no REACH candidate substance

#### 15.1.2. National regulations

**Regional legislation** 

: EU:Not classified as dangerous for supply/use. (1999/45/EC)

USA: All chemical substances contained in this product are and had been listed on the TSCA Chemical Substances Inventory, and none is subject to any of the following TSCA requirements: section 4 test rules; proposed or final section 5(a)(2) significant new use rules; section 5(e) consent orders; section 8(a) preliminary assessment information rules; and section 8(d) health and safety data reporting rules.

Canada: WHMIS: Not applicable. (Manufactured article).

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#### 15.2. Chemical safety assessment

No chemical safety assessment has been carried out

#### **SECTION 16: Other information**

Indication of changes: SECTION 1.

Data sources	: World Health Organization International Agency for Research on Cancer, IARC Monographs on the Evaluation on the Carcinogenic Risks to Humans, Volume 93
	EU Directive 1999/45/EC
	U.S. Department of labor, 29CFR Part 1910.
	ACGIH, Threshold Limit Values for Chemical Substances and Physical Agents and Biological Exposure Indices
	EU Commission Directive 2009/161/EU.
Abbreviations and acronyms	: IARC (International Agency for Research on Cancer)
	IATA (International Air Transport Association)
	IMDG (International Maritime Dangerous Goods Code)
	IOELV (Indicative Occupational Exposure Limit)
	REACH (Registration, Evaluation and Authorisation of CHemicals)
	WHMIS (Workplace Hazardous Material Information System (Canada))
	ACGIH (American Conference of Governement Industrial Hygienists)
	DOT (Department Of Transportation (US))
	ICAO (International Civil Aviation Organization)
	NOHSC (National Occupational Health and Safety Commission (Australia))
	NTP (National Toxicology Program) (US)
	OSHA (Occupational Safety and Health Administration) (US)
	PEL (Permissible Exposure Limit)
	STEL (Short Term Exposure Limit)
	TLV (Threshold Limit Value) (ACGIH)
	TSCA (Toxic Substances Control Act) (US)
	TWA (Time Weighted Average).
Other information	: The information only relates to this specific 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

with any other materials or in any other process, and it is based on our best knowledge as of the date of preparation (revision).

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