

Product Name: TN-213M, TN-217M, TN-223M, TN-227M, TN-233M, TN-237M, TN-243M, TN-247M, TN-253M, TN-257M, TN-263M, TN-267M, TN-273M, TN-277M, TN-283M, TN-287M, TN-293M, TN-297M

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Section 1: Identification of the substance/mixture and of the company/undertaking

| 1.1. Product identifier | |
|--|--|
| Product Name | TN-213M, TN-217M, TN-223M, TN-227M, TN-233M, TN-237M, TN-243M, TN-247M, TN-253M, TN-257M, TN-263M, TN-267M, TN-273M, TN-277M, TN-283M, TN-287M, TN-293M, TN-297M |
| Product Form | Mixture |
| Safety data sheet number | MT413-03 |
| 1.2. Relevant identified uses of the s | substance or mixture and uses advised against |
| Relevant identified uses | 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. |
| Uses advised against | No information available |
| 1.3. Details of the supplier of the sa | iety data sheet |
| Manufacturer | Brother Industries, Ltd. 15-1 Naeshiro-cho, Mizuho-ku, Nagoya 467-8561, Japan Telephone (for information): +81-52-824-2735 |
| Importer_ | (Europe) Brother International Europe Ltd. 1 Tame Street, Audenshaw, Manchester M34 5JE, UK Brother International (Nederland) B.V. Zanderij 25, 1185 ZM Amstelveen, The Netherlands Telephone (for information): +44-161-330-6531 |
| For further information, please cont | act |
| E-mail address | sds.info@brother.co.jp |
| 1.4. Emergency telephone number | - |
| Emergency Telephone | CHEMTREC +1-703-527-3887 (International) |
| | For France only: Antipoison Center telephone number: ORFILA +33-1-45-425-959 |

Section 2: Hazard(s) identification

2.1. Classification of the substance or mixture



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Regulation (EC) No 1272/2008

This mixture is classified as not hazardous according to regulation (EC) 1272/2008 [GHS]

2.2. Label elements

Regulation (EC) No 1272/2008

This mixture is classified as not hazardous according to regulation (EC) 1272/2008 [GHS]

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

3.1 Substances

Not applicable

3.2 Mixtures

| Chemical name | CAS No | EC No | EC Index No | Weight-% | Classification according to Regulation (EC) No. 1272/2008 [CLP] | REACH Registration Number |
|-----------------------------|-------------|-----------|-------------|----------|---|---------------------------------|
| Styrene-acrylate-copolymer | 25767-47-9 | - | - | 75-85 | Not classified | Not applicable |
| Fatty acid ester | ** | - | - | 5-14 | Not classified | Registered |
| Pigment | ** | - | - | 3-10 | Not classified | Registered |
| Styrene-acrylate Resin | ** | - | - | 1-3 | Not classified | Not applicable |
| Silicon dioxide (amorphous) | 112945-52-5 | 231-545-4 | - | 1-3 | Not classified | Pre-registered |
| PMMA | 9011-14-7 | - | - | 1-3 | Not classified | Not applicable |
| Silicon dioxide (amorphous) | 844491-94-7 | 430-570-1 | - | <2 | Not classified | Pre-registered |

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

Section 4: First aid measures

4.1. Description of first aid measures

| General advice | If symptoms persist, call a physician. |
|----------------|---|
| Inhalation | Get immediate medical advice/attention. IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing. |
| Eye contact | In case of eye contact, immediately flush eyes with plenty of water for at least 15 minutes. Get immediate medical advice/attention. |



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| Skin contact: | Take off contaminated clothing. Wash off immediately with soap and plenty of water. |
|-------------------------------------|--|
| 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 o | effects, both acute and delayed |
| Symptoms | Inhalation (dust): For large quantities: May cause irritation to the respiratory system. Increased difficulty in breathing. Sneezing. Coughing Eye contact: May cause eye irritation Skin contact: Repeated and/or prolonged skin contact may cause irritation Ingestion: May cause stomach ache. Unlikely route of exposure |
| 4.3. Indication of any immediate me | dical attention and special treatment needed |
| Note to physicians | Treat symptomatically. |

| Section | 5: | Firefig | hting | measures |
|---------|----|---------|-------|----------|
| | | | | |

5.1. Extinguishing media

- **Suitable Extinguishing Media** Dry chemical, CO₂, water spray or regular foam
- Unsuitable extinguishing media Do not use water jet
- 5.2. Special hazards arising from the substance or mixture
- Specific hazards arising from the May form explosive dust clouds in air chemical

5.3. Advice for firefighters

Special protective equipment for fire-fighters 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.

Section 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

| For non-emergency personnel | Ensure adequate ventilation Avoid contact with skin and eyes |
|-----------------------------|---|
| For emergency responders | Avoid generation of dust. Do not breathe dust. A suitable dust mask or dust respirator with filter type A/P may be appropriate. |



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6.2. Environmental precautions **Environmental precautions** Prevent substance entering sewers. Washings must be prevented from entering surface water drains. 6.3. Methods and material for containment and cleaning up Methods for containment 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. Methods for cleaning up Take up mechanically, placing in appropriate containers for disposal Prevention of secondary hazards Clean contaminated objects and areas thoroughly observing environmental regulations. 6.4. Reference to other sections Reference to other sections See section 8 for more information. See section 13 for more information.

Section 7: Handling and storage

7.1. Precautions for safe handlingKeep out of the reach of children. Avoid generation of dust. Avoid inhalation of high
concentrations of dust. Avoid contact with eyes.General hygiene considerationsHandle in accordance with good industrial hygiene and safety practice.7.2. Conditions for safe storage, including any incompatibilitiesKeep away from oxidizing agents.Storage ConditionsKeep away from oxidizing agents.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. The cartridge should be used as supplied by
Brother and for use in the products stated.

Section 8: Exposure controls and personal protection

8.1. Control parameters

Exposure Limits



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| Chemical name | Aust | ria | Switzerland | Poland | Norway | Ireland |
|--|--|--|--------------------------|--------|-----------------|---------|
| Silicon dioxide | TWA: 4 mg/m ³ | | TWA: 4 mg/m ³ | - | - | - |
| (amorphous) | Ũ | | | | | |
| 112945-52-5 | | | | | | |
| Derived No Effect Level (DNEL) | | No information available. | | | | |
| Predicted No Effect Concentration (PNEC) | | No information available. | | | | |
| 8.2. Exposure controls | | | | | | |
| Appropriate engineering controls | | Good general ventilation should be sufficient under normal use. | | | | |
| Personal protective equi | 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/face protection | | Safety goggles. | | | | |
| Hand protection | | Protective gloves. | | | | |
| Skin and body protection | n | Long sleeved clothing and long pants | | | | |
| Respiratory protection | | Face Mask. In case of large spillages: Wear suitable respiratory protective equipment. | | | tive equipment. | |
| Environmental exposure | oosure controls Avoid release to the environment | | | nent. | | |

Section 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

| Appearance | | |
|--------------------------------|--------------------------|------------------|
| Physical state | Powder | |
| Color | magenta | |
| Odor | Odorless | |
| Odor threshold | No information available | |
| Property | Values | Remarks • Method |
| pH | Not applicable | None known |
| Melting point / freezing point | No data available | None known |
| Boiling point / boiling range | Not applicable | None known |
| Flash point | Not applicable | None known, |
| Evaporation rate | Not applicable | None known |
| Flammability (solid, gas) | Not applicable | None known, |
| Flammability Limit in Air | | None known |
| Upper flammability limit: | No data available | |
| Lower flammability limit: | No data available | |
| Vapor pressure | Not applicable | None known |
| Vapor density | Not applicable | None known |
| | | |



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Relative density Water solubility Solubility(ies) Partition coefficient Autoignition temperature Decomposition temperature Kinematic viscosity Dynamic viscosity Explosive properties

Oxidizing properties

9.2. Other information

No information available

No data available No data available No data available No information available Not applicable No information available No information available

No data available

Insoluble in water

None known

None known None known None known None known None known Explosive limits of toner particles suspended in air approximately equal to that of coal dust

Section 10: Stability and reactivity

10.1. Reactivity

No information available.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No information available.

10.4. Conditions to avoid

Keep at a temperature not exceeding 200 °C. Keep away from heat. Avoid friction, sparks, or other means of ignition.

10.5. Incompatible materials

Strong oxidizing agents

10.6. Hazardous decomposition products

Carbon monoxide, Carbon dioxide (CO₂), Nitrogen oxides (NOx)

Section 11: Toxicological information

11.1. Information on toxicological effects

Product Information

Inhalation

Acute $LC_{50} > 5.2 \text{ mg/l/4h}$ (OECD 436 method)



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| Eye contact | No information available |
|-----------------------------------|--|
| Skin contact: | No information available |
| Ingestion | Acute LD ₅₀ > 2000 mg/kg (OECD 420 method) |
| Skin corrosion/irritation | Non-irritant (OECD 404 method) |
| Serious eye damage/eye irritation | Minimal irritant to the eye (OECD 405 method) |
| Respiratory or skin sensitization | It is not a skin sensitizer (OECD 429 method) |
| Germ cell mutagenicity | AMES test : Negative (OECD 471 method) |
| Carcinogenicity | Ingredients of this product have not been classified as carcinogens according to IARC monographs, NTP and OSHA |
| Reproductive toxicity | Not classified. |
| STOT - single exposure | Not classified. |
| STOT - repeated exposure | Not classified |
| Aspiration hazard | Not classified. |

Section 12: Ecological information

12.1. Toxicity

Ecotoxicity The environmental impact of this product has not been fully investigated

Contains 0 % of components with unknown hazards to the aquatic environment

12.2. Persistence 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).



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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

IMDG

| 14.1 14.2 14.3 14.4 14.5 14.6 14.7 Anne IBC 0 | UN/ID no Proper shipping name Hazard Class Packing group Marine pollutant Special Provisions Transport in bulk according to x II of MARPOL 73/78 and the Code | Not regulated Not regulated Not regulated Not regulated Not applicable None Not applicable |
|---|---|--|
| RID 14.1 14.2 14.3 14.4 14.5 14.6 | UN/ID no Proper shipping name Hazard Class Packing group Environmental hazard Special Provisions | Not regulated Not regulated Not regulated Not regulated Not applicable None |
| ADR 14.1 14.2 14.3 14.4 14.5 14.6 | UN/ID no Proper shipping name Hazard Class Packing group Environmental hazard Special Provisions | Not regulated Not regulated Not regulated Not regulated Not applicable None |
| <u>IATA</u> 14.1 14.2 14.3 14.4 14.5 14.6 | UN/ID no Proper shipping name Hazard Class Packing group Environmental hazard Special Provisions | Not regulated Not regulated Not regulated Not regulated Not applicable None |



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Section 15: Regulatory information

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

EU-Regulations

* Contains no substances listed in REACH Regulation (EC) No.1907/2006 ANNEX XVII.

- * Contains no substance listed in REACH Regulation (EC) No.1907/2006 Candidate List for Authorization.
- * Contains no substances listed in REACH Regulation (EC) No.1907/2006 ANNEX XIV.

National Regulations

No information available

15.2. Chemical safety assessment

No chemical safety assessment has been carried out.

Section 16: Other information

Key or legend to abbreviations and acronyms used in the safety data sheet

Legend

 SVHC: Substances of Very High Concern for Authorization:

 TWA
 TWA (time-weighted average)
 STEL
 STEL (Short Term Exposure Limit)

 **
 Trade secret

Key literature references and sources for data No information available

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Issuing Date 06-Jul-2017

Revision Note

Importer information has been changed.

This material safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006

Disclaimer

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).