# This SDS packet was issued with item: 070333088

N/A



Product name: TN-210Y, TN-230Y, TN-240Y, TN-270Y Toner

Issuing Date: 9-January-2009 Revision Date: 10-November-2012 Version: 4 SDS No: YT402-01-EUUSOTHER

### SECRICIN Excentification of the substance/mixture and of the company under exing sal

| 1.1 Product identifier                   |  |  |
|--|--|--|
| Product name                             | TN-210Y, TN-230Y, TN-240Y, TN-270Y Toner   |  |
| 1.2 Relevant identified uses of the su   | bstance or mixture and uses advised against  |  |
| Relevant Identified Use(s)               | These products are yellow toner in a cartridge for Brother Industries, Ltd. laser printers,<br>multifunction devices and fax receivers. The cartridge should be used as supplied by Brother and<br>for use in the products stated. Information provided on this SDS is only consistent with the use<br>specified by Brother. |  |
| 1.3 Details of the supplier of the safet | ty data sheet  |  |
| Manufacturer                             | Brother Industries, Ltd.<br>15-1 Naeshiro-cho, Mizuho-ku, Nagoya 467-8561, Japan<br>Telephone (for information): +81-52-824-2735   |  |
| Importer (USA)                           | Brother International Corporation<br>200 Crossing Boulevard, Bridgewater, NJ 08807, USA<br>Telephone (for information): +1-800-284-4329  |  |
| Importer (Canada)                        | Brother International Corporation (Canada) Ltd.<br>1 Hotel de Ville, Dollard des Ormeaux, Quebec, H9B 3H6, Canada<br>Telephone (for information): +1-514-685-0600  |  |
| importer (Europe)                        | Brother International Europe Ltd.<br>Brother House, 1 Tame Street, Guide Bridge, Audenshaw, Manchester M34 5JE, UK<br>Telephone (for information): +44-161-330-6531  |  |
| Importer (Australia)                     | Brother International (Aust.) Pty. Ltd. ACN 001 393 835<br>Level 3, Building A, 11 Talavera Road, Macquarie Park, NSW 2113, Australia<br>Telephone (for information): +61-2-9887-4344  |  |
| E-mail Address                           | sds.info@brother.co.jp   |  |
| 1.4 Emergency telephone number           |  |  |
| Emergency Telephone<br>(24 hours)        | CHEMTREC<br>+1-703-527-3887 (International)<br>+1-800-424-9300 (North America)   |  |
|  | For France only:<br>Antipoison Center telephone number: ORFILA +33-1-45-425-959  |  |



Product name: TN-210Y, TN-230Y, TN-240Y, TN-270Y Toner

Issuing Date: 9-January-2009 Revision Date: 10-November-2012 Version: 4 SDS No: YT402-01-EUUSOTHER

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).

#### SECTIONS Controls (Ich) momation on ingredients

3.2 Mixtures

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

|                             | CAS-No      | EC-No     |       |                |                |
|-----------------------------|-------------|-----------|-------|----------------|----------------|
| Styrene-acrylate copolymer  | 25767-47-9  | -         | 83-87 | Not classified | Not classified |
| Pigment                     | **          | **        | 4-6   | Not classified | Not classified |
| Fatty Acid Ester            | **          | -         | 4-6   | Not classified | Not classified |
| PMMA                        | 9011-14-7   | •         | 1-3   | Not classified | Not classified |
| Silicon Dioxide (amorphous) | 112945-52-5 | 231-545-4 | 1-3   | Not classified | Not classified |
| Styrene-acrylate Resin      | **          | -         | 0.1-2 | Not classified | Not classified |
| Silicon Dioxide (amorphous) | 844491-94-7 | 430-570-1 | <1    | Not classified | Not classified |

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

\*\* CONFIDENTIAL



Issuing Date: 9-January-2009 Revision Date: 10-November-2012 Version: 4 SDS No: YT402-01-EUUSOTHER

Product name: TN-210Y, TN-230Y, TN-240Y, TN-270Y Toner

|  | isures  |
|--|---|
| 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<br>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<br>medical attention and special<br>treatment needed | Treat symptomatically.  |

### SECTION DELICETURING MEASURES

| 5.1 Extinguishing media<br>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<br>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.<br>Use appropriate respirator for carbon monoxide and carbon dioxide. Wear positive pressure<br>self-contained breathing apparatus (SCBA) during the attack phase of firefighting operations and<br>during cleanup in enclosed or poorly ventilated areas immediately after a fire. Personnel not having<br>suitable respiratory protection must leave the area to prevent significant exposure to toxic<br>combustion gases from any source. |



Product name: TN-210Y, TN-230Y, TN-240Y, TN-270Y Toner

Issuing Date: 9-January-2009 Revision Date: 10-November-2012 Version: 4 SDS No: YT402-01-EUUSOTHER

### 

| 6.1 Personal precautions, protective<br>equipment and emergency<br>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<br>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.<br>For disposal considerations: See section 13.   |
| SECTION DE FINAITH CELLS  | storagenesis  |

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

### SEDTION/8 EXposure controls/personal protection

#### 8.1 Control Parameters

Occupational Exposure Limits

|                                  | Silicon Dioxida (amorginous)  |  |
|----------------------------------|---|--|
| ACGIH TLV                        |   |  |
| OSHA PEL                         | 20mppcf 80(mg/m <sup>3</sup> )/%SiO <sub>2</sub>  |  |
| European Union                   | -   |  |
| Austria                          | TWA: 4 mg/m <sup>3</sup>  |  |
| Chemical Name                    | Silkon Dioxide (ambrightus) to the state of |  |
| 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).<br>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.   |  |



Product name: TN-210Y, TN-230Y, TN-240Y, TN-270Y Toner

Issuing Date: 9-January-2009 Revision Date: 10-November-2012 Version: 4 SDS No: YT402-01-EUUSOTHER

| 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). |

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   | Yellow   |
| Odor<br>Odor Threshold<br>pH<br>Melting point/freezing point<br>Initial boiling point and boiling range<br>Flash Point<br>Evaporation rate<br>Flammability (solid, gas)<br>Upper/lower flammability or explosive<br>timits                                | Odorless<br>No information available<br>Not applicable<br>110 °C (Melting point)<br>Not applicable<br>Not applicable<br>Not applicable<br>Sof applicable<br>65 - 70 g/m <sup>3</sup> (Jower)   |
| Vapor pressure<br>Vapor pressure<br>Vapor density<br>Relative density<br>Solubility(ies)<br>Partition coefficient: n-octanol/water<br>Auto-ignition temperature<br>Decomposition temperature<br>Viscosity<br>Explosive properties<br>Oxidizing properties | Not applicable<br>Not applicable<br>1.15 (H <sub>2</sub> O=1)<br>Insoluble (water)<br>No information available<br>No information available<br>Not applicable<br>Explosive limits of toner particles suspended in air approximately equal to that of coal dust.<br>No information available |

9.2 Other information

No information available.

reactions

products

| SECTORED Stability and reactivity |                           |  |
|-----------------------------------|---------------------------|--|
| 10.1 Reactivity                   | No information available. |  |
| 10.2 Chemical stability           | Stable.                   |  |
| 10.3 Possibility of hazardous     | 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 | Contains: Carbon monoxide, Carbon dioxide and Nitrogen oxides.                                  |



Product name: TN-210Y, TN-230Y, TN-240Y, TN-270Y Toner

Issuing Date: 9-January-2009 Revision Date: 10-November-2012 Version: 4 SDS No: YT402-01-EUUSOTHER

#### SECTOR ENTROPOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute toxicity

| Inhalation<br>Eye contact<br>Skin contact<br>Ingestion | Acute LC <sub>50</sub> > 5.15 mg/l (Method OECD#403)<br>No information available.<br>No information available.<br>Acute LD <sub>50</sub> > 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.   |

#### SECTION 2 Ecological information

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

### 

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.



Product name: TN-210Y, TN-230Y, TN-240Y, TN-270Y Toner

Issuing Date: 9-January-2009 Revision Date: 10-November-2012 Version: 4 SDS No: YT402-01-EUUSOTHER

SECTIONS AS TRANSPORTING 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<br>Annex II of Marpol 73/78 and the IBC | Not applicable |

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

Code

SECTION SEGURITORY INformation

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

15.2 Chemical Safety Assessment No.



Product name: TN-210Y, TN-230Y, TN-240Y, TN-270Y Toner

Issuing Date: 9-January-2009 Revision Date: 10-November-2012 Version: 4 SDS No: YT402-01-EUUSOTHER

| SPARATE   | nauon  |
|---|--|
| Full text of R-phrases referred to<br>under sections 2 and 3    | None   |
| Full text of H-Statements referred to<br>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<br>other materials or in any other process, and it is based on our best knowledge as of the date of<br>preparation (revision).  |
| Revision Note   | Updated for compliance with EU Regulations 453/2010 and 172/2008 (CLP).  |
| References:   | U.S. 29CFR Part 1910<br>ACGIH Threshold Limit Values for Chemical Substances and Physical Agents and Biological<br>Exposure Indices<br>IARC Monographs on the Evaluation Carcinogenic Risks to Humans World Health Organization<br>EU Directive 91/322/EEC and 2000/39/EC<br>NTP 11th Report on Carcinogens  |
| Abbreviations:  | ACGIH: American Conference of Governmental Industrial Hygienists<br>ADR: European Agreement concerning the International carriage of Dangerous goods by Road<br>(EU)<br>DOT: Department Of Transportation (US)<br>IARC: International Agency for Research on Cancer<br>IATA: International Air Transport Association<br>IMDG: International Maritime Dangerous Goods<br>NOHSC: National Occupational Health and Safety Commission (Australia)<br>NTP: National Toxicology Program (US)<br>OSHA: Occupational Safety and Health Administration (US)<br>PEL: Permissible Exposure Limit<br>RID: Regulations concerning the International carriage of goods by Rail (EU)<br>STEL: Short Term Exposure Limit<br>TLV: Threshold Limit Value (ACGIH)<br>TSCA: Toxic Substances Control Act (US)<br>TWA: Time Weighted Average<br>WHMIS: Workplace Hazardous Material Information System (Canada) |



Product name: TN-210Y, TN-230Y, TN-240Y, TN-270Y Toner

Issuing Date: 9-January-2009 Revision Date: 01-November-2015 Version: 5 SDS No: YT402-01-EUUSOTHER

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

| 1.1 Product identifier                               |   |  |  |
|--|---|--|--|
| Product name   | TN-210Y, TN-230Y, TN-240Y, TN-270Y Toner  |  |  |
| 1.2 Relevant identified uses of the su               | 1.2 Relevant identified uses of the substance or mixture and uses advised against   |  |  |
| Relevant Identified Use(s)                           | These products are yellow 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. |  |  |
| 1.3 Details of the supplier of the safety data sheet |   |  |  |
| Manufacturer   | Brother Industries, Ltd.<br>15-1 Naeshiro-cho, Mizuho-ku, Nagoya 467-8561, Japan<br>Telephone (for information): +81-52-824-2735  |  |  |
| Importer (USA)                                       | Brother International Corporation<br>200 Crossing Boulevard, Bridgewater, NJ 08807, USA<br>Telephone (for information): +1-877-276-8437   |  |  |
| Importer (Canada)                                    | Brother International Corporation (Canada) Ltd.<br>1 Hotel de Ville, Dollard des Ormeaux, Quebec, H9B 3H6, Canada<br>Telephone (for information): +1-514-685-0600   |  |  |
| Importer (Europe)                                    | Brother International Europe Ltd.<br>Brother House, 1 Tame Street, Guide Bridge, Audenshaw, Manchester M34 5JE, UK<br>Telephone (for information): +44-161-330-6531   |  |  |
| Importer (Australia)                                 | Brother International (Aust.) Pty. Ltd. ACN 001 393 835<br>Level 3, Building A, 11 Talavera Road, Macquarie Park, NSW 2113, Australia<br>Telephone (for information): +61-2-9887-4344   |  |  |
| E-mail Address                                       | sds.info@brother.co.jp  |  |  |
| 1.4 Emergency telephone number                       |   |  |  |
| Emergency Telephone<br>(24 hours)                    | CHEMTREC<br>+1-703-527-3887 (International)<br>+1-800-424-9300 (North America)  |  |  |
|  | For France only:  |  |  |

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



Product name: TN-210Y, TN-230Y, TN-240Y, TN-270Y Toner

Issuing Date: 9-January-2009 Revision Date: 01-November-2015 Version: 5 SDS No: YT402-01-EUUSOTHER

### **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<br>(EU Reg. 1272/2008) |
|-----------------------------|-------------|-----------|-------|---------------------------------------|
| Styrene-acrylate copolymer  | 25767-47-9  | -         | 83-87 | Not classified                        |
| Pigment                     | **          | **        | 4-6   | Not classified                        |
| Fatty Acid Ester            | **          | -         | 4-6   | Not classified                        |
| PMMA                        | 9011-14-7   | -         | 1-3   | Not classified                        |
| Silicon Dioxide (amorphous) | 112945-52-5 | 231-545-4 | 1-3   | Not classified                        |
| Styrene-acrylate Resin      | **          | -         | 0.1-2 | Not classified                        |
| Silicon Dioxide (amorphous) | 844491-94-7 | 430-570-1 | <1    | Not classified                        |

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

\*\* CONFIDENTIAL



Issuing Date: 9-January-2009 Revision Date: 01-November-2015 Version: 5 SDS No: YT402-01-EUUSOTHER

Product name: TN-210Y, TN-230Y, TN-240Y, TN-270Y Toner

| 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<br>medical attention and special<br>treatment needed | Treat symptomatically.  |  |  |

### SECTION 5: Firefighting measures

| 5.1 Extinguishing media<br>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. |



Product name: TN-210Y, TN-230Y, TN-240Y, TN-270Y Toner

Issuing Date: 9-January-2009 Revision Date: 01-November-2015 Version: 5 SDS No: YT402-01-EUUSOTHER

### 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.<br>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 yellow 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                    | Silicon Dioxide (amorphous)   |  |
|----------------------------------|---|--|
|                                  | 112945-52-5   |  |
| ACGIH TLV                        | -   |  |
| OSHA PEL                         | 20mppcf 80(mg/m <sup>3</sup> )/%SiO <sub>2</sub>  |  |
| 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).<br>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.   |  |



Product name: TN-210Y, TN-230Y, TN-240Y, TN-270Y Toner

Issuing Date: 9-January-2009 Revision Date: 01-November-2015 Version: 5 SDS No: YT402-01-EUUSOTHER

| 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). |
|                          |   |

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                                   | Yellow   |
| Odor                                    | Odorless   |
| Odor Threshold                          | No information available   |
| рН                                      | Not applicable   |
| Melting point/freezing point            | 110 °C (Melting point)   |
| Initial boiling point and boiling range | Not applicable   |
| Flash Point                             | Not applicable   |
| Evaporation rate                        | Not applicable   |
| Flammability (solid, gas)               | Not applicable   |
| Upper/lower flammability or explosive   | 65 - 70 g/m <sup>3</sup> (lower)   |
| limits                                  |  |
| Vapor pressure                          | Not applicable   |
| Vapor density                           | Not applicable   |
| Relative density                        | 1.15 (H <sub>2</sub> O=1)  |
| Solubility(ies)                         | Insoluble (water)  |
| Partition coefficient: n-octanol/water  | No information available   |
| Auto-ignition temperature               | No information available   |
| Decomposition temperature               | No information available   |
| Viscosity                               | Not applicable   |
| Explosive properties                    | Explosive limits of toner particles suspended in air approximately equal to that of coal dust. |
| Oxidizing properties                    | No information available   |
|   |  |

#### 9.2 Other information

No 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.   |  |
| 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<br>products | Contains: Carbon monoxide, Carbon dioxide and Nitrogen oxides.                                  |  |



Issuing Date: 9-January-2009 Revision Date: 01-November-2015 Version: 5 SDS No: YT402-01-EUUSOTHER

Product name: TN-210Y, TN-230Y, TN-240Y, TN-270Y Toner

### SECTION 11: Toxicological information

#### 11.1 Information on toxicological effects

| Inhalation<br>Eye contact<br>Skin contact<br>Ingestion | Acute $LC_{50} > 5.15$ mg/l (Method OECD#403)<br>No information available.<br>No information available.<br>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.   |

| SECTION 12: Ecological information                                   |  |  |
|--|--|--|
| 12.1 Toxicity  | No information available.  |  |
| 12.2 Persistance and degradability<br>12.3 Bioaccumulative potential | No information available.  |  |
| 12.4 Mobility in soil<br>12.5 Results of PBT and vPvB<br>assessment  | No information available.<br>This product contains no substance considered to be persistent, bioaccumulating nor toxic (PBT).<br>This product contains no substance considered to be very persistent nor very bioaccumulating<br>(vPvB). |  |
| 12.6 Other adverse effects   | No information available.  |  |

### **SECTION 13: Disposal considerations**

| 13.1 Waste treatment method | S |
|-----------------------------|---|
|-----------------------------|---|

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.



Issuing Date: 9-January-2009 Revision Date: 01-November-2015 Version: 5 SDS No: YT402-01-EUUSOTHER

Product name: TN-210Y, TN-230Y, TN-240Y, TN-270Y Toner

### **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<br>Annex II of Marpol 73/78 and the IBC | Not applicable |

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

Code

### SECTION 15: Regulatory information

15.1 Safety, health and environmental EU:Not classified as dangerous for supply/use. (1999/45/EC) regulations/legislation specific for the USA: All chemical substances contained in this product are and had been listed on the TSCA substance or mixture 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) No.

**15.2 Chemical Safety Assessment** 



Product name: TN-210Y, TN-230Y, TN-240Y, TN-270Y Toner

Issuing Date: 9-January-2009 Revision Date: 01-November-2015 Version: 5 SDS No: YT402-01-EUUSOTHER

| 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  | SECTION 3   |  |
| References:  | U.S. 29CFR Part 1910<br>ACGIH Threshold Limit Values for Chemical Substances and Physical Agents and Biological<br>Exposure Indices<br>IARC Monographs on the Evaluation Carcinogenic Risks to Humans World Health Organization<br>EU Directive 91/322/EEC and 2000/39/EC<br>NTP 11th Report on Carcinogens   |  |
| Abbreviations:   | ACGIH: American Conference of Governmental Industrial Hygienists<br>ADR: European Agreement concerning the International carriage of Dangerous goods by Road (EU)<br>DOT: Department Of Transportation (US)<br>IARC: International Agency for Research on Cancer<br>IATA: International Air Transport Association<br>IMDG: International Maritime Dangerous Goods<br>NOHSC: National Occupational Health and Safety Commission (Australia)<br>NTP: National Toxicology Program (US)<br>OSHA: Occupational Safety and Health Administration (US)<br>PEL: Permissible Exposure Limit<br>RID: Regulations concerning the International carriage of goods by Rail (EU)<br>STEL: Short Term Exposure Limit<br>TLV: Threshold Limit Value (ACGIH)<br>TSCA: Toxic Substances Control Act (US)<br>TWA: Time Weighted Average<br>WHMIS: Workplace Hazardous Material Information System (Canada) |  |