

Revision Date: 11-May-2020 Issuing Date: 10-Nov-2012

Revision Number: 3

Safety data sheet number: YT403-02

Product Name: TN-221Y, TN-225Y, TN-241Y, TN-245Y, TN-251Y, TN-255Y, TN-

261Y, TN265Y, TN-281Y, TN-285Y Toner

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

### 1.1. Product identifier

Product Name TN-221Y, TN-225Y, TN-241Y, TN-245Y, TN-251Y, TN-255Y, TN-261Y, TN-281Y,

TN-285Y Toner

Product Form Mixture

Safety data sheet number YT403-02

### 1.2. Relevant identified uses of the substance or mixture and uses advised against

Relevant identified uses 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.

Uses advised against No information available

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

Manufacturer Brother Industries, Ltd.

15-1 Naeshiro-cho, Mizuho-ku, Nagoya 467-8561, Japan

Telephone (for information): +81-52-824-2735

**Importer** Brother International Europe Ltd.

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

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

### For further information, please contact

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

#### 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]

EN / EGHS Page 1/9



Revision Date: 11-May-2020 Issuing Date: 10-Nov-2012

Revision Number: 3

Safety data sheet number: YT403-02

Product Name: TN-221Y, TN-225Y, TN-241Y, TN-245Y, TN-251Y, TN-255Y, TN-

 $261Y,\, TN265Y,\, TN\text{-}281Y,\, TN\text{-}285Y\,\, Toner$ 

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	•	-	82-85	Not classified	No data available
Pigment	**	•	-	6-7	Not classified	No data available
Paraffin wax	8002-74-2	232-315-6	-	2-3	Not classified	No data available
Fatty acid ester	**	-	-	2-3	Not classified	No data available
PMMA	9011-14-7	•	-	1.5-2.5	Not classified	No data available
Silicon dioxide (amorphous)	112945-52-5	231-545-4	-	1-2	Not classified	No data available
Silicon dioxide (amorphous)	844491-94-7	430-570-1	-	0.5-1.5	Not classified	No data available
Styrene-acrylate Resin	**	-	-	0.1-1	Not classified	No data available

<sup>\*\*</sup> CONFIDENTIAL

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** IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing.

Get immediate medical advice/attention.

**Eye contact** Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids.

Consult a physician.

EN / EGHS Page 2/9



Revision Date: 11-May-2020 Issuing Date: 10-Nov-2012

Revision Number: 3

Product Name: TN-221Y, TN-225Y, TN-241Y, TN-245Y, TN-251Y, TN-255Y, TN-

261Y, TN265Y, TN-281Y, TN-285Y Toner

Safety data sheet number: YT403-02

Take off contaminated clothing. Wash off immediately with soap and plenty of water. Skin contact:

Obtain immediate medical attention. Wash out mouth with water and give 100-200 ml of Ingestion

water to drink.

### 4.2. Most important symptoms and effects, both acute and delayed

**Symptoms** Inhalation ( dust ): For large quantities: May cause irritation to the respiratory system.

Increased difficulty in breathing. Sneezing. Coughing

Eve 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

Note to physicians Treat symptomatically.

# Section 5: Firefighting measures

#### 5.1. Extinguishing media

**Suitable Extinguishing Media** Dry chemical, CO<sub>2</sub>, 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

chemical

May form explosive dust clouds in air.

#### 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

Avoid generation of dust. Do not breathe dust. A suitable dust mask or dust respirator with For non-emergency personnel

filter type A/P may be appropriate.

For emergency responders Use personal protection recommended in Section 8.

#### 6.2. Environmental precautions

EN / EGHS Page 3 / 9



Revision Date: 11-May-2020 Issuing Date: 10-Nov-2012 Revision Number: 3

Product Name: TN-221Y, TN-225Y, TN-241Y, TN-245Y, TN-251Y, TN-255Y, TN-261Y, TN-261Y

261Y, TN265Y, TN-281Y, TN-285Y Toner

Safety data sheet number: YT403-02

**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 handling

Advice on safe handling Keep out of the reach of children. Avoid generation of dust. Avoid inhalation of high

concentrations of dust. Avoid contact with eyes.

**General hygiene considerations** Handle in accordance with good industrial hygiene and safety practice.

7.2. Conditions for safe storage, including any incompatibilities

**Storage Conditions** Keep away from oxidizing agents.

7.3. Specific end use(s)

**Specific 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.

These products are black 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 and personal protection

#### 8.1. Control parameters

Exposure Limits .

EN / EGHS Page 4 / 9



Revision Date: 11-May-2020 Issuing Date: 10-Nov-2012

Revision Number: 3

Safety data sheet number: YT403-02

Product Name: TN-221Y, TN-225Y, TN-241Y, TN-245Y, TN-251Y, TN-255Y, TN-

261Y, TN265Y, TN-281Y, TN-285Y Toner

Chemical name	European Union	United Kingdom	France	Spain	Germany
Paraffin wax 8002-74-2	-	TWA: 2 mg/m <sup>3</sup> STEL: 6 mg/m <sup>3</sup>	TWA: 2 mg/m <sup>3</sup>	TWA: 2 mg/m <sup>3</sup>	-
Chemical name	Italy	Portugal	Netherlands	Finland	Denmark
Paraffin wax 8002-74-2	-	TWA: 2 mg/m <sup>3</sup>	-	TWA: 1 mg/m <sup>3</sup>	TWA: 2 mg/m <sup>3</sup>
Chemical name	Austria	Switzerland	Poland	Norway	Ireland
Paraffin wax 8002-74-2	-	TWA: 2 mg/m <sup>3</sup>	TWA: 2 mg/m <sup>3</sup>	TWA: 2 mg/m <sup>3</sup> STEL: 4 mg/m <sup>3</sup>	TWA: 2 mg/m <sup>3</sup> STEL: 6 mg/m <sup>3</sup>
Silicon dioxide (amorphous) 112945-52-5	TWA: 4 mg/m <sup>3</sup>	TWA: 4 mg/m <sup>3</sup>	-	-	-

No information available. **Derived No Effect Level (DNEL)** 

Predicted No Effect Concentration No information available.

(PNEC)

#### 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/face protection If there is a risk of contact:. Safety goggles.

**Hand protection** Protective gloves.

Skin and body protection Long sleeved clothing and long pants.

Face Mask. In case of large spillages: Wear suitable respiratory protective equipment. Respiratory protection

**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 Solid Powder yellow Color Odor Odorless.

**Odor threshold** No information available

**Property** Values Remarks • Method

Not applicable Hq None known

Melting point / freezing point 110 °C

Boiling point / boiling range Not applicable None known Flash point Not applicable None known

EN / EGHS Page 5 / 9



None known

Revision Date: 11-May-2020 Issuing Date: 10-Nov-2012

Revision Number: 3

Safety data sheet number: YT403-02

Product Name: TN-221Y, TN-225Y, TN-241Y, TN-245Y, TN-251Y, TN-255Y, TN-

261Y, TN265Y, TN-281Y, TN-285Y Toner

**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: 95 - 100 a/m3 Vapor pressure Not applicable

None known Vapor density Not applicable None known Relative density 1.15  $(H_2O=1)$ 

Water solubility Insoluble in water Solubility(ies) No data available Partition coefficient No data available No data available

None known **Autoignition temperature** None known **Decomposition temperature** No data available None known Kinematic viscosity Not applicable None known Dynamic viscosity Not applicable None known

**Explosive properties** Explosive limits of toner particles No information available

suspended in air approximately equal

to that of coal dust No information available

**Oxidizing properties** 

9.2. Other information No information available

# 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 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 (CO<sub>2</sub>), Nitrogen oxides (NOx)



Revision Date: 11-May-2020 Issuing Date: 10-Nov-2012 Revision Number: 3

Safety data sheet number: YT403-02

Product Name: TN-221Y, TN-225Y, TN-241Y, TN-245Y, TN-251Y, TN-255Y, TN-261Y, TN265Y, TN-281Y, TN-285Y Toner

# Section 11: Toxicological information

#### 11.1. Information on toxicological effects

#### **Product Information**

Inhalation Acute LC<sub>50</sub> >5.22 mg/l (OECD 403 method)

No information available Eye contact

Skin contact: No information available

Ingestion Acute LD<sub>50</sub> > 2000 mg/kg (OECD 420 method)

The following values are calculated based on chapter 3.1 of the GHS document

4,619.30 mg/kg ATEmix (oral) ATEmix (dermal) 4,324.30 mg/kg

Skin corrosion/irritation Non-irritant (OECD 404 method)

Serious eye damage/eye irritation Slight irritant to the eye (OECD 405 method)

Respiratory or skin sensitization It is not a skin sensitizer (OECD 429 method)

AMES test: Negative (OECD 471 method) Germ cell mutagenicity

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

**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.



Revision Date: 11-May-2020 Issuing Date: 10-Nov-2012

Revision Number: 3

Safety data sheet number: YT403-02

Product Name: TN-221Y, TN-225Y, TN-241Y, TN-245Y, TN-251Y, TN-255Y, TN-255Y

261Y, TN265Y, TN-281Y, TN-285Y Toner

### 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

#### IMDG

14.1	UN/ID no	Not regulated
14.2	Proper shipping name	Not regulated
14.3	Hazard Class	Not regulated
14.4	Packing group	Not regulated
14.5	Marine pollutant	Not applicable
14.6	Special Provisions	None
–		

14.7 Transport in bulk according to Not applicable

Annex II of MARPOL 73/78 and the

**IBC Code** 

RI	D

14.1	UN/ID no	Not regulated
14.2	Proper shipping name	Not regulated
14.3	Hazard Class	Not regulated
14.4	Packing group	Not regulated
14.5	<b>Environmental hazard</b>	Not applicable
14.6	Special Provisions	None

#### ADR

14.1	UN/ID no	Not regulated
14.2	Proper shipping name	Not regulated
14.3	Hazard Class	Not regulated
14.4	Packing group	Not regulated
14.5	<b>Environmental hazard</b>	Not applicable
14.6	Special Provisions	None

### <u>IATA</u>

14.1	UN/ID no	Not regulated
14.2	Proper shipping name	Not regulated

EN / EGHS Page 8 / 9



Revision Date: 11-May-2020 Issuing Date: 10-Nov-2012

Revision Number: 3

Safety data sheet number: YT403-02

Product Name: TN-221Y, TN-225Y, TN-241Y, TN-245Y, TN-251Y, TN-255Y, TN-255Y

 $261Y,\, TN265Y,\, TN\text{-}281Y,\, TN\text{-}285Y\,\, Toner$ 

14.3 Hazard Class
14.4 Packing group
14.5 Environmental hazard
Not regulated
Not applicable

14.6 Special Provisions None

# 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

Revision Date 11-May-2020

Issuing Date 10-Nov-2012

Revision Note No information available

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).