

Product name: TN-630, TN-660, TN-2340, TN-2370, TN-2310, TN-2320, TN-2335, TN-2375, TN-2330, TN-2350, TN-2315, TN-2345, TN-2360, TN-2380, TN-2305, TN-2355, TN-2306, TN-2356, TN-2365, TN-2385, TN2312, TN-2325 Toner

1501094

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

1.1. Product identifier

Product Name (Product code)

: TN-630,TN-660,TN-2340,TN-2370,TN-2310,TN-2320,TN-2335,TN-2375,TN-2330,TN-2350, TN-2315,TN-2345,TN-2360,TN-2380,TN-2305,TN-2355,TN-2366,TN-2365,TN-2365,TN-2365,

TN2312 TN-2325 Toner

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

1.2.1. Relevant identified uses

Use of the substance/mixture

: These products are black 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

1.2.2. Uses advised against No additional 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 (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, Macquarle 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 number

: 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

#### **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 Directive 67/548/EEC [DSD] or 1999/45/EC [DPD]

Not classified

Australia Classification

Not classified as hazardous according to the criteria of NOHSC

#### 2.2. Label elements

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

EUH phrases : EUH208 - Contains Rosin, furnarated(65997-04-8), May produce an atlergic reaction



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#### 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]
N,N-diethyl-N-methyl-2-(2-methyl-1-oxo-2- propenyl)oxyethanaminium salt with 4-methylbenzenesulfonic acid (1:1) polymer with butyl 2-propenoate and ethenylbenzene	(CAS No) 133350-42-2 (EC no) -	5 - 10	Xi; R36	Eye Irrit. 2, H319
Carbon Black (bound)	(CAS No) 1333-86-4 (EC no) 215-609-9	1-5	Not classified	Not classified
Rosin, furnarated	(CAS No) 65997-04-8 (EC no) 266-040-8	1 - 2.5	Xn; R22 Xi; R41 R43	Acute Tox. 4 (Oral), H302 Eye Dam. 1, H318 Skin Sens. 1, H317
Polyester resin	(CAS No) ** (EC no) -	**	Not classified	Not classified

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

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

## **SECTION 4: First aid measures**

#### 4.1. Description of first aid measures

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 imitation.

Symptoms/injuries after 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, Water spray.

Unsuitable extinguishing media

: Do not use water jet.

# 5.2. Special hazards arising from the substance 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.



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

#### 6.1. Personal precautions, protective equipment and emergency procedures

#### 6.1.1. For non-emergency personnel

No additional information available

### 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 must 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 any incompatibilities

Storage conditions

: Keep away from oxidizing agents.

### 7.3. Specific end use(s)

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/personal protection

### 8.1. Control parameters

Carbon Black (bound) (1333-86-4)		
Belgium	Local name	Carbone (noir de)
Belgium	Limit value (mg/m³)	3.5 mg/m³
Denmark	Local name	Carbon black
Denmark	Limit (long-term) (mg/m³)	3.5 mg/m³
Denmark	Anmærkninger (DK)	К
Finland	Local name	Nokimusta
Finland	HTP-arvo (8h) (mg/m³)	3.5 mg/m³
Finland	HTP-arvo (15 min)	7 mg/m³
France	Local name	Noir de carbone
France	VME (mg/m³)	3.5 mg/m³
Ireland	Local name	Carbon black
Ireland	OEL (8 hours ref) (mg/m³)	3.5 mg/m³
Ireland	OEL (15 min ref) (mg/m3)	7 mg/m³
Portugal	Local name	Carbono, preto (Negro de fumo)
Portugal	OEL TWA (mg/m³)	3.5 mg/m <sup>3</sup>
Spain	Local name	Negro de humo
Spain	VLA-ED (mg/m³)	3.5 mg/m³
Spain	Notes	véase Apartado 9
United Kingdom	Local name	Carbon black



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Carbon Black (bound)	(1333-86-4)		
United Kingdom	WEL TWA (mg/m³)	3.5 mg/m³	
United Kingdom	WEL STEL (mg/m³)	7 mg/m³	
Norway	Local name	Carbon Black (lampesot)	
Norway	TWA (AN) (mg/m³)	3.5 mg/m³	
USA - ACGIH	Local name	Carbon black	
USA - ACGIH	ACGIH TWA (mg/m³)	3 mg/m³	
USA - ACGIH	Remark (ACGIH)	Bronchitis	
USA - OSHA	Local name	Carbon black	
USA - OSHA	OSHA PEL (TWA) (mg/m³)	3.5 mg/m³	

Additional information : USA OSHA PEL (TWA): 15 mg/m³ (Total dust) 5 mg/m³ (Respirable Fraction)

ACGIH TLV (TWA): 10 mg/m³ (Inhalable particles) 3 mg/m³ (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:

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 : Black
Odor : odorless

Odor threshold : No information available

pH : Not applicable
Relative evaporation rate (butyl acetate=1) : Not applicable
Relative evaporation rate (ether=1) : Not applicable

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 : No information available

Flammability (solid, gas) : Not applicable Vapor pressure : Not applicable Relative vapor density at 20  $^{\circ}$ C : Not applicable Relative density : 1.2 (H<sub>2</sub>O=1)

Solubility : Partially soluble (toluene, chloroform and tetrahydrofuran). 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



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Other information

No additional information available

# **SECTION 10: Stability and reactivity**

Reactivity

No information available.

10.2. Chemical stability

Stable.

10.3. Possibility of hazardous reactions

No information available.

Conditions to avoid

Keep away from heat. Avoid friction, sparks, or other means of Ignition.

Incompatible materials

Strong oxidizing agents.

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 > 5000 mg/kg (OECD 423 method) LC<sub>50</sub> inhalation rat (mg/l) > 5.24 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)

Carbon Black: In 1996, the IARC re-evaluated carbon black as a Group 2B carcinogen (possible human carcinogen). This classification is given to chemicals, for which there is inadequate human evidence, but sufficient animal evidence on which to base an opinion of carcinogenicity. The classification is based upon the development of lung tumors in rats receiving chronic inhalation exposures to free carbon black at levels that induce particle overload of the lung. Studies performed in animal models other than rats did not show any association between carbon black and lung tumors. Moreover, a two-year cancer bloassay using a typical toner preparation containing carbon black demonstrated no association between toner exposure and

tumor development in rats.

Other ingredients of this product have not been classified as carcinogens according to IARC

monographs, NTP and OSHA

Reproductive toxicity Specific target organ toxicity (single exposure) : Not classified Specific target organ toxicity (repeated : Not classified

exposure)

Carcinogenicity

Aspiration hazard : Not classified

# **SECTION 12: Ecological information**

#### 12.1. Toxicity

Carbon Black (bound) (1333-86	-4)
EC <sub>50</sub> Daphnia	> 5600 mg/l 24 h (Daphnia magna)
Rosin, fumarated (65997-04-8)	
LC <sub>50</sub> fish	3.2 mg/l 96 h static (Brachydanio rerio)



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12.2. Persistence and degradability

Persistence and degradability

No information available.

12.3. Bioaccumulative potential

Log Pow No information available
Log Kow 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

Results of PBT assessment Not available

12.6. Other adverse effects

Other adverse effects : No information available.

## **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

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

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

IBC code : Not applicable



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# **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).

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

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

Indication of changes:

Newly issued.

Data sources

: 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 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 Government 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 date of preparation (revision).

#### Full text of R-, H- and EUH-phrases:

Acute Tox. 4 (Oral)	Acute toxicity (oral) Category 4
Eye Dam. 1	Serious eye damage/eye irritation Category 1
Eye Irrit. 2	Serious eye damage/eye irritation Category 2
Skin Sens. 1	Skin sensitization Category 1



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H302	Harmful if swallowed
H317	May cause an allergic skin reaction
H318	Causes serious eye damage
H319	Causes serious eye imitation
R22	Harmful if swallowed
R36	Irritating to eyes
R41	Risk of serious damage to eyes
R43	May cause sensitization by skin contact
Xi	Imitant
Xn	Hamful