

Product Name: TN-820, TN-850, TN-880, TN-890, TN-3400, TN-3410, TN-3415, TN-3417, TN-3420, TN-3422, TN-3425, TN-3428, TN-3429, TN-3430, TN-3435, TN-3437, TN-3440, TN-3442, TN-3448, TN-3449, TN-3465, TN-3467, TN-3470, TN-3472, TN-3475, TN-3478, TN-3479, TN-3480, TN-3485, TN-3487, TN-3490, TN-3492, TN-3495, TN-3498, TN-3499, TN-3500, TN-3505, TN-3510, TN-3512, TN-3512RE, TN-3520, TN-4638 Toner

Safety data sheet number: PT475/477-01

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

### **1.1. Product identifier**

**Safety data sheet number** PT475/477-01

**Product Name** TN-820, TN-850, TN-880, TN-890, TN-3400, TN-3410, TN-3415, TN-3417, TN-3420, TN-3422, TN-3425, TN-3428, TN-3429, TN-3430, TN-3435, TN-3437, TN-3440, TN-3442, TN-3448, TN-3449, TN-3465, TN-3467, TN-3470, TN-3472, TN-3475, TN-3478, TN-3479, TN-3480, TN-3485, TN-3487, TN-3490, TN-3492, TN-3495, TN-3498, TN-3499, TN-3500, TN-3505, TN-3510, TN-3512, TN-3512RE, TN-3520, TN-4638 Toner

### **Other means of identification**

**Pure substance/mixture** Mixture

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

**Recommended use** 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.

**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

#### **Supplier**

(Europe)  
Brother International (Nederland) B.V.  
Zanderij 25, 1185 ZM Amstelveen, The Netherlands

Brother International Europe Ltd.  
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**

Revision date: 01-Jun-2023

Issuing Date: 10-May-2019

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Emergency Telephone

CHEMTREC +1-703-527-3887 (International)

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

#### Regulation (EC) No 1272/2008

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

### 2.2. Label elements

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

#### Hazard statements

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

99.9 % of the mixture consists of ingredient(s) of unknown acute dermal toxicity.

99.9 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (gas).

99.9 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (vapor).

#### Unknown aquatic toxicity

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

### 2.3. Other hazards

No information available.

#### Endocrine Disruptor Information

This product does not contain any known or suspected endocrine disruptors.

## SECTION 3: Composition/information on ingredients

### 3.1 Substances

Not applicable

### 3.2 Mixtures

Chemical name	CAS No	EC No (EU Index No)	EC Index No	Weight-%	Classification according to Regulation	Specific concentration limit (SCL)	M-Factor	M-Factor (long-term)	REACH registration number

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					(EC) No. 1272/2008 [CLP]				
Styrene-acrylate-copolymer	**	-		65-80	No data available	-	-	-	Not applicable
Ester Wax	**	**		10-20	No data available	-	-	-	Registered
Carbon Black (bound)	1333-86-4	215-609-9		4-9	No data available	-	-	-	01-2119384 822-32-XX XX
PMMA	9011-14-7	618-466-4		1-4	No data available	-	-	-	Not applicable
Styrene-acrylate Resin	**	-		0.5-3	No data available	-	-	-	Not applicable
Resin	**	**		0.5-3	No data available	-	-	-	Registered
Silicon dioxide (amorphous)	112945-52-5	601-216-3		<1.5	No data available	-	-	-	Registered
Zinc stearate	557-05-1	209-151-9		<0.2	No data available	-	-	-	Registered

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

**Acute Toxicity Estimate**

No information available

This product does not contain candidate substances of very high concern at a concentration  $\geq 0.1\%$  (Regulation (EC) No. 1907/2006 (REACH), Article 59)

**SECTION 4: First aid measures**

**4.1. Description of first aid measures**

<b>General advice</b>	If symptoms persist, call a physician.
<b>Inhalation</b>	IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing. Get immediate medical advice/attention.
<b>Eye contact</b>	Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician.
<b>Skin contact:</b>	Wash skin with soap and water. In the case of skin irritation or allergic reactions see a physician.
<b>Ingestion</b>	Obtain immediate medical attention. Wash out mouth with water and give 100-200 ml of

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water to drink.

**Self-protection of the first aider** Avoid contact with skin, eyes or clothing. Wear personal protective clothing (see section 8).

**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  
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

**Effects of Exposure** No information available.

**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.

**Large Fire** CAUTION: Use of water spray when fighting fire may be inefficient.

**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**

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

**For non-emergency personnel** Avoid generation of dust. Do not breathe dust. A suitable dust mask or dust respirator with filter type A/P may be appropriate.

**For emergency responders** Use personal protection recommended in Section 8.

**6.2. Environmental precautions**

**Environmental precautions** Do not flush into surface water or sanitary sewer system

**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)**

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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.

**Risk Management Methods (RMM)** The information required is contained in this Safety Data Sheet.

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

#### Exposure Limits

Chemical name	European Union	Austria	Belgium	Bulgaria	Croatia
Carbon Black (bound) 1333-86-4	-	-	-	-	TWA: 3.5 mg/m <sup>3</sup> STEL: 7 mg/m <sup>3</sup>
PMMA 9011-14-7	-	-	-	TWA: 20.0 mg/m <sup>3</sup>	-
Silicon dioxide (amorphous) 112945-52-5	-	TWA: 4 mg/m <sup>3</sup>	-	-	-
Zinc stearate 557-05-1	-	-	-	-	TWA: 10 mg/m <sup>3</sup> TWA: 4 mg/m <sup>3</sup> STEL: 20 mg/m <sup>3</sup>
Chemical name	Cyprus	Czech Republic	Denmark	Estonia	Finland
Carbon Black (bound) 1333-86-4	-	-	TWA: 3.5 mg/m <sup>3</sup>	TWA: 3 mg/m <sup>3</sup>	TWA: 3.5 mg/m <sup>3</sup> STEL: 7 mg/m <sup>3</sup>
Zinc stearate 557-05-1	-	-	-	-	TWA: 10 mg/m <sup>3</sup>
Chemical name	France	Germany TRGS	Germany DFG	Greece	Hungary
Carbon Black (bound) 1333-86-4	TWA: 3.5 mg/m <sup>3</sup>	-	-	-	TWA: 3 mg/m <sup>3</sup>
Silicon dioxide (amorphous) 112945-52-5	-	-	TWA: 0.5 mg/m <sup>3</sup> Ceiling / Peak: 4 mg/m <sup>3</sup>	-	-
Zinc stearate 557-05-1	TWA: 10 mg/m <sup>3</sup>	-	-	-	-
Chemical name	Ireland	Italy MDLPS	Italy AIDII	Latvia	Lithuania
Carbon Black (bound) 1333-86-4	TWA: 3 mg/m <sup>3</sup> STEL: 15 mg/m <sup>3</sup>	-	-	-	-
Zinc stearate 557-05-1	TWA: 10 mg/m <sup>3</sup> TWA: 4 mg/m <sup>3</sup> STEL: 12 mg/m <sup>3</sup> STEL: 20 mg/m <sup>3</sup> STEL: 30 mg/m <sup>3</sup>	-	-	-	-
Chemical name	Luxembourg	Malta	Netherlands	Norway	Poland
Carbon Black (bound)	-	-	-	TWA: 3.5 mg/m <sup>3</sup>	TWA: 4 mg/m <sup>3</sup>

**Revision date:** 01-Jun-2023

**Issuing Date:** 10-May-2019

**Revision Number:** 3

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1333-86-4			STEL: 7 mg/m <sup>3</sup>		
Chemical name	Portugal	Romania	Slovakia	Slovenia	Spain
Carbon Black (bound) 1333-86-4	TWA: 3 mg/m <sup>3</sup>	-	TWA: 2 mg/m <sup>3</sup> TWA: 10 mg/m <sup>3</sup>	-	TWA: 3.5 mg/m <sup>3</sup>
Zinc stearate 557-05-1	TWA: 10 mg/m <sup>3</sup>	TWA: 10 mg/m <sup>3</sup>	-	-	TWA: 10 mg/m <sup>3</sup>
Chemical name	Sweden		Switzerland		United Kingdom
Carbon Black (bound) 1333-86-4	-		-		TWA: 3.5 mg/m <sup>3</sup> STEL: 7 mg/m <sup>3</sup>
Zinc stearate 557-05-1	-		TWA: 3 mg/m <sup>3</sup>		TWA: 10 mg/m <sup>3</sup> TWA: 4 mg/m <sup>3</sup> STEL: 20 mg/m <sup>3</sup> STEL: 12 mg/m <sup>3</sup>

**Biological occupational exposure limits** This product, as supplied, does not contain any hazardous materials with biological limits established by the region specific regulatory bodies.

**Derived No Effect Level (DNEL) - Workers** No information available

**Derived No Effect Level (DNEL) - General Public** 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 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** Safety goggles.

**Hand protection** Protective gloves.

**Skin and body protection** Long sleeved clothing and long pants

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

**Thermal hazards** No information available.

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

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**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** Powder  
**Color** black  
**Odor** Odorless.  
**Odor threshold** No information available

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
<b>Melting point / freezing point</b>	110 °C	
<b>Initial boiling point and boiling range</b>	No information available	
<b>Flammability</b>	No information available	
<b>Flammability Limit in Air</b>		None known
<b>Upper flammability or explosive limits</b>	No information available	
<b>Lower flammability or explosive limits</b>	No information available	
<b>Flash point</b>	No information available	
<b>Autoignition temperature</b>	No information available	None known
<b>Decomposition temperature</b>	No information available	None known
<b>pH</b>	No information available	
<b>pH (as aqueous solution)</b>	No information available	
<b>Kinematic viscosity</b>	No information available	
<b>Dynamic viscosity</b>	No information available	
<b>Water solubility</b>	Insoluble in water	
<b>Solubility(ies)</b>	No information available	None known
<b>Partition coefficient</b>	No information available	None known
<b>Vapor pressure</b>	No information available	
<b>Relative density</b>	1.15	(H <sub>2</sub> O=1)
<b>Bulk density</b>	No information available	
<b>Liquid Density</b>	No information available	
<b>Relative vapor density</b>	No information available	
<b>Particle characteristics</b>		
<b>Particle Size</b>	No information available	
<b>Particle Size Distribution</b>	No information available	

**9.2. Other information**

**9.2.1. Information with regard to physical hazard classes**

**Explosives**  
Explosive properties Explosive limits of toner particles suspended in air approximately equal to that of coal dust  
**Oxidizing properties** No information available



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**9.2.2. Other safety characteristics**

No information available

**SECTION 10: Stability and reactivity**

**10.1. Reactivity**

**Reactivity** No information available.

**10.2. Chemical stability**

**Stability** Stable under normal conditions.

**Explosion data**

**Sensitivity to mechanical impact** None.

**Sensitivity to static discharge** None.

**10.3. Possibility of hazardous reactions**

**Possibility of hazardous reactions** No information available.

**10.4. Conditions to avoid**

**Conditions to avoid** Keep away from heat. Avoid friction, sparks, or other means of ignition.

**10.5. Incompatible materials**

**Incompatible materials** Strong oxidizing agents

**10.6. Hazardous decomposition products**

**Hazardous decomposition products** Carbon monoxide. Carbon dioxide (CO<sub>2</sub>). Nitrogen oxides (NO<sub>x</sub>).

**SECTION 11: Toxicological information**

**11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008**

**Information on likely routes of exposure**

**Product Information**

**Inhalation** Acute LC<sub>50</sub> > 5.07 mg/l (4-hr)  
(The highest technically achievable concentration) (OECD 436 method)

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**Eye contact** No information available.

**Skin contact** No information available.

**Ingestion** Acute LD<sub>50</sub> > 2000 mg/kg (OECD 420 method) (OECD 423 method)

**Symptoms related to the physical, chemical and toxicological characteristics**

**Symptoms** No information available.

**Acute toxicity**

**Numerical measures of toxicity**

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

**ATEmix (dermal)** 99,999.00 mg/kg

99.9 % of the mixture consists of ingredient(s) of unknown acute dermal toxicity.

99.9 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (gas).

99.9 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (vapor).

**Component Information**

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Carbon Black (bound)	> 15400 mg/kg	-	> 4.6 mg/m <sup>3</sup> 4 h
Silicon dioxide (amorphous)	= 3160 mg/kg	-	-
Zinc stearate	> 10 g/kg	> 2000 mg/kg	> 200 mg/L 1 h

**Delayed and immediate effects as well as chronic effects from short and long-term exposure**

**Skin corrosion/irritation** Slight irritant to the skin. (OECD 404 method).

**Serious eye damage/eye irritation** Mild 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** 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

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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 bioassay 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** No information available.

**STOT - single exposure** No information available.

**STOT - repeated exposure** No information available.

**Aspiration hazard** No information available.

## 11.2. Information on other hazards

### 11.2.1. Endocrine disrupting properties

**Endocrine disrupting properties** No information available.

### 11.2.2. Other information

**Other adverse effects** No information available.

## **SECTION 12: Ecological information**

### 12.1. Toxicity

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

**Unknown aquatic toxicity** Contains 0 % of components with unknown hazards to the aquatic environment.

### 12.2. Persistence and degradability

Product Name: TN-820, TN-850, TN-880, TN-890, TN-3400, TN-3410, TN-3415, TN-3417, TN-3420, TN-3422, TN-3425, TN-3428, TN-3429, TN-3430, TN-3435, TN-3437, TN-3440, TN-3442, TN-3448, TN-3449, TN-3465, TN-3467, TN-3470, TN-3472, TN-3475, TN-3478, TN-3479, TN-3480, TN-3485, TN-3487, TN-3490, TN-3492, TN-3495, TN-3498, TN-3499, TN-3500, TN-3505, TN-3510, TN-3512, TN-3512RE, TN-3520, TN-4638 Toner

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**Persistence and degradability** No information available.

**12.3. Bioaccumulative potential**

**Bioaccumulation** No information available.

**Component Information**

Chemical name	Partition coefficient
Zinc stearate	4.64

**12.4. Mobility in soil**

**Mobility in soil** No information available.

**Mobility** No information available.

**12.5. Results of PBT and vPvB assessment**

**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. Endocrine disrupting properties**

**Endocrine disrupting properties** No information available.

**12.7. Other adverse effects**

No information available.

**SECTION 13: Disposal considerations**

**13.1. Waste treatment methods**

**Waste from residues/unused products** 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.

**Contaminated packaging** Do not reuse empty containers.

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## SECTION 14: Transport information

### IATA

14.1 UN number or ID number	Not regulated
14.2 UN proper shipping name	Not regulated
14.3 Transport hazard class(es)	Not regulated
14.4 Packing group	Not regulated
14.5 Environmental hazards	Not applicable
14.6 Special precautions for user	
Special Provisions	None

### IMDG

14.1 UN number or ID number	Not regulated
14.2 UN proper shipping name	Not regulated
14.3 Transport hazard class(es)	Not regulated
14.4 Packing group	Not regulated
14.5 Environmental hazards	Not applicable
14.6 Special precautions for user	
Special Provisions	None
14.7 Maritime transport in bulk according to IMO instruments	No information available

### RID

14.1 UN number or ID number	Not regulated
14.2	
14.3 Transport hazard class(es)	Not regulated
14.4 Packing group	Not regulated
14.5 Environmental hazards	Not applicable
14.6 Special precautions for user	
Special Provisions	None

### ADR

14.1 UN number or ID number	Not regulated
14.2	
14.3 Transport hazard class(es)	Not regulated
14.4 Packing group	Not regulated
14.5 Environmental hazards	Not applicable
14.6 Special precautions for user	
Special Provisions	None

## SECTION 15: Regulatory information

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

#### National Regulations

Revision date: 01-Jun-2023

Issuing Date: 10-May-2019

Revision Number: 3

Product Name: TN-820, TN-850, TN-880, TN-890, TN-3400, TN-3410, TN-3415, TN-3417, TN-3420, TN-3422, TN-3425, TN-3428, TN-3429, TN-3430, TN-3435, TN-3437, TN-3440, TN-3442, TN-3448, TN-3449, TN-3465, TN-3467, TN-3470, TN-3472, TN-3475, TN-3478, TN-3479, TN-3480, TN-3485, TN-3487, TN-3490, TN-3492, TN-3495, TN-3498, TN-3499, TN-3500, TN-3505, TN-3510, TN-3512, TN-3512RE, TN-3520, TN-4638 Toner

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**France**

**Occupational Illnesses (R-463-3, France)**

Chemical name	French RG number
Carbon Black (bound) - 1333-86-4	RG 16, RG 16bis

**European Union**

Take note of Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work.

**Authorizations and/or restrictions on use:**

This product contains one or more substance(s) subject to restriction (Regulation (EC) No. 1907/2006 (REACH), Annex XVII)

Chemical name	Restricted substance per REACH Annex XVII	Substance subject to authorization per REACH Annex XIV
Carbon Black (bound) - 1333-86-4	75.	-

**Persistent Organic Pollutants**

Not applicable

**Ozone-depleting substances (ODS) regulation (EC) 1005/2009**

Not applicable

**International Inventories**

TSCA	Complies
DSL/NDSL	Complies
EINECS/ELINCS	Complies
ENCS	Complies
IECSC	Complies
KECL	Complies
PICCS	Complies
AICS	Complies
NZIoC	Complies

**Legend:**

**TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory

**DSL/NDSL** - Canadian Domestic Substances List/Non-Domestic Substances List

**EINECS/ELINCS** - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

Product Name: TN-820, TN-850, TN-880, TN-890, TN-3400, TN-3410, TN-3415, TN-3417, TN-3420, TN-3422, TN-3425, TN-3428, TN-3429, TN-3430, TN-3435, TN-3437, TN-3440, TN-3442, TN-3448, TN-3449, TN-3465, TN-3467, TN-3470, TN-3472, TN-3475, TN-3478, TN-3479, TN-3480, TN-3485, TN-3487, TN-3490, TN-3492, TN-3495, TN-3498, TN-3499, TN-3500, TN-3505, TN-3510, TN-3512, TN-3512RE, TN-3520, TN-4638 Toner

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- ENCS** - Japan Existing and New Chemical Substances
- IECSC** - China Inventory of Existing Chemical Substances
- KECL** - Korean Existing and Evaluated Chemical Substances
- PICCS** - Philippines Inventory of Chemicals and Chemical Substances
- AICS** - Australian Inventory of Chemical Substances
- NZIoC** - New Zealand Inventory of Chemicals

**15.2. Chemical safety assessment**

**Chemical Safety Report** 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:  
PBT: Persistent, Bioaccumulative, and Toxic (PBT) Chemicals  
vPvB: Very Persistent and very Bioaccumulative (vPvB) Chemicals

**Legend SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**

TWA	TWA (time-weighted average)	STEL	STEL (Short Term Exposure Limit)
Ceiling	Maximum limit value	*	Skin designation
+	Sensitizers		

Classification procedure	
Classification according to Regulation (EC) No. 1272/2008 [CLP]	Method Used
Acute oral toxicity	On basis of test data
Acute dermal toxicity	Calculation method
Acute inhalation toxicity - gas	Calculation method
Acute inhalation toxicity - vapor	Calculation method
Acute inhalation toxicity - dust/mist	On basis of test data
Skin corrosion/irritation	On basis of test data
Serious eye damage/eye irritation	On basis of test data
Respiratory sensitization	Calculation method
Skin sensitization	On basis of test data
Mutagenicity	On basis of test data
Carcinogenicity	On basis of test data
Reproductive toxicity	Calculation method
STOT - single exposure	Calculation method
STOT - repeated exposure	Calculation method
Acute aquatic toxicity	Calculation method
Chronic aquatic toxicity	Calculation method
Aspiration hazard	Calculation method

**Revision date:** 01-Jun-2023

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Revision Number: 3

Product Name: TN-820, TN-850, TN-880, TN-890, TN-3400, TN-3410, TN-3415, TN-3417, TN-3420, TN-3422, TN-3425, TN-3428, TN-3429, TN-3430, TN-3435, TN-3437, TN-3440, TN-3442, TN-3448, TN-3449, TN-3465, TN-3467, TN-3470, TN-3472, TN-3475, TN-3478, TN-3479, TN-3480, TN-3485, TN-3487, TN-3490, TN-3492, TN-3495, TN-3498, TN-3499, TN-3500, TN-3505, TN-3510, TN-3512, TN-3512RE, TN-3520, TN-4638 Toner

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Ozone	Calculation method
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**Key literature references and sources for data used to compile the SDS**

Agency for Toxic Substances and Disease Registry (ATSDR)  
 U.S. Environmental Protection Agency ChemView Database  
 European Food Safety Authority (EFSA)  
 European Chemicals Agency (ECHA) Committee for Risk Assessment (ECHA\_RAC)  
 European Chemicals Agency (ECHA) (ECHA\_API)  
 EPA (Environmental Protection Agency)  
 Acute Exposure Guideline Level(s) (AEGl(s))  
 U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act  
 U.S. Environmental Protection Agency High Production Volume Chemicals  
 Food Research Journal  
 Hazardous Substance Database  
 International Uniform Chemical Information Database (IUCLID)  
 National Institute of Technology and Evaluation (NITE)  
 Australia National Industrial Chemicals Notification and Assessment Scheme (NICNAS)  
 NIOSH (National Institute for Occupational Safety and Health)  
 National Library of Medicine's ChemID Plus (NLM CIP)  
 National Library of Medicine's PubMed database (NLM PUBMED)  
 National Toxicology Program (NTP)  
 New Zealand's Chemical Classification and Information Database (CCID)  
 Organization for Economic Co-operation and Development Environment, Health, and Safety Publications  
 Organization for Economic Co-operation and Development High Production Volume Chemicals Program  
 Organization for Economic Co-operation and Development Screening Information Data Set  
 World Health Organization

**Issuing Date** 10-May-2019

**Revision date** 01-Jun-2023

**Safety Data Sheet according to Regulation (EC) No. 1907/2006 (REACH)**

**Disclaimer**

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

**End of Safety Data Sheet**