

Product Name: TN229BK, TN229XLBK, TN229XXLBK, TN229VBK, TN229RBK, TN229XLBK 2PK, TN219BK, TN219XLBK, TN219XXLBK, TN248BK, TN248XLBK, TN249BK, TN252PBK, TN258BK, TN258XLBK, TN259BK, TN258XLBK 2PK, TN269BK, TN269XLBK, TN269XXLBK, TN279BK, TN279XLBK, TN279XXLBK, TN289BK, TN289XLBK, TN299XLBK, TN299XXLBK toner

Safety data sheet number: PT407-01

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

### **1.1. Product identifier**

**Safety data sheet number** PT407-01

**Product Name** TN229BK, TN229XLBK, TN229XXLBK, TN229VBK, TN229RBK, TN229XLBK 2PK, TN219BK, TN219XLBK, TN219XXLBK, TN248BK, TN248XLBK, TN249BK, TN252PBK, TN258BK, TN258XLBK, TN259BK, TN258XLBK 2PK, TN269BK, TN269XLBK, TN269XXLBK, TN279BK, TN279XLBK, TN279XXLBK, TN289BK, TN289XLBK, TN299XLBK, TN299XXLBK 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: 24-Aug-2023

Issuing Date: 13-Sep-2021

Revision Number: 2

Product Name: TN229BK, TN229XLBK, TN229XXLBK, TN229VBK, TN229RBK, TN229XLBK 2PK, TN219BK, TN219XLBK, TN219XXLBK, TN248BK, TN248XLBK, TN249BK, TN252PBK, TN258BK, TN258XLBK, TN259BK, TN258XLBK 2PK, TN269BK, TN269XLBK, TN269XXLBK, TN279BK, TN279XLBK, TN279XXLBK, TN289BK, TN289XLBK, TN299XLBK, TN299XXLBK toner

Safety data sheet number: PT407-01

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]

89.3 % of the mixture consists of ingredient(s) of unknown acute oral toxicity.

99.1 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (gas).

99.1 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (vapor).

### **Unknown aquatic toxicity**

Contains 0.4 % 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 (EC) No. 1272/2008	Specific concentration limit (SCL)	M-Factor	M-Factor (long-term)	REACH registration number

Product Name: TN229BK, TN229XLBK, TN229XXLBK, TN229VBK, TN229RBK, TN229XLBK 2PK, TN219BK, TN219XLBK, TN219XXLBK, TN248BK, TN248XLBK, TN249BK, TN252PBK, TN258BK, TN258XLBK, TN259BK, TN258XLBK 2PK, TN269BK, TN269XLBK, TN269XXLBK, TN279BK, TN279XLBK, TN279XXLBK, TN289BK, TN289XLBK, TN299XLBK, TN299XXLBK toner

Safety data sheet number: PT407-01

					[CLP]				
Styrene-acrylate-copolymer	25767-47-9	607-806-7		60-70	No data available	-	-	-	Not applicable
Fatty acid ester	**	-		10-15	No data available	-	-	-	Registered
Carbon Black (bound)	1333-86-4	215-609-9		5-10	No data available	-	-	-	01-2119384 822-32-XX XX
Styrene-acrylate Resin	**	-		4-8	No data available	-	-	-	Not applicable
PMMA	9011-14-7	618-466-4		1-3	No data available	-	-	-	Not applicable
Silicon dioxide (amorphous)	112945-52-5	601-216-3		=<1.5	No data available	-	-	-	Registered
Silicon Dioxide (amorphous)	7631-86-9	231-545-4		=<1	No data available	-	-	-	01-2119379 499-16-XX XX
Zinc stearate	557-05-1	209-151-9		=<0.5	No data available	-	-	-	Registered

**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>	Remove to fresh air. 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>	Clean mouth with water and drink afterwards plenty of water.
<b>Self-protection of the first aider</b>	No information available.

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

Product Name: TN229BK, TN229XLBK, TN229XXLBK, TN229VBK, TN229RBK, TN229XLBK 2PK, TN219BK, TN219XLBK, TN219XXLBK, TN248BK, TN248XLBK, TN249BK, TN252PBK, TN258BK, TN258XLBK, TN259BK, TN258XLBK 2PK, TN269BK, TN269XLBK, TN269XXLBK, TN279BK, TN279XLBK, TN279XXLBK, TN289BK, TN289XLBK, TN299XLBK, TN299XXLBK toner

Safety data sheet number: PT407-01

**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.

**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**

**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** Avoid generation of dust. Do not breathe dust. A suitable dust mask or dust respirator with

Product Name: TN229BK, TN229XLBK, TN229XXLBK, TN229VBK, TN229RBK, TN229XLBK 2PK, TN219BK, TN219XLBK, TN219XXLBK, TN248BK, TN248XLBK, TN249BK, TN252PBK, TN258BK, TN258XLBK, TN259BK, TN258XLBK 2PK, TN269BK, TN269XLBK, TN269XXLBK, TN279BK, TN279XLBK, TN279XXLBK, TN289BK, TN289XLBK, TN299XLBK, TN299XXLBK toner

Safety data sheet number: PT407-01

filter type A/P may be appropriate.

### **6.2. Environmental precautions**

**Environmental precautions** Prevent entry into waterways, sewers, basements or confined areas.

### **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 container tightly closed in a dry and well-ventilated place.

### **7.3. Specific end use(s)**

#### **Specific use(s)**

These products are black ink in a cartridge for Brother Industries, Ltd. inkjet multifunction devices and fax receivers. The 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.

Product Name: TN229BK, TN229XLBK, TN229XXLBK, TN229VBK, TN229RBK, TN229XLBK 2PK, TN219BK, TN219XLBK, TN219XXLBK, TN248BK, TN248XLBK, TN249BK, TN252PBK, TN258BK, TN258XLBK, TN259BK, TN258XLBK 2PK, TN269BK, TN269XLBK, TN269XXLBK, TN279BK, TN279XLBK, TN279XXLBK, TN289BK, TN289XLBK, TN299XLBK, TN299XXLBK toner

Safety data sheet number: PT407-01

**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>	-	-	-
Silicon Dioxide (amorphous) 7631-86-9	TWA 0.1 mg/m <sup>3</sup> respirable fraction	TWA: 4 mg/m <sup>3</sup>	-	TWA: 0.1 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>
Silicon Dioxide (amorphous) 7631-86-9	-	-	-	TWA: 2 mg/m <sup>3</sup>	TWA: 5 mg/m <sup>3</sup> TWA: 0.05 mg/m <sup>3</sup> TWA: 0.1 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>	-	-
Silicon Dioxide (amorphous) 7631-86-9	-	TWA: 4 mg/m <sup>3</sup>	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>	-	-	-	-
Silicon Dioxide (amorphous) 7631-86-9	TWA: 6 mg/m <sup>3</sup> TWA: 2.4 mg/m <sup>3</sup> STEL: 18 mg/m <sup>3</sup> STEL: 7.2 mg/m <sup>3</sup>	TWA: 0.1 mg/m <sup>3</sup>	-	TWA: 1 mg/m <sup>3</sup> TWA: 0.1 mg/m <sup>3</sup>	-
Zinc stearate 557-05-1	TWA: 10 mg/m <sup>3</sup> TWA: 4 mg/m <sup>3</sup>	-	-	-	-

Product Name: TN229BK, TN229XLBK, TN229XXLBK, TN229VBK, TN229RBK, TN229XLBK 2PK, TN219BK, TN219XLBK, TN219XXLBK, TN248BK, TN248XLBK, TN249BK, TN252PBK, TN258BK, TN258XLBK, TN259BK, TN258XLBK 2PK, TN269BK, TN269XLBK, TN269XXLBK, TN279BK, TN279XLBK, TN279XXLBK, TN289BK, TN289XLBK, TN299XLBK, TN299XXLBK toner

Safety data sheet number: PT407-01

	STEL: 12 mg/m <sup>3</sup> STEL: 20 mg/m <sup>3</sup> STEL: 30 mg/m <sup>3</sup>				
<b>Chemical name</b>	<b>Luxembourg</b>	<b>Malta</b>	<b>Netherlands</b>	<b>Norway</b>	<b>Poland</b>
Carbon Black (bound) 1333-86-4	-	-	-	TWA: 3.5 mg/m <sup>3</sup> STEL: 7 mg/m <sup>3</sup>	TWA: 4 mg/m <sup>3</sup>
Silicon Dioxide (amorphous) 7631-86-9	-	-	TWA: 0.75 mg/m <sup>3</sup>	TWA: 1.5 mg/m <sup>3</sup> STEL: 3 mg/m <sup>3</sup>	-
<b>Chemical name</b>	<b>Portugal</b>	<b>Romania</b>	<b>Slovakia</b>	<b>Slovenia</b>	<b>Spain</b>
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>
Silicon Dioxide (amorphous) 7631-86-9	TWA: 0.05 mg/m <sup>3</sup> TWA: 0.1 mg/m <sup>3</sup>	-	-	TWA: 4 mg/m <sup>3</sup> TWA: 0.1 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>
<b>Chemical name</b>	<b>Sweden</b>		<b>Switzerland</b>		<b>United Kingdom</b>
Carbon Black (bound) 1333-86-4	-		-		TWA: 3.5 mg/m <sup>3</sup> STEL: 7 mg/m <sup>3</sup>
Silicon Dioxide (amorphous) 7631-86-9	-		TWA: 4 mg/m <sup>3</sup>		TWA: 6 mg/m <sup>3</sup> TWA: 2.4 mg/m <sup>3</sup> TWA: 0.1 mg/m <sup>3</sup> STEL: 18 mg/m <sup>3</sup> STEL: 7.2 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

Product Name: TN229BK, TN229XLBK, TN229XXLBK, TN229VBK, TN229RBK, TN229XLBK 2PK, TN219BK, TN219XLBK, TN219XXLBK, TN248BK, TN248XLBK, TN249BK, TN252PBK, TN258BK, TN258XLBK, TN259BK, TN258XLBK 2PK, TN269BK, TN269XLBK, TN269XXLBK, TN279BK, TN279XLBK, TN279XXLBK, TN289BK, TN289XLBK, TN299XLBK, TN299XXLBK toner

Safety data sheet number: PT407-01

event of large spill), the following should be applied:

<b>Eye/face protection</b>	Safety goggles
<b>Hand protection</b>	Protective gloves
<b>Skin and body protection</b>	If there is a risk of contact:, Apron, Boots
<b>Respiratory protection</b>	Use appropriate respiratory protection.
<b>Thermal hazards</b>	No information available.
<b>General hygiene considerations</b>	Handle in accordance with good industrial hygiene and safety practice.
<b>Environmental exposure controls</b>	Avoid release to the environment.

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

<b>Physical state</b>	Powder
<b>Color</b>	black
<b>Odor</b>	Odorless.
<b>Odor threshold</b>	No information available

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
<b>Melting point / freezing point</b>	110 °C	None known
<b>Initial boiling point and boiling range</b>	No information available	None known
<b>Flammability</b>	No information available	None known
<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	None known
<b>Autoignition temperature</b>	No information available	None known
<b>Decomposition temperature</b>	No information available	None known
<b>pH</b>	No information available	None known
<b>pH (as aqueous solution)</b>	No information available	None known
<b>Kinematic viscosity</b>	No information available	None known
<b>Dynamic viscosity</b>	No information available	None known
<b>Water solubility</b>	Insoluble in water	
<b>Solubility(ies)</b>	No data available	None known
<b>Partition coefficient</b>	No information available	None known
<b>Vapor pressure</b>	No information available	None known

Product Name: TN229BK, TN229XLBK, TN229XXLBK, TN229VBK, TN229RBK, TN229XLBK 2PK, TN219BK, TN219XLBK, TN219XXLBK, TN248BK, TN248XLBK, TN249BK, TN252PBK, TN258BK, TN258XLBK, TN259BK, TN258XLBK 2PK, TN269BK, TN269XLBK, TN269XXLBK, TN279BK, TN279XLBK, TN279XXLBK, TN289BK, TN289XLBK, TN299XLBK, TN299XXLBK toner

Safety data sheet number: PT407-01

<b>Relative density</b>	1.15	None known
<b>Bulk density</b>	No information available	
<b>Liquid Density</b>	No information available	
<b>Relative vapor density</b>	No information available	None known
<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

### *9.2.2. Other safety characteristics*

No information available None known

## **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** None under normal processing.

### 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

Product Name: TN229BK, TN229XLBK, TN229XXLBK, TN229VBK, TN229RBK, TN229XLBK 2PK, TN219BK, TN219XLBK, TN219XXLBK, TN248BK, TN248XLBK, TN249BK, TN252PBK, TN258BK, TN258XLBK, TN259BK, TN258XLBK 2PK, TN269BK, TN269XLBK, TN269XXLBK, TN279BK, TN279XLBK, TN279XXLBK, TN289BK, TN289XLBK, TN299XLBK, TN299XXLBK toner

Safety data sheet number: PT407-01

**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

<b>Inhalation</b>	Acute LC <sub>50</sub> > 5.94 mg/l (4-hr) (OECD 436 method)
<b>Eye contact</b>	No information available.
<b>Skin contact</b>	No information available.
<b>Ingestion</b>	Acute LD <sub>50</sub> > 2000 mg/kg (OECD 423 method)

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

**Symptoms** No information available.

#### Acute toxicity

#### Numerical measures of toxicity

89.3 % of the mixture consists of ingredient(s) of unknown acute oral toxicity.

99.1 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (gas).

99.1 % 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	-	-
Silicon Dioxide (amorphous)	= 7900 mg/kg ( Rat )	> 5000 mg/kg ( Rabbit )	> 58.8 mg/L ( Rat ) 4 h
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** Non-irritant (OECD 404 method)

Product Name: TN229BK, TN229XLBK, TN229XXLBK, TN229VBK, TN229RBK, TN229XLBK 2PK, TN219BK, TN219XLBK, TN219XXLBK, TN248BK, TN248XLBK, TN249BK, TN252PBK, TN258BK, TN258XLBK, TN259BK, TN258XLBK 2PK, TN269BK, TN269XLBK, TN269XXLBK, TN279BK, TN279XLBK, TN279XXLBK, TN289BK, TN289XLBK, TN299XLBK, TN299XXLBK toner

Safety data sheet number: PT407-01

**Serious eye damage/eye irritation** Non-irritant (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 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

**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.

Product Name: TN229BK, TN229XLBK, TN229XXLBK, TN229VBK, TN229RBK, TN229XLBK 2PK, TN219BK, TN219XLBK, TN219XXLBK, TN248BK, TN248XLBK, TN249BK, TN252PBK, TN258BK, TN258XLBK, TN259BK, TN258XLBK 2PK, TN269BK, TN269XLBK, TN269XXLBK, TN279BK, TN279XLBK, TN279XXLBK, TN289BK, TN289XLBK, TN299XLBK, TN299XXLBK toner

Safety data sheet number: PT407-01

**SECTION 12: Ecological information**

**12.1. Toxicity**

**Ecotoxicity**

**Unknown aquatic toxicity** Contains 0.4 % of components with unknown hazards to the aquatic environment.

Chemical name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
Silicon Dioxide (amorphous)	EC50: =440mg/L (72h, Pseudokirchneriella subcapitata)	LC50: =5000mg/L (96h, Brachydanio rerio)	-	EC50: =7600mg/L (48h, Ceriodaphnia dubia)

**12.2. Persistence and degradability**

**Persistence and degradability** No information available.

**12.3. Bioaccumulative potential**

**Bioaccumulation** There is no data for this product.

**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**

Product Name: TN229BK, TN229XLBK, TN229XXLBK, TN229VBK, TN229RBK, TN229XLBK 2PK, TN219BK, TN219XLBK, TN219XXLBK, TN248BK, TN248XLBK, TN249BK, TN252PBK, TN258BK, TN258XLBK, TN259BK, TN258XLBK 2PK, TN269BK, TN269XLBK, TN269XXLBK, TN279BK, TN279XLBK, TN279XXLBK, TN289BK, TN289XLBK, TN299XLBK, TN299XXLBK toner

Safety data sheet number: PT407-01

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.

## 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 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

### ADR

14.1 UN number or ID number	Not regulated
-----------------------------	---------------

Revision date: 24-Aug-2023

Issuing Date: 13-Sep-2021

Revision Number: 2

Product Name: TN229BK, TN229XLBK, TN229XXLBK, TN229VBK, TN229RBK, TN229XLBK 2PK, TN219BK, TN219XLBK, TN219XXLBK, TN248BK, TN248XLBK, TN249BK, TN252PBK, TN258BK, TN258XLBK, TN259BK, TN258XLBK 2PK, TN269BK, TN269XLBK, TN269XXLBK, TN279BK, TN279XLBK, TN279XXLBK, TN289BK, TN289XLBK, TN299XLBK, TN299XXLBK toner

Safety data sheet number: PT407-01

<b>14.2 UN proper shipping name</b>	Not regulated
<b>14.3 Transport hazard class(es)</b>	Not regulated
<b>14.4 Packing group</b>	Not regulated
<b>14.5 Environmental hazards</b>	Not applicable
<b>14.6 Special precautions for user</b>	
<b>Special Provisions</b>	None

## SECTION 15: Regulatory information

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

#### National Regulations

##### France

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

Chemical name	French RG number
Carbon Black (bound) - 1333-86-4	RG 16, RG 16bis
Silicon Dioxide (amorphous) - 7631-86-9	RG 25

##### 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

Revision date: 24-Aug-2023

Issuing Date: 13-Sep-2021

Revision Number: 2

Product Name: TN229BK, TN229XLBK, TN229XXLBK, TN229VBK, TN229RBK, TN229XLBK 2PK, TN219BK, TN219XLBK, TN219XXLBK, TN248BK, TN248XLBK, TN249BK, TN252PBK, TN258BK, TN258XLBK, TN259BK, TN258XLBK 2PK, TN269BK, TN269XLBK, TN269XXLBK, TN279BK, TN279XLBK, TN279XXLBK, TN289BK, TN289XLBK, TN299XLBK, TN299XXLBK toner

Safety data sheet number: PT407-01

**International Inventories**

<b>TSCA</b>	Complies
<b>DSL/NDSL</b>	Complies
<b>EINECS/ELINCS</b>	Complies
<b>ENCS</b>	Complies
<b>IECSC</b>	Complies
<b>KECL</b>	Complies
<b>PICCS</b>	Complies
<b>AICS</b>	Complies
<b>NZIoC</b>	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  
**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	Calculation method
Acute dermal toxicity	On basis of test data
Acute inhalation toxicity - gas	Calculation method

Revision date: 24-Aug-2023

Issuing Date: 13-Sep-2021

Revision Number: 2

Product Name: TN229BK, TN229XLBK, TN229XXLBK, TN229VBK, TN229RBK, TN229XLBK 2PK, TN219BK, TN219XLBK, TN219XXLBK, TN248BK, TN248XLBK, TN249BK, TN252PBK, TN258BK, TN258XLBK, TN259BK, TN258XLBK 2PK, TN269BK, TN269XLBK, TN269XXLBK, TN279BK, TN279XLBK, TN279XXLBK, TN289BK, TN289XLBK, TN299XLBK, TN299XXLBK toner

Safety data sheet number: PT407-01

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	Calculation method
Respiratory sensitization	Calculation method
Skin sensitization	On basis of test data
Mutagenicity	Calculation method
Carcinogenicity	Calculation method
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
Ozone	Calculation method

**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 13-Sep-2021

Revision date 24-Aug-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,

**Revision date:** 24-Aug-2023

**Issuing Date:** 13-Sep-2021

Revision Number: 2

Product Name: TN229BK, TN229XLBK, TN229XXLBK, TN229VBK, TN229RBK,  
TN229XLBK 2PK, TN219BK, TN219XLBK, TN219XXLBK, TN248BK, TN248XLBK,  
TN249BK, TN252PBK, TN258BK, TN258XLBK, TN259BK, TN258XLBK 2PK,  
TN269BK, TN269XLBK, TN269XXLBK, TN279BK, TN279XLBK, TN279XXLBK,  
TN289BK, TN289XLBK, TN299XLBK, TN299XXLBK toner

Safety data sheet number: PT407-01

---

**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**