

### SAFETY DATA SHEET

This safety data sheet was created pursuant to the requirements of: US OSHA Hazard Communication Standard 2024 (29 CFR 1910.1200) and Canada Hazardous Products Act (HPA) and the Hazardous Products Regulation (HPR), as amended

SDS #: A-10729 **266 Toner Black** 

Issuing Date 10-Oct-2025 Revision date 17-Dec-2025 Revision Number 1

#### 1. Identification

**Product identifier** 

**Product Name** 

266 Toner for

Lexmark T640, Lexmark T642, Lexmark T644,
Lexmark T650, Lexmark T652, Lexmark T654,
Lexmark T656, Lexmark TG654, Lexmark TS650,
Lexmark TS652, Lexmark TS654, Lexmark TS656,
Lexmark X642, Lexmark X644, Lexmark X646,
Lexmark XM642, Lexmark XM644, Lexmark XM646,
Lexmark X651, Lexmark X652, Lexmark X654,
Lexmark X656, Lexmark X658, Lexmark XS651,
Lexmark XS652, Lexmark XS654, Lexmark XS656,

Lexmark XS658

Part no.

10D1829, 20G1312, 20G2067, 24B1454, 24B2542, 24B2543, 24B4842, 24B4843, 24B5555, 64004HA, 64004HE, 64004HL, 64004HR, 64015HA, 64015SA, 64016HE, 64016SE, 64017HR, 64017SR, 64018HB, 64018HL, 64018SL, 64035HA, 64035SA, 64036HE, 64036SE, 64037HR, 64037SR, 64038HL, 64038SL, 64040HW, 64054HE 64075HA, 64075SW, 64080HW, 64080XW, 64083XW, 64084HW, 64087HW, 64404XA, 64404XE, 64404XL, 64404XR, 64415XA, 64416XE, 64417XR, 64418XL, 64435XA, 64436XE, 64437XR, 64438XL, 64440XW, 64475XA, 64480XW, 64484XW, 64487XW, BCLD5210HBX, BCLD5310XBX, BCLXD5210H, BCLXD5310X, BCLXT640BX, BCLXT644, BCLXT644BX, DL5210H, DL5310X, 10D2285, 10D2286, 24B5552, 24B5707, 24B5708, 24B5870, 24B5880, 24B5885, 24B5930, 24B5984, 3065781, 3065783, 3065784, 3065785, 53A4685, BCLD5230HBX, BCLXD5230H, BCLXT650, BCLXT650BX, BCLXT650L, BCLXT654, BCLXT654BX, BCLXT654L, DL5230H, T650A11A, T650A11E, T650A11L, T650A11P, T650A41G, T650H04A, T650H04E, T650H04L, T650H04P, T650H11A, T650H11B, T650H11E, T650H11L, T650H11P, T650H21A, T650H21E, T650H21L, T650H21P, T650H31E, T650H31G, T650H41G, T650H80G, T650H80P, T650H84G, T650H87G, T654X04A, T654X04E, T654X04L, T654X04P, T654X11A, T654X11B, T654X11E, T654X11L, T654X11P, T654X21A, T654X21E, T654X21L, T654X21P, T654X31E, T654X31G, T654X34G, T654X37G, T654X41G, T654X80G, T654X84G, T654X87G, TG654X11, TG654X21, 10D1871, 10D2148, 10D2277, 12A6420, 12A6421, X642H31E, X642H31W, X644A11A, X644A11E, X644A11L, X644A11P, X644A21A, X644A21E, X644A21L, X644A21P, X644H01A, X644H01L, X644H01P, X644H11A, X644H11E, X644H11L, X644H11P, X644H21A, X644H21E, X644H21L, X644H21P, X644X01A, X644X01L, X644X01P, X644X11A, X644X11E, X644X11L, X644X11P, X644X21A, X644X21E, X644X21L, X644X21P, X644X31E, X644X41G, 10D2363, 24B5875, X651H04L, X651H21L, X651H21P

Other means of identification

**Color** Black

Revision date 17-Dec-2025

Pure substance/mixture Mixture Synonyms None

Recommended use of the chemical and restrictions on use

Recommended use Printing

**Restrictions on use**No information available.

Details of the supplier of the safety data sheet

#### **Manufacturer Address**

Lexmark International, Inc. A Subsidairy of Xerox Corporation 740 West New Circle Road Lexington, Kentucky 40550

Lexmark Canada

2 Sheppard Avenue East, Suite 200

Toronto, Ontario, M2N 5Y7

Emergency telephone number

Initial supplier phone number 1-800-539-6275 (U.S. & Canada)

**Emergency Telephone** Safety Information US: (800) 275-9376

Chemical Emergency only (Chemtrec) (800) 424-9300

E-mail address adam.toth@lexmark.com

For the most current document <a href="https://www.lexmark.com/en\_us/supplies-and-parts/printer-supplies-finder/material-safety-d">https://www.lexmark.com/en\_us/supplies-and-parts/printer-supplies-finder/material-safety-d</a>

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## 2. Hazard(s) identification

#### Classification

This product is not considered hazardous by either the US OSHA Hazard Communication Standard 2024, or Canada Hazardous Products Act (HPA) and Hazardous Products Regulation (HPR), as amended.

#### Label elements

Not classified

#### **Hazard statements**

No hazard statements required.

#### Other information

May form explosible dust-air mixture if dispersed.

# 3. Composition/information on ingredients

### **Substance**

Not applicable.

#### Mixture

Chemical name	CAS No.	Weight-%	GHS Classification
Polyester Resin	Trade secret	65-75	
Iron Oxide	1317-61-9	1-10	
Carbon black	1333-86-4	1-10	
Charge Control Agent	Trade secret	<1.5	Flam. Sol. 1 (H228) Acute Tox 4 (H302) Aquatic Acute 1 (H400) Aquatic Chronic 1 (H410)
Titanium dioxide	13463-67-7	<1	

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

#### Note

## 4. First-aid measures

#### **Description of first aid measures**

General advice For external use only. Get medical attention if irritation or other symptoms occur. Show this

safety data sheet to the doctor in attendance.

**Inhalation** Remove to fresh air.

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

Consult a physician.

**Skin contact** Wash skin with soap and water.

**Ingestion** Rinse mouth.

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

**Symptoms** Dust irritates eyes and air passages.

**Effects of Exposure** No information available.

Indication of any immediate medical attention and special treatment needed

**Note to physicians** Treat symptomatically.

## 5. Fire-fighting measures

**Unsuitable extinguishing media**Do not scatter spilled material with high pressure water streams.

Specific hazards arising from the

chemical

Fine dust dispersed in air may ignite.

Hazardous combustion products Hazardous decomposition products due to incomplete combustion. Carbon dioxide (CO2).

<sup>&</sup>quot;--" indicates no classification or hazard statements apply.

Nitrogen oxides (NOx).

**Explosion data** 

Sensitivity to mechanical impact None. Sensitivity to static discharge None.

Special protective equipment and precautions for fire-fighters

In the event of fire and/or explosion do not breathe fumes. Wear fire/flame resistant/retardant clothing. Wear self contained breathing apparatus for fire fighting if

necessary.

### 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

**Personal precautions** Avoid generation of dust. Ensure adequate ventilation.

Methods and material for containment and cleaning up

Methods for containment Prevent further leakage or spillage if safe to do so. Prevent dust cloud.

**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.

Reference to other sections See section 8 for more information

See section 16 for more information

## 7. Handling and storage

Precautions for safe handling

Advice on safe handling Handle in accordance with good industrial hygiene and safety practice.

Conditions for safe storage, including any incompatibilities

Storage Conditions Keep containers tightly closed in a dry, cool and well-ventilated place.

## 8. Exposure controls/personal protection

Control Parameters
Exposure Limits

Chemical name	ACGIH TLV	OSHA PEL	NIOSH
Carbon black	TWA: 3 mg/m <sup>3</sup> inhalable	TWA: 3.5 mg/m <sup>3</sup>	TWA: 3.5 mg/m <sup>3</sup> ;
	particulate matter	(vacated) TWA: 3.5 mg/m <sup>3</sup>	TWA: 0.1 mg/m <sup>3</sup> ; Carbon
		-	black in presence of Polycyclic
			aromatic hydrocarbons PAH
			IDLH: 1750 mg/m <sup>3</sup>
Titanium dioxide	TWA: 0.2 mg/m³ nanoscale	TWA: 15 mg/m <sup>3</sup> total dust	TWA: 2.4 mg/m <sup>3</sup> ; CIB 63 fine
	respirable particulate matter	(vacated) TWA: 10 mg/m <sup>3</sup>	TWA: 0.3 mg/m <sup>3</sup> ; CIB 63
	TWA: 2.5 mg/m <sup>3</sup> finescale	total dust	ultrafine, including engineered

respirable particulate matter		nanoscale IDLH: 5000 mg/m³
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Chemical name	Alberta	British Columbia	Ontario	Quebec
Carbon black	TWA: 3.5 mg/m <sup>3</sup> ;	TWA: 3 mg/m <sup>3</sup> ;	TWA: 3 mg/m <sup>3</sup> ;	TWAEV: 3 mg/m <sup>3</sup> ;
		inhalable	inhalable particulate	inhalable dust
			matter	
Titanium dioxide	TWA: 10 mg/m <sup>3</sup> ;	TWA: 10 mg/m <sup>3</sup> ; total	TWA: 10 mg/m <sup>3</sup> ;	TWAEV: 10 mg/m <sup>3</sup> ; total
	-	dust		dust
		TWA: 3 mg/m³;		
		respirable fraction		

Chemical name	Manitoba	New Brunswick	Newfoundland and Labrador	Nova Scotia
Carbon black	TWA: 3 mg/m³; inhalable particulate matter	TWA: 3 mg/m³; inhalable fraction	TWA: 3 mg/m³; inhalable particulate matter	TWA: 3 mg/m³; inhalable particulate matter
Titanium dioxide	TWA: 0.2 mg/m³; nanoscale respirable particulate matter TWA: 2.5 mg/m³; finescale respirable particulate matter	TWA: 10 mg/m³;	TWA: 0.2 mg/m³; nanoscale respirable particulate matter TWA: 2.5 mg/m³; finescale respirable particulate matter	TWA: 0.2 mg/m³; nanoscale respirable particulate matter TWA: 2.5 mg/m³; finescale respirable particulate matter

Chemical name	Nunavut	Prince Edward Island	Saskatchewan	Yukon
Carbon black	TWA: 3.5 mg/m³; STEL: 7 mg/m³;	TWA: 3 mg/m³; inhalable particulate matter	TWA: 3.5 mg/m³; STEL: 7 mg/m³;	TWA: 3.5 mg/m³; STEL: 7 mg/m³;
Titanium dioxide	TWA: 10 mg/m <sup>3</sup> ; STEL: 20 mg/m <sup>3</sup> ;	TWA: 0.2 mg/m³; nanoscale respirable particulate matter TWA: 2.5 mg/m³; finescale respirable particulate matter	TWA: 10 mg/m <sup>3</sup> ; STEL: 20 mg/m <sup>3</sup> ;	TWA: 30 mppcf; TWA: 10 mg/m³; STEL: 20 mg/m³;

#### **Biological occupational exposure limits**

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

#### **Appropriate engineering controls**

**Engineering controls** None under normal use conditions.

## Individual protection measures, such as personal protective equipment

**Eye/face protection** No special protective equipment required.

**Hand protection** No special protective equipment required.

**Skin and body protection**No special protective equipment required.

Respiratory protection No protective equipment is needed under normal use conditions. If exposure limits are

exceeded or irritation is experienced, ventilation and evacuation may be required.

None known

**Environmental exposure controls** Do not allow into any sewer, on the ground or into any body of water.

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

**Thermal hazards** None under normal processing.

## 9. Physical and chemical properties

Information on basic physical and chemical properties

Physical state Solid
Color Black
Odor (includes odor threshold) Faint

<u>Property</u> <u>Values</u> <u>Remarks • Method</u>

Melting point / freezing pointNot applicableNone knownBoiling point (or initial boiling point orNot applicableNone known

boiling range)

Flammability No data available None known

Flammability Limit in Air None known

Upper flammability or explosive limits Not flammable Lower flammability or explosive limits Not flammable

Not applicable Flash point None known **Autoignition temperature** Not applicable None known **Decomposition temperature** Not applicable None known No data available SADT (°C) None known Not applicable None known pН pH (as aqueous solution) No data available None known Kinematic viscosity Not applicable None known **Dynamic viscosity** Not applicable None known Solubility No data available None known Water solubility Negligible None known

Partition coefficient n-octanol/water (log

value)

Vapor pressure (includes evaporation rate)Not applicableNone knownEvaporation rateNot applicableNone knownDensity and/or relative densityNot applicableNone known

Not applicable

Bulk density
Liquid Density
Not applicable
Not applicable

Relative vapor density
Not applicable
None known
Particle characteristics
None known

Particle Size No data available
Particle Size Distribution 4 - 9 micron

Other information

VOC content None

**Softening point** 49 - 60 °C / 120 - 140 °F

Information with regard to physical hazard classes

Explosive properties Fine dust dispersed in air, in sufficient concentrations, and in the presence of an ignition

source is a potential dust explosion hazard

## 10. Stability and reactivity

**Reactivity** No dangerous reaction known under conditions of normal use.

**Chemical stability** Stable under normal conditions.

Possibility of hazardous reactions None under normal processing.

**Conditions to avoid** Generation/formation of dust.

**Incompatible materials**None known based on information supplied.

**Hazardous decomposition products** None under normal use conditions.

## 11. Toxicological information

Note: The toxicity data noted below is based on the test results of similar reprographic materials.

#### Information on likely routes of exposure

Product Information

**Inhalation** No known effects under normal use conditions.

**Eye contact** No hazard from product as supplied.

**Skin contact** No known effects under normal use conditions.

**Ingestion** No hazard from product as supplied.

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

**Symptoms** No information available.

Acute toxicity

### Numerical measures of toxicity

The following ATE values have been calculated for the mixture

ATEmix (oral) 4,195.80 mg/kg
ATEmix (dermal) 3,099.30 mg/kg
ATEmix (inhalation-gas) 99,999.00 ppm
ATEmix (inhalation-vapor) 99,999.00 mg/L

**Component Information** 

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Iron Oxide	> 10000 mg/kg (Rat)	-	-
Carbon black	> 10000 mg/kg (Rat)	> 2000 mg/kg (Rabbit)	> 4.6 mg/m³ (Rat) 4 h
Charge Control Agent	-	> 2000 mg/kg (Rat)	-
Titanium dioxide	> 2000 mg/kg (Rat)	-	> 5.09 mg/L (Rat)4 h

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

**Skin corrosion/irritation**Based on available data, the classification criteria are not met.

Serious eye damage/eye irritation Based on available data, the classification criteria are not met.

**Respiratory or skin sensitization** Based on available data, the classification criteria are not met.

Germ cell mutagenicity Not mutagenic in AMES Test.

Carcinogenicity The IARC (International Agency for Research on Cancer) has listed carbon black as

"possibly carcinogenic to humans". However, We have concluded that the presence of carbon black in this mixture does not present a health hazard. The IARC classification is based on studies evaluating pure, "free" carbon black. In contrast, toner is a formulation composed of specially prepared polymer and a small amount of carbon black (or other pigment). In the process of making toner, the small amount of carbon black becomes encapsulated within a matrix. We have performed extensive testing of toner, including a chronic bioassay (test for potential carcinogenicity). Exposure to toner did not produce evidence of cancer in exposed animals. The results were submitted to regulatory agencies

and published extensively.

The IARC (International Agency for Research on Cancer) has listed titanium dioxide as "possibly carcinogenic to humans". However, we have concluded that the presence of titanium dioxide in this mixture does not present a health hazard. The IARC classification is based on studies in rats using high concentrations of pure, unbound TiO 2 particles of respirable size. Epidemiological studies do not suggest a carcinogenic effect in humans. In addition, the titanium dioxide in this mixture is encapsulated in a matrix or bound to the surface of the toner.

The table below indicates whether each agency has listed any ingredient as a carcinogen.

ACGIH	IARC	NTP	OSHA
A3 - Confirmed animal	Group 2B - Possibly	-	Present
unknown relevance to	carcinogenic to numaris		
humans)			
		-	Present
, ,	carcinogenic to humans		
	A3 - Confirmed animal carcinogen (with unknown relevance to humans) A3 - Confirmed animal	A3 - Confirmed animal carcinogen (with unknown relevance to humans)  A3 - Confirmed animal carcinogen (with unknown relevance to humans)  A3 - Confirmed animal carcinogen (with unknown relevance to	A3 - Confirmed animal carcinogen (with unknown relevance to humans)  A3 - Confirmed animal carcinogen (with unknown relevance to humans)  A3 - Confirmed animal carcinogen (with unknown relevance to

**Reproductive toxicity**This product does not contain any known or suspected reproductive hazards.

**STOT - single exposure**Based on available data, the classification criteria are not met.

**STOT - repeated exposure**Based on available data, the classification criteria are not met.

**Aspiration hazard** Based on available data, the classification criteria are not met.

Other adverse effects Although toner is not an aquatic toxin, microplastics may be a physical hazard to aquatic life

and should not be allowed to enter drains, sewers, or waterways.

## 12. Ecological information

**Ecotoxicity** Not considered to be harmful to aquatic life.

**Aquatic ecotoxicity** 

**Product Information** 

**96-hour LC50** LC50: > 625, NOEC: = 625 mg/L Pimephales promelas

**48-hour EC50** EC50: 625, NOEC: = 40 mg/L *Daphnia magna* 

**72-hour EC50** EC50: = 370, ErC50: >625, EyC50: = 368 mg/L *Pseudokirchneriella subcapitata* 

Chemical name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
Charge Control Agent	-	LC50: =5.5mg/L (96h, Oncorhynchus mykiss)	-	-

**Terrestrial ecotoxicity**Based on available data, the classification criteria are not met.

<u>Persistence and degradability</u> Not readily biodegradable.

### Bioaccumulative potential

Chemical name	Partition coefficient	Bioconcentration factor (BCF)	Trophic magnification factor (TMF)
Charge Control Agent	2.32	-	_

Mobility in soil The product is insoluble and floats on water.

Other adverse effects No information available.

Endocrine disrupting properties This mixture does not contain any substance that has endocrine disrupting properties with

respect to non-target organisms.

# 13. Disposal considerations

**Disposal methods** 

Waste from residues/unused

products

Can be landfilled or incinerated, when in compliance with local regulations.

**Contaminated packaging** Dispose of contents/containers in accordance with local regulations.

California waste information This product contains one or more substances that are listed with the State of California as

a hazardous waste.

Other information Although toner is not an aquatic toxin, microplastics may be a physical hazard to aquatic life

and should not be allowed to enter drains, sewers, or waterways. Do Not Pour Product

Down the Drain; Do Not Rinse the Container Before Disposal.

14. Transport information

**Note:** This material is not subject to regulation as a hazardous material for shipping

**DOT** Not regulated

<u>IATA</u> Not regulated

<u>IMDG</u> Not regulated

## 15. Regulatory information

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

#### **International Regulations**

The Montreal Protocol on Substances that Deplete the Ozone Layer Not applicable

The Stockholm Convention on Persistent Organic Pollutants Not applicable

The Rotterdam Convention Not applicable

**International Inventories** 

**TSCA** Listed / Active or Exempt.

Chemical name	CAS No.	Inventory Listing Status	Commercial Activity Designation
Polyester Resin	-	-	Unknown *
Iron Oxide	1317-61-9	Present	Active
Carbon black	1333-86-4	Present	Active
Charge Control Agent	-	Present	Active
Titanium dioxide	13463-67-7	Present	Active

<sup>\*</sup>Contact supplier for details. One or more substances in this product are either not listed on the US TSCA inventory, listed on the confidential US TSCA inventory or are otherwise exempted from inventory listing requirements.

DSL/NDSL Complies.
EINECS/ELINCS Complies.
ENCS Complies.

IECSCContact supplier for inventory compliance status.KECLContact supplier for inventory compliance status.PICCSContact supplier for inventory compliance status.AIICContact supplier for inventory compliance status.NZIOCContact supplier for inventory compliance status.TCSIContact supplier for inventory compliance status.

#### 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 Chemicals Inventory

PICCS - Philippines Inventory of Chemicals and Chemical Substances

AIIC - Australian Inventory of Industrial Chemicals
NZIOC - New Zealand Inventory of Chemicals
TCSI - Taiwan Chemical Substance Inventory

#### **US Federal Regulations**

#### **SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

Chemical name	SARA 313 - Threshold Values %
Charge Control Agent	1.0

#### SARA 311/312 Hazard Categories

Should this product meet EPCRA 311/312 Tier reporting criteria at 40 CFR 370, refer to Section 2 of this SDS for appropriate classifications.

#### **CWA (Clean Water Act)**

This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

Chemical name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Charge Control Agent	-	X	-	-

#### CAA (Clean Air Act)

This product does not contain any substances regulated as pollutants pursuant to Clean Air Act (CAA).

#### **CERCLA**

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

#### **US State Regulations**

### **California Proposition 65**

This product contains the following Proposition 65 chemicals:.

Carbon black is regulated under California Proposition 65 only if in the form of "airborne, unbound particles of respirable size". Toner products do not contain carbon black in the form of "airborne, unbound particles of respirable size". Therefore, the requirements of Proposition 65 do not apply to this product.

Titanium dioxide is regulated under California Proposition 65 only if a product results in exposure in the form of "airborne, unbound particles of respirable size". Toner products do not result in exposure to titanium dioxide in the form of "airborne, unbound particles of respirable size". Therefore, the requirements of Proposition 65 do not apply to this product.

Chemical name	California Proposition 65	
Carbon black	Carcinogen	
Titanium dioxide	Carcinogen	

### U.S. State Right-to-Know Regulations

Although this product contains substances included in some U.S. State Right-to-Know regulations, the particles are bound in a unique matrix and, therefore, the product does not pose any specific hazard.

Chemical name	New Jersey	Massachusetts	Pennsylvania
Iron Oxide	-	X	-
Carbon black	X	X	X
Charge Control Agent	X	-	X
Titanium dioxide	X	X	X

#### U.S. EPA Label Information

#### EPA Pesticide Registration Number Not applicable

# 16. Other information

### Key or legend to abbreviations and acronyms used in the safety data sheet

List may include phrases which are not applicable to this product

#### Full text of H-Statements referred to under section 3

H228 - Flammable solid

H302 - Harmful if swallowed

H400 - Very toxic to aquatic life

H410 - Very toxic to aquatic life with long lasting effects

ACGIH	American Conference of Governmental Industrial Hygienists			
ADN	Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways			
	(Europe)			
ADR	Agreement concerning the International Carriage of Dangerous Goods by Road (Europe)			
AIIC	Australian Inventory of Industrial Chemicals			
ATE	Acute Toxicity Estimate			
ASTM	American Society for the Testing of Materials			
bar	Biological Reference Values for Chemical Compounds in the Work Area			
BAT	Biological tolerance values for occupational exposure			
BEL	Biological exposure limits			
bw	Body weight			
Ceiling	Maximum limit value			
CMR	Carcinogen, Mutagen or Reproductive Toxicant			
DOT	Department of Transportation (United States)			
DSL	Domestic Substances List (Canada)			
EmS	Emergency Schedule			
ENCS	Existing and New Chemical Substances (Japan)			
EPA	U.S. Environmental Protection Agency			
GHS	Globally Harmonized System			
HMIS	Hazardous Materials Identification System			
IARC	International Agency for Research on Cancer			
IATA	International Air Transport Association			
IBC	International Code for the Construction and Equipment of Ships carrying Dangerous			
	Chemicals in Bulk			
ICAO	International Civil Aviation Organization			
IECSC	Inventory of Existing Chemical Substances in China			
IMDG	International Maritime Dangerous Goods			
IMO	International Maritime Organization			
ISO	International Organization for Standardization			
KECI	Korean Existing Chemicals Inventory			
LC50	Lethal Concentration to 50% of a test population			
LD50	Lethal Dose to 50% of a test population (Median Lethal Dose)			
MARPOL	International Convention for the Prevention of Pollution from Ships			
NFPA	National Fire Protection Association			
NIOSH	National Institute for Occupational Safety and Health			
n.o.s.	Not Otherwise Specified			
NOAEC	No Observed Adverse Effect Concentration			
NOAEL	No Observed Adverse Effect Level			
NOELR	No Observable Effect Loading Rate			
NTP	National Toxicology Program (United States)			
NZIoC	New Zealand Inventory of Chemicals			
OECD	Organization for Economic Cooperation and Development			

OEL	Occupational exposure limits	
OSHA	Occupational Safety and Health Administration of the US Department of Labor	
PBT	Persistent, Bioaccumulative and Toxic substance	
PICCS	Philippines Inventory of Chemicals and Chemical Substances	
PMT	Persistent, Mobile and Toxic	
PPE	Personal protective equipment	
QSAR	Quantitative Structure Activity Relationship	
RID	Agreement concerning the International Carriage of Dangerous Goods by Rail (Europe)	
SADT	Self-Accelerating Decomposition Temperature	
SAR	Structure-activity relationship	
SARA	Superfund Amendments and Reauthorization Act	
SDS	Safety Data Sheet	
SL	Surface Limit	
STEL	Short Term Exposure Limit	
STOT RE	Specific target organ toxicity - Repeated exposure	
STOT SE	Specific target organ toxicity - Single exposure	
TCSI	Taiwan Chemical Substance Inventory	
TDG	Transport of Dangerous Goods (Canada)	
TSCA	Toxic Substances Control Act (United States)	
TWA	Time-Weighted Average	
UN	United Nations	
VOC	Volatile organic compounds	
vPvB	Very Persistent and Very Bioaccumulative	
vPvM	Very Persistent and Very Mobile	
As	Allergenic substance	
DS	Dermal Sensitizer	
Ot	Ototoxicant	
pOt	Ototoxicant - potential to cause hearing disorders	
PS	Photosensitizer	
RS	Respiratory Sensitizer	
S	Sensitizer	
poS	Sensitizer - capable of causing occupational asthma	
Sa	Simple asphyxiant	
Sd	Skin designation	
pSd	Skin designation - potential for cutaneous absorption	
Sdv	Skin designation - vacated	
Sk	Skin notation	
dSk	Skin notation - danger of cutaneous absorption	
pSk	Skin notation - potential for cutaneous absorption	

#### Key literature references and sources for data used to compile the SDS

U.S. Agency for Toxic Substances and Disease Registry (ATSDR)

U.S. Environmental Protection Agency ChemView Database

European Food Safety Authority (EFSA)

U.S. 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)

Japan 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)

U.S. National Toxicology Program (NTP)

New Zealand's Chemical Classification and Information Database (CCID)

International Organization for Economic Co-operation and Development (OECD) Environment, Health, and Safety Publications International Organization for Economic Co-operation and Development (OECD) High Production Volume Chemicals Program International Organization for Economic Co-operation and Development (OECD) Screening Information Data Set United Nations World Health Organization (WHO)

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Revision Note Update to Format.

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**End of Safety Data Sheet**