

SAFETY DATA SHEET

This safety data sheet was created pursuant to the requirements of: Regulation (EC) No. 1907/2006 as amended by Regulation (EU) No. 2020/878, and Regulation (EC) No. 1272/2008

SDS # : A-10740

455 Toner Black

Issuing Date 13-Oct-2025

Revision date 14-Jan-2026

Revision Number 2

European Version Only**SECTION 1: Identification of the substance/mixture and of the company/undertaking****1.1. Product identifier**

Product Name 455 Toner for Lexmark MS53, Lexmark MS63
Part no. 29S1000, 36S4525, 36S4526, 36S4527, 40S2457, 40S2458, 40S2459
Other means of identification

Pure substance/mixture Mixture**Colour** Black**1.2. Relevant identified uses of the substance or mixture and uses advised against****Recommended use** Printing**Uses advised against** No information available**1.3. Details of the supplier of the safety data sheet****Importer**

Lexmark International Technology Sarl
ICC Building, Bloc A
20 route de Pré-Bois, 1215 Geneva 15, Switzerland

For further information, please contact**Contact Point** Manager, Environment, Health, Safety & Sustainability**E-mail address** adam.toth@lexmark.com**Non-Emergency Telephone Number** +41 227107050**For the most current document** https://www.lexmark.com/en_us/supplies-and-parts/printer-supplies-finder/material-safety-data-sheets.html**1.4. Emergency telephone number****Emergency Telephone** +44 1273 289451**Emergency Telephone - §45 - (EC)1272/2008****Europe** 112**SECTION 2: Hazards identification**

2.1. Classification of the substance or mixture**Classification according to Regulation (EC) No. 1272/2008 [CLP]**

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

2.2. Label elements

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

Hazard statements

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

2.3. Other hazards**Other hazards**

May form explosible dust-air mixture if dispersed.

PBT & vPvB

The components in this formulation do not meet the criteria for classification as PBT or vPvB.

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	Weight-%	CAS No.	EC No (EU Index No)	Classification according to Regulation (EC) No. 1272/2008 [CLP]	REACH registration number
Polyester Resin	65-75	Proprietary	--	--	--
Iron Oxide	20-30	1317-61-9	215-277-5	--	01-2119457646-28-0082
Charge Control Agent	<1.5	Proprietary	Listed	Flam. Sol. 1 (H228) Acute Tox 4 (H302) Aquatic Acute 1 (H400) Aquatic Chronic 1 (H410)	01-2119890895-16-0002
Titanium dioxide	<1	13463-67-7	236-675-5	--	--

Note

Full text of H- statements: see section 16

"--" indicates no classification or hazard statements apply.

Components marked as "Not Listed" are exempt from registration.

Where no REACH registration number is listed, it is considered confidential to the Only Representative.

Acute Toxicity Estimate

If LD50/LC50 data is not available or does not correspond to the classification category, then the appropriate conversion value from CLP Annex I, Table 3.1.2, is used to calculate the acute toxicity estimate (ATEmix) for classifying a mixture based on its components

Chemical name	Oral LD50 mg/kg	Dermal LD50 mg/kg	Inhalation LC50 - 4 hour - dust/mist - mg/L	Inhalation LC50 - 4 hour - vapour - mg/L	Inhalation LC50 - 4 hour - gas - ppm
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Chemical name	Oral LD50 mg/kg	Dermal LD50 mg/kg	Inhalation LC50 - 4 hour - dust/mist - mg/L	Inhalation LC50 - 4 hour - vapour - mg/L	Inhalation LC50 - 4 hour - gas - ppm
Iron Oxide	10000	No data available	No data available	No data available	No data available
Charge Control Agent	No data available	2000	No data available	No data available	No data available
Titanium dioxide	2000	No data available	5.09	No data available	No data 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

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 doctor.
Skin contact	Wash skin with soap and water.
Ingestion	Rinse mouth.

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

Symptoms	Dust irritates eyes and air passages.
Effects of Exposure	No information available.

4.3. Indication of any immediate medical attention and special treatment needed

Note to doctors	Treat symptomatically.
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SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable Extinguishing Media	Use water spray or fog; do not use straight streams.
Unsuitable extinguishing media	Do not scatter spilled material with high pressure water streams.

5.2. Special hazards arising from the substance or mixture

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 (CO ₂). Nitrogen oxides (NO _x).

5.3. Advice for firefighters**Special protective equipment and precautions for fire-fighters**

In case of fire: Wear self-contained breathing apparatus. Use personal protective equipment.

SECTION 6: Accidental release measures**6.1. Personal precautions, protective equipment and emergency procedures****Personal precautions**

Avoid generation of dust. Ensure adequate ventilation.

For emergency responders

Use personal protection recommended in Section 8.

6.2. Environmental precautions**Environmental precautions**

See Section 12 for additional Ecological Information.

6.3. 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.

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**

Ensure adequate ventilation. Avoid generation of dust.

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.

Storage class (TRGS 510)

Not determined.

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

See section 1 for more information.

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
Iron Oxide	-	-	-	TWA: 6.0 mg/m ³	-
Titanium dioxide	-	TWA: 5 mg/m ³ STEL 10 mg/m ³	TWA: 10 mg/m ³	TWA: 10.0 mg/m ³	TWA: 10 mg/m ³ TWA: 4 mg/m ³
Chemical name	Cyprus	Czech Republic	Denmark	Estonia	Finland
Iron Oxide	-	TWA: 10 mg/m ³	-	-	-
Titanium dioxide	-	-	TWA: 6 mg/m ³ STEL: 12 mg/m ³	TWA: 5 mg/m ³	-
Chemical name	France	Germany TRGS	Germany DFG	Greece	Hungary
Titanium dioxide	TWA: 10 mg/m ³	TWA: 10 mg/m ³ TWA: 1.25 mg/m ³	TWA: 0.3 mg/m ³ Peak: 2.4 mg/m ³	TWA: 10 mg/m ³ TWA: 5 mg/m ³	-
Chemical name	Ireland	Italy MDLPS	Italy AIDII	Latvia	Lithuania
Iron Oxide	TWA: 5 mg/m ³ TWA: 10 mg/m ³ TWA: 4 mg/m ³ STEL: 10 mg/m ³ STEL: 12 mg/m ³ STEL: 30 mg/m ³	-	-	-	-
Titanium dioxide	TWA: 10 mg/m ³ TWA: 4 mg/m ³ STEL: 30 mg/m ³ STEL: 12 mg/m ³	-	TWA: 10 mg/m ³	TWA: 10 mg/m ³	TWA: 5 mg/m ³
Chemical name	Luxembourg	Malta	Netherlands	Norway	Poland
Iron Oxide	-	-	-	-	TWA: 5 mg/m ³ TWA: 2.5 mg/m ³ STEL: 10 mg/m ³ STEL: 5 mg/m ³
Titanium dioxide	-	-	-	TWA: 5 mg/m ³ STEL: 10 mg/m ³	TWA: 10 mg/m ³ STEL: 30 mg/m ³
Chemical name	Portugal	Romania	Slovakia	Slovenia	Spain
Iron Oxide	-	-	TWA: 4 mg/m ³ TWA: 1.5 mg/m ³	-	-
Titanium dioxide	TWA: 10 mg/m ³	TWA: 10 mg/m ³ STEL: 15 mg/m ³	TWA: 5 mg/m ³	-	TWA: 10 mg/m ³
Chemical name	Sweden		Switzerland		United Kingdom
Titanium dioxide	NGV: 5 mg/m ³		TWA: 3 mg/m ³ TWA: 10 mg/m ³		TWA: 10 mg/m ³ TWA: 4 mg/m ³ STEL: 30 mg/m ³ STEL: 12 mg/m ³

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

Chemical name	Oral	Dermal	Inhalation
Charge Control Agent	-	0.26 mg/kg bw/day [4] [6]	0.9404 mg/m ³ [4] [6]

Notes

[4] Systemic health effects.
[6] Long term.

Derived No Effect Level (DNEL) - General Public

Chemical name	Oral	Dermal	Inhalation
Charge Control Agent	0.133 mg/kg bw/day [4] [6]	-	0.231 mg/m ³ [4] [6]

Notes

[4] Systemic health effects.
[6] Long term.

Predicted No Effect Concentration (PNEC)

Chemical name	Freshwater	Freshwater (intermittent release)	Marine water	Marine water (intermittent release)	Air
Charge Control Agent	0.73 µg/L	7.3 µg/L	0.073 µg/L	-	-

Chemical name	Freshwater sediment	Marine sediment	Sewage treatment	Soil	Food chain
Charge Control Agent	9.78 µg/kg sediment dw	0.978 µg/kg sediment dw	18 mg/L	1.53 µg/kg soil dw	-

8.2. Exposure controls

Engineering controls None under normal use conditions.

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.

Thermal hazards None under normal processing.

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

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

SECTION 9: Physical and chemical properties**9.1. Information on basic physical and chemical properties**

Physical state Solid

Appearance	Powder
Colour	Black
Odour	Faint.
Odour threshold	Not applicable

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
Melting point / freezing point	Not applicable	None known
Initial boiling point and boiling range	Not applicable	None known
Flammability	Not flammable	None known
Flammability Limit in Air		None known
Upper flammability or explosive limits	Not applicable	
Lower flammability or explosive limits	Not applicable	
Flash point	Not applicable	None known
Autoignition temperature	Not applicable	None known
Decomposition temperature	Not applicable	None known
pH	Not applicable	None known
pH (as aqueous solution)	No data available	None known
Kinematic viscosity	Not applicable	None known
Dynamic viscosity	Not applicable	None known
Water solubility	negligible	None known
Solubility(ies)	No data available	None known
Partition coefficient	Not applicable	None known
Vapour pressure	Not applicable	None known
Relative density	1 - 2	None known
Bulk density	Not applicable	
Liquid Density	Not applicable	
Relative vapour density	No data available	None known
Particle characteristics		
Particle Size	No information available	
Particle Size Distribution	4 - 9 micron	

9.2. Other information

Softening point	49 - 60 °C / 120 - 140 °F
VOC content	None

9.2.1. Information with regards 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
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9.2.2. Other safety characteristics

No information available

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity	No dangerous reaction known under conditions of normal use.
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10.2. Chemical stability

Stability	Stable under normal conditions.
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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 Generation/formation of dust.

10.5. Incompatible materials

Incompatible materials None known based on information supplied.

10.6. Hazardous decomposition products

Hazardous decomposition products None known based on information supplied.

SECTION 11: Toxicological information

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

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

Inhalation No known effects under normal use conditions.

Eye contact No hazard from product as supplied.

Skin contact No hazard from product as supplied.

Ingestion No hazard from product as supplied.

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms None known.

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

Acute toxicity Based on available data, the classification criteria are not met.

Numerical measures of toxicity

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

ATEmix (oral) 5,353.20 mg/kg

ATEmix (dermal) 4,421.80 mg/kg

ATEmix (inhalation-gas) 99,999.00 ppm

ATEmix (inhalation-vapour) 99,999.00 mg/L

ATEmix (inhalation-dust/mist) 99,999.00 mg/L

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

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 sensitisation 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 titanium dioxide as "possibly carcinogenic to humans". However, Xerox has 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.

Chemical name	European Union
Titanium dioxide	Carc. 2

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.

11.2. Information on other hazards

11.2.1. Endocrine disrupting properties

Endocrine disrupting properties This mixture does not contain any substance that has endocrine disrupting properties with respect to humans.

11.2.2. Other information

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.

SECTION 12: Ecological information

12.1. Toxicity

Ecotoxicity

Not considered to be harmful to aquatic life.

Product Information					
Method	Species	Endpoint type	Effective dose	Exposure time	Results
OECD Test No. 201: Freshwater Algae and Cyanobacteria, Growth Inhibition Test	Pseudokirchneriella subcapitata	EC50	370 mg/L	72 hours	Harmless to aquatic organisms up to the tested concentration

OECD Test No. 201: Freshwater Algae and Cyanobacteria, Growth Inhibition Test	Pseudokirchneriella subcapitata	ErC50	>625 mg/L	72 hours	Harmless to aquatic organisms up to the tested concentration
OECD Test No. 201: Freshwater Algae and Cyanobacteria, Growth Inhibition Test	Pseudokirchneriella subcapitata	EYC50	638 mg/L	72 hours	Harmless to aquatic organisms up to the tested concentration
OECD Test No. 203: Fish, Acute Toxicity Test	Pimephales promelas	LC50	>625 mg/L	96 hours	Harmless to aquatic organisms up to the tested concentration
OECD Test No. 203: Fish, Acute Toxicity Test	Daphnia magna Pimephales promelas	NOEC	625 mg/L	96 hours	Harmless to aquatic organisms up to the tested concentration
OECD Test No. 202: Daphnia sp., Acute Immobilisation Test	Daphnia magna	EC50	625 mg/L	48 hours	Harmless to aquatic organisms up to the tested concentration
OECD Test No. 202: Daphnia sp., Acute Immobilisation Test	Daphnia magna	NOEC	40 mg/L	48 hours	Harmless to aquatic organisms up to the tested concentration
Chemical name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea	
Charge Control Agent	-	LC50: =5.5mg/L (96h, Oncorhynchus mykiss)	-	-	

12.2. Persistence and degradability**Persistence and degradability** Not readily biodegradable.**12.3. Bioaccumulative potential****Bioaccumulation**

Chemical name	Partition coefficient
Charge Control Agent	2.32

12.4. Mobility in soil**Mobility in soil** The product is insoluble and floats on water.**12.5. Results of PBT and vPvB assessment****PBT and vPvB assessment** The product does not contain any substance(s) classified as PBT or vPvB.

Chemical name	PBT and vPvB assessment
Iron Oxide	Not PBT/vPvB
Charge Control Agent	Not PBT/vPvB
Titanium dioxide	Not PBT/vPvB

12.6. Endocrine disrupting properties**Endocrine disrupting properties** This mixture does not contain any substance that has endocrine disrupting properties with respect to non-target organisms.**12.7. Other adverse effects****Other adverse effects** No information available.**PMT or vPvM properties** The product does not contain any substance(s) classified as PMT or vPvM.**SECTION 13: Disposal considerations**

13.1. Waste treatment 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.
Waste codes / waste designations according to EWC	08 03 18.
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.

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
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

ADN

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 hazard	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

Switzerland

Ordinance on the Incentive Tax on Volatile Organic Compounds (OVOC) SR 814.018	Not applicable
Storage of Hazardous Material	SC Non-hazardous material
WPO (GSchV) SR 814.201; WPA (GSchG) SR 814.20	Not applicable

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.

Authorisations and/or restrictions on use:

This product does not contain substances subject to authorisation (Regulation (EC) No. 1907/2006 (REACH), Annex XIV) This product does not contain substances subject to restriction (Regulation (EC) No. 1907/2006 (REACH), Annex XVII)

The synthetic polymer microparticles supplied is subject to conditions laid down by entry 78 of Annex XVII to Regulation (EC) No 1907/2006 of the European Parliament and of the Council. Toners and inks are subject to the derogations referred to in Paragraphs 4a and/or 5 (a/b/c) of the Regulation.

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	Contact supplier for inventory compliance status
IECSC	Contact supplier for inventory compliance status
KECL	Contact supplier for inventory compliance status
PICCS	Contact supplier for inventory compliance status
AIIC	Contact supplier for inventory compliance status
NZIoC	Contact supplier for inventory compliance status
TCSI	Contact 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

15.2. Chemical safety assessment**Chemical Safety Report**

A chemical safety assessment according to regulation (EC) No. 1907/2006 is not required

SECTION 16: Other information**Key or legend to abbreviations and acronyms used in the safety data sheet****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

Legend

SVHC: Substances of Very High Concern for Authorisation:
PBT: Persistent, Bioaccumulative, and Toxic (PBT) Substances
vPvB: Very Persistent and very Bioaccumulative (vPvB) Substances
STOT: Specific Target Organ Toxicity
ATE: Acute Toxicity Estimate
LC50: 50% Lethal Concentration
LD50: 50% Lethal Dose

Legend Section 8: Exposure controls/personal protection

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

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

Ozone	Calculation method
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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)
European Chemicals Agency (ECHA) Committee for Risk Assessment (ECHA_RAC)
European Chemicals Agency (ECHA) (ECHA_API)
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)
Australian 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)

Revision date 14-Jan-2026

Revision Note Update to format

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