

Supersedes date 19-Jul-2023

Revision date 07-Oct-2025

Revision Number 4

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

### 1.1. Product identifier

Product Name ISOVER APR

Synonyms None

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

Recommended use Mineral wool for thermal, acoustic and fire protection insulation

Uses advised against No specific uses advised against are identified

### 1.3. Details of the supplier of the safety data sheet

#### Supplier

Saint-Gobain Construction Products (Ireland) Limited  
Unit 4 Kilcarbery Business Park  
Nangor Road  
Dublin 22  
D22 R2Y7  
Ireland  
Tel: +353 (0)1 629 8444

#### For further information, please contact

E-mail address info@isover.ie

### 1.4. Emergency telephone number

Emergency telephone ROI: 1800 744480  
NI: 0845 3990159  
(Monday - Friday, 9am - 5pm)

Emergency telephone - Contact number	
Europe	112

## SECTION 2: Hazards identification

### 2.1. Classification of the substance or mixture

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

This product is an article. Classification according to CLP is not applicable to articles.

### 2.2. Label elements

#### Additional information

As supplied, this product does not meet the requirements for labelling.

**2.3. Other hazards**

<b>Other hazards</b>	May cause temporary skin irritation by mechanical action. Cutting and handling may create dust. Product dust may be irritating to eyes, skin and respiratory system.
<b>PBT or vPvB properties</b>	None known.
<b>Endocrine Disruptor Information</b>	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**

This product is an article: Mineral wool roll.

Glass Mineral Wool and Stone Mineral Wool - inert vitreous silicate mineral wool bonded with a thermosetting resin, which has been urea extended. Contains up to 0.7% mineral oil.

Chemical name	Weight-%	REACH registration number	EC No. (Index No.)	Classification according to Regulation (EC) No. 1272/2008 [CLP]	Specific concentration limit (SCL)	M-Factor	M-Factor (long-term)	Notes
Mineral wool	50 - 100	-	-	[C]	-	-	-	-
Mineral oil 8042-47-5	0.1 - <1	-	232-455-8	[C]	-	-	-	-

**Additional information**

Note: EU Index Number: 650-016-00-2 [Man-made vitreous (silicate) fibres with random orientation with alkaline and alkali earth oxides (Na<sub>2</sub>O+K<sub>2</sub>O+CaO+ MgO+BaO) content greater than 18% by weight and fulfilling one of the CLP Regulation Annex VI Nota Q conditions]

*Classification according to Regulation (EC) No. 1272/2008 [CLP] - Notes*

[C] - Components with occupational exposure limits and/or biological occupational exposure limits requiring monitoring

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

**Acute Toxicity Estimate**

**No information available**

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
Mineral oil 8042-47-5	5005	No data available	No data available	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

<b>General advice</b>	Get medical attention if irritation or other symptoms occur. Show this safety data sheet to the doctor in attendance.
<b>Inhalation</b>	Remove person to fresh air and keep comfortable for breathing. If symptoms persist, call a doctor.
<b>Eye contact</b>	Rinse thoroughly with plenty of water, also under the eyelids. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if irritation develops and persists.
<b>Skin contact</b>	Wash skin with soap and water. Take off contaminated clothing and wash it before reuse. Get medical attention if irritation develops and persists.
<b>Ingestion</b>	Rinse mouth. Get medical attention if symptoms occur.

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

<b>Symptoms</b>	Product dust may be irritating to eyes, skin and respiratory system. May cause temporary skin irritation by mechanical action.
<b>Effects of Exposure</b>	None known.

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

<b>Note to doctors</b>	Treat symptomatically.
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### **SECTION 5: Firefighting measures**

#### 5.1. Extinguishing media

<b>Suitable Extinguishing Media</b>	Water spray, carbon dioxide (CO <sub>2</sub> ), dry chemical, alcohol-resistant foam. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
<b>Unsuitable extinguishing media</b>	Full water jet.

#### 5.2. Special hazards arising from the substance or mixture

<b>Specific hazards arising from the chemical</b>	The product does not pose a fire hazard, however packaging materials and facings may burn.
<b>Hazardous combustion products</b>	Thermal decomposition can lead to release of irritating gases and vapours. Carbon monoxide. Carbon dioxide (CO <sub>2</sub> ).

#### 5.3. Advice for firefighters

<b>Special protective equipment and precautions for fire-fighters</b>	Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.
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### **SECTION 6: Accidental release measures**

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

<b>Personal precautions</b>	Ensure adequate ventilation. Use personal protective equipment as required. Minimise dust generation and accumulation. Avoid breathing dust. In case of insufficient ventilation, wear suitable respiratory equipment.
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**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.

**Methods for cleaning up** Take up mechanically, placing in appropriate containers for disposal. Do not dry sweep dust. Wet dust with water before sweeping or use a vacuum to collect dust.

**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** Handle in accordance with good industrial hygiene and safety practice. Avoid unnecessary handling of unwrapped product. Ensure adequate ventilation. Avoid generation of dust. Do not breathe dust. If cutting material, use sharp hand tools and avoid power tools. Wash hands thoroughly after handling.

**General hygiene considerations** Handle in accordance with good industrial hygiene and safety practice. Regular cleaning of equipment, work area and clothing is recommended. Wash hands and face before breaks and immediately after handling the product. Do not eat, drink or smoke when using this product. Keep away from food, drink and animal feedingstuffs.

### 7.2. Conditions for safe storage, including any incompatibilities

**Storage Conditions** Keep/store only in original container. Keep in a dry, cool and well-ventilated place.

### 7.3. Specific end use(s)

**Specific use(s)** The identified uses for this product are detailed in Section 1.2.

## **SECTION 8: Exposure controls/personal protection**

### 8.1. Control parameters

#### Exposure Limits

Chemical name	Austria	Belgium	Bulgaria	Croatia
Mineral wool -	-	-	TWA: 6.0 mg/m <sup>3</sup> TWA: 1.0 fiber/cm <sup>3</sup>	TWA: 5 mg/m <sup>3</sup> TWA: 2 fiber/cm <sup>3</sup>
Chemical name	Cyprus	Czech Republic	Denmark	Estonia
Mineral wool -	-	-	TWA: 1 fiber/cm <sup>3</sup> STEL: 2 fiber/cm <sup>3</sup>	-
Chemical name	Finland	France	Germany TRGS	Germany DFG
Mineral wool -	TWA: 1 fiber/cm <sup>3</sup>	-	-	-
Mineral oil 8042-47-5	-	-	TWA-AGW; 5 mg/m <sup>3</sup> (4(II)); respirable fraction	TWA-MAK: 5 mg/m <sup>3</sup> ; II(4); respirable fraction

Chemical name	Greece	Hungary	Italy MDLPS	Italy AIDII
Mineral wool -	-	TWA: 0.1 fiber/cm <sup>3</sup>	-	-
Mineral oil 8042-47-5	-	TWA-AK: 5 mg/m <sup>3</sup> ;	-	-
Chemical name	Ireland	Latvia	Lithuania	Luxembourg
Mineral wool -	TWA: 5 mg/m <sup>3</sup> TWA: 1 fibre/mL	TWA: 2 mg/m <sup>3</sup>	-	-
Mineral oil 8042-47-5	-	TWA: 5 mg/m <sup>3</sup> ;	-	-
Chemical name	Malta	Netherlands	Norway	Poland
Mineral wool -	-	-	TWA: 1 fiber/cm <sup>3</sup> STEL: 3 fiber/cm <sup>3</sup>	TWA: 1 fiber/cm <sup>3</sup>
Chemical name	Portugal	Romania	Slovakia	Slovenia
Mineral wool -	TWA: 1 fiber/cm <sup>3</sup>	TWA: 1 fiber/cm <sup>3</sup>	-	-
Mineral oil 8042-47-5	-	-	-	TWA: 5 mg/m <sup>3</sup> ; respirable fraction STEL: 20 mg/m <sup>3</sup> ; respirable fraction
Chemical name	Spain	Sweden	Switzerland	United Kingdom
Mineral wool -	TWA: 1 fiber/cm <sup>3</sup> STEL: 1 fiber/cm <sup>3</sup>	NGV: 1 fiber/cm <sup>3</sup>	-	TWA: 2 fibre/mL TWA: 5 mg/m <sup>3</sup>
Mineral oil 8042-47-5	-	-	TWA-MAK: 5 mg/m <sup>3</sup> ; inhalable dust	-

**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
Mineral oil 8042-47-5	-	217.05 mg/kg bw/day [4] [6]	164.56 mg/m <sup>3</sup> [4] [6]

**Notes**

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

**Derived No Effect Level (DNEL) - General Public**

Chemical name	Oral	Dermal	Inhalation
Mineral oil 8042-47-5	25 mg/kg bw/day [4] [6]	-	34.78 mg/m <sup>3</sup> [4] [6]

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

**Predicted No Effect Concentration (PNEC)** No information available.

**8.2. Exposure controls****Engineering controls**

As this product contains ingredients with exposure limits, process enclosures, local exhaust ventilation or other engineering controls should be used to keep worker exposure below any

statutory or recommended limits, if use generates dust, fumes, gas, vapour or mist. Provide extract ventilation at the points where emissions occur. Ensure the ventilation system is regularly maintained and tested.

#### Personal protective equipment

**Eye/face protection** If working with products above head height or in restricted space: Safety glasses with side shields. Eye protection must conform to standard EN 166.

**Hand protection** Wear suitable gloves to avoid itching. Gloves must conform to standard EN 374.

**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. When workers are facing concentrations above the exposure limit they must use appropriate certified respirators. Disposable filtering half mask respirators should comply with European Standard EN149 or EN405.

FFP1 or FFP2.

**Environmental exposure controls** Avoid creating dust.

## SECTION 9: Physical and chemical properties

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

<b>Appearance</b>	Roll
<b>Physical state</b>	Solid
<b>Colour</b>	Characteristic
<b>Odour</b>	Characteristic
<b>Odour threshold</b>	No information available

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
<b>Melting point / freezing point</b>	> 600 °C	No data available
<b>Boiling point or initial boiling point and boiling range</b>		No data available
<b>Flammability</b>		No data available
<b>Lower and upper explosion limit/flammability limit</b>		
Lower explosion limit		No data available
Upper explosion limit		No data available
<b>Flash point</b>		No data available
<b>Autoignition temperature</b>		No data available
<b>Decomposition temperature</b>		No data available
SADT (°C)		No data available
<b>pH</b>		No data available
pH (as aqueous solution)		No data available
<b>Kinematic viscosity</b>		No data available
Dynamic viscosity		No data available
<b>Water solubility</b>	Insoluble in water (<0.1 mg/L)	No data available
<b>Solubility</b>		No data available
<b>Partition coefficient n-octanol/water (log value)</b>		No data available
<b>Vapour pressure</b>		No data available
<b>Density and/or relative density</b>		No data available
Bulk density		No data available
Liquid Density		No data available
<b>Relative vapour density</b>		No data available
<b>Particle characteristics</b>		
Particle Size		No data available

**Particle Size Distribution**

No data available

**9.2. Other information**

<b>Molecular weight</b>	No information available
<b>VOC content</b>	No information available
<b>Softening point</b>	No information available

**9.2.1. Information with regards to physical hazard classes****Explosives**

Explosive properties No information available

**Oxidising properties** No information available**9.2.2. Other safety characteristics**

No information available

**SECTION 10: Stability and reactivity****10.1. Reactivity****Reactivity** None under normal use conditions.**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** Excessive heat.**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. Ethers. Carbon oxides.**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** Specific test data for the substance or mixture is not available. Inhalation of dust in high concentration may cause irritation of respiratory system.**Eye contact** Specific test data for the substance or mixture is not available. Dust contact with the eyes can lead to mechanical irritation.**Skin contact** Specific test data for the substance or mixture is not available. Contact with dust can cause

mechanical irritation or drying of the skin.

**Ingestion**

Specific test data for the substance or mixture is not available. May cause irritation.

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

Product dust may be irritating to eyes, skin and respiratory system. May cause temporary skin irritation by mechanical action.

**Acute toxicity**

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

**Numerical measures of toxicity** No information available.

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Mineral oil	> 5000 mg/kg ( Rat )	-	-

**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 sensitisation**

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

**Germ cell mutagenicity**

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

**Carcinogenicity**

Based on available data, the classification criteria are not met. Note: EU Index Number: 650-016-00-2 [Man-made vitreous (silicate) fibres with random orientation with alkaline and alkali earth oxides (Na<sub>2</sub>O+K<sub>2</sub>O+CaO+ MgO+BaO) content greater than 18% by weight and fulfilling one of the CLP Regulation Annex VI Nota Q conditions].

**Reproductive toxicity**

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

**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**

Not applicable.

**11.2. Information on other hazards****11.2.1. Endocrine disrupting properties****Endocrine disruption for human health**

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

**11.2.2. Other information****Other adverse effects**

No information available.

**SECTION 12: Ecological information****12.1. Toxicity**

Not considered to be harmful to aquatic life.

Chemical name	Fish	Crustacea	Algae/aquatic plants	Toxicity to microorganisms
Mineral oil	LC50: >10000mg/L (96h, Lepomis macrochirus)	-	-	-

**12.2. Persistence and degradability** No information available.

**12.3. Bioaccumulative potential** Not likely to bioaccumulate.

Chemical name	Partition coefficient	Bioconcentration factor (BCF)	Trophic magnification factor (TMF)
Mineral oil	6	-	-

**12.4. Mobility in soil** No information available.

**12.5. Results of PBT and vPvB assessment** No information available.

Chemical name	PBT and vPvB assessment
Mineral oil	Not PBT/vPvB

**12.6. Endocrine disrupting properties** This product does not contain any known or suspected endocrine disruptors.

**12.7. Other adverse effects** None known based on information supplied.

**PMT or vPvM properties** Based on available data, the classification criteria are not met.

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

**Waste from residues/unused products** Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation.

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

**Waste codes / waste designations according to EWC / AVV** According to the European Waste Catalogue, Waste Codes are not product specific, but application specific. Waste codes should be assigned by the user based on the application for which the product was used.

## SECTION 14: Transport information

<b>IATA</b>	Not regulated
<b>14.1 UN number or ID number</b>	Not regulated
<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>	

**Special Provisions** None

**IMDG** Not regulated  
**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** Not regulated  
**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** Not regulated  
**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** Not regulated  
**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 applicable  
**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

##### France

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

Chemical name	French RG number
Mineral oil 8042-47-5	RG 36bis

#### Chemical Prohibition Ordinance (ChemVerbotsV)

Not applicable.

**TRGS 905** Not applicable

<b>Ordinance on the Incentive Tax on Volatile Organic Compounds (OVOC) SR 814.018</b>	Not applicable
<b>Storage of Hazardous Material</b>	Not applicable
<b>WPO (GSchV) SR 814.201; WPA (GSchG) SR 814.20</b>	Not applicable
<b>Major Accidents Ordinance SR 814.012</b>	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)

**Persistent Organic Pollutants**

Not applicable

**Ozone-depleting substances (ODS) regulation (EC) 2024/590**

Not applicable.

**EU - Plant Protection Products (1107/2009/EC)**

Chemical name	EU - Plant Protection Products (1107/2009/EC)
Mineral oil 8042-47-5	Plant protection agent

**Explosives Precursors Marketing and Use (2019/1148)**

Not applicable.

**International Inventories**

Contact supplier for inventory compliance status

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

Not applicable.

**SECTION 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

ACGIH	American Conference of Governmental Industrial Hygienists
AIDII	Italian Association of 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
CLP	Classification, Labelling and Packaging Regulation; Regulation (EC) No 1272/2008
CMR	Carcinogen, Mutagen or Reproductive Toxicant
DFG	German Research Foundation
DOT	Department of Transportation (United States)
DSL	Domestic Substances List (Canada)
ECHA	European Chemicals Agency
EC Number	European Community number
EmS	Emergency Schedule
ENCS	Existing and New Chemical Substances (Japan)
EPA	U.S. Environmental Protection Agency
EWC	European Waste Codes
GHS	Globally Harmonized 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 Organisation
IECSC	Inventory of Existing Chemical Substances in China
IMDG	International Maritime Dangerous Goods
IMO	International Maritime Organization
ISO	International Organisation for Standardisation
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)
MAK	Maximum Concentration at the Workplace
MAL	Measuring Technical Hygienic Air Needs
MARPOL	International Convention for the Prevention of Pollution from Ships
MDLPS	Ministry of Labour and Social Policy
n.o.s.	Not Otherwise Specified
NOAEC	No Observed Adverse Effect Concentration
NOAEL	No Observed Adverse Effect Level
NOELR	No Observable Effect Loading Rate
NZIoC	New Zealand Inventory of Chemicals
OECD	Organization for Economic Cooperation and Development
OEL	Occupational exposure limits
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
REACH	Registration, Evaluation, Authorisation, and Restriction of Chemicals (REACH) Regulation (EC 1907/2006)
RID	Agreement concerning the International Carriage of Dangerous Goods by Rail (Europe)
SADT	Self-Accelerating Decomposition Temperature
SAR	Structure-activity relationship
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
SVHC	Substance of very high concern
TCSI	Taiwan Chemical Substance Inventory
TDG	Transport of Dangerous Goods (Canada)
TRGS	Technical Rule for Hazardous Substances
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
C	Carcinogen
DS	Dermal Sensitizer
Ot	Ototoxicant
pOt	Ototoxicant - potential to cause hearing disorders
PS	Photosensitiser
RS	Respiratory Sensitiser
S	Sensitiser
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)  
 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 GHS Classification  
 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)

<b>Issuing Date</b>	15-Dec-2020
<b>Supersedes date</b>	19-Jul-2023
<b>Revision date</b>	07-Oct-2025
<b>Revision Note</b>	Document reviewed.
<b>Further information</b>	This SDS is not mandated under REACH Regulation (EC) No 1907/2006 and is provided for information only

This safety data sheet complies with the requirements of Commission Regulation (EU) 2020/878 of 18 June 2020 amending Regulation (EC) No. 1907/2006

**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**