

#### Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830 Reference number: 0173A Issue date: 13-12-2022 Revision date: 13-12-2022 Supersedes version of: 12-04-2016 Version: 1.0

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

1.1. Product identifier	
Product form Trade name EC-No. CAS-No. Product code Type of product Formula Chemical structure	<ul> <li>Mixture</li> <li>HYDROCHLORIC ACID 37% ACIPUR</li> <li>231-595-7</li> <li>7647-01-0</li> <li>0173A</li> <li>Acids</li> <li>HCl</li> </ul>
Synonyms	: Hydronium chloride, Chlorhydric acid, Chlorane, Muriatic acid
1.2. Relevant identified uses of the subst	ance or mixture and uses advised against
<ul> <li>1.2.1. Relevant identified uses</li> <li>Intended for general public</li> <li>Industrial/Professional use spec</li> <li>Use of the substance/mixture</li> <li>1.2.2. Uses advised against</li> </ul>	<ul> <li>Industrial</li> <li>For professional use only</li> <li>Laboratory chemicals</li> <li>Manufacture of substances</li> </ul>
No additional information available	
1.3. Details of the supplier of the safety d	ata sheet
LOBA CHEMIE PVT.LTD. 107 Wode House Road, Jehangir Villa, Colaba 400005 Mumbai INDIA T +91 22 6663 6663 - F +91 22 6663 6699 info@lobachemie.com - www.lobachemie.com	
1.4. Emergency telephone number	
Emergency number	+ 91 22 6663 6663 (9:00am - 6:00 nm)

Emergency number

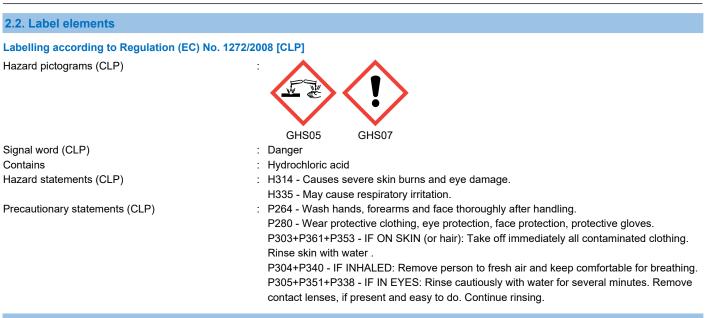
: + 91 22 6663 6663 (9:00am - 6:00 pm)

# SECTION 2: Hazards identification 2.1. Classification of the substance or mixture Classification according to Regulation (EC) No. 1272/2008 [CLP] Skin corrosion/irritation, Category 1 H314 Specific target organ toxicity – Single exposure, Category 3, Respiratory H335 tract irritation H335 Full text of H- and EUH-statements: see section 16 Adverse physicochemical, human health and environmental effects

May cause respiratory irritation. Causes severe skin burns and eye damage.

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#### 2.3. Other hazards

Contains no PBT/vPvB substances ≥ 0.1% assessed in accordance with REACH Annex XIII

#### **SECTION 3: Composition/information on ingredients**

#### 3.1. Substances

#### Not applicable

#### 3.2. Mixtures

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Water	CAS-No.: 7732-18-5 EC-No.: 231-791-2	60 – 65	Not classified
Hydrochloric acid	CAS-No.: 7647-01-0 EC-No.: 231-595-7 EC Index-No.: 017-002-01-X	35 – 40	Skin Corr. 1B, H314 STOT SE 3, H335

Full text of H- and EUH-statements: see section 16

#### **SECTION 4: First aid measures**

4.1. Description of first aid measures	
First-aid measures general First-aid measures after inhalation	<ul> <li>Call a physician immediately.</li> <li>Remove person to fresh air and keep comfortable for breathing. Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER/doctor. Call a POISON CENTER/doctor if you feel unwell. Call a poison center or a doctor if you feel unwell.</li> </ul>
First-aid measures after skin contact	: Take off immediately all contaminated clothing. Rinse skin with water/shower. Immediately call a POISON CENTER/doctor. Call a physician immediately.
First-aid measures after eye contact	: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/doctor. Call a physician immediately.
First-aid measures after ingestion	: Rinse mouth. Do NOT induce vomiting. Immediately call a POISON CENTER/doctor. Do not induce vomiting. Call a physician immediately.

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Symptoms/effects	: Causes severe skin burns and eye damage.
Symptoms/effects after inhalation	: May cause respiratory irritation.
Symptoms/effects after skin contact	: Burns.
Symptoms/effects after eye contact	: Serious damage to eyes.
Symptoms/effects after ingestion	: Burns.

Treat symptomatically.

SECTION 5: Firefighting measures		
5.1. Extinguishing media		
Suitable extinguishing media Unsuitable extinguishing media	<ul><li>Carbon dioxide. Dry powder. Foam. Water spray.</li><li>Do not use a heavy water stream.</li></ul>	
5.2. Special hazards arising from the substance or mixture		
Hazardous decomposition products in case of fire	: Toxic fumes may be released.	
5.3. Advice for firefighters		
Protection during firefighting	: Do not enter fire area without proper protective equipment, including respiratory protection. Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.	

SECTION 6: Accidental release me	asures
6.1. Personal precautions, protective e	equipment and emergency procedures
6.1.1. For non-emergency personnel	
Emergency procedures	: Ventilate spillage area. Evacuate unnecessary personnel. Avoid contact with skin and eyes. Do not breathe dust/fume/gas/mist/vapours/spray.
6.1.2. For emergency responders	
Protective equipment	: Do not attempt to take action without suitable protective equipment. Use personal protective equipment as required. For further information refer to section 8: "Exposure controls/personal protection".
Emergency procedures	: Ventilate area.
6.2. Environmental precautions	
Avoid release to the environment.	
6.3. Methods and material for containn	nent and cleaning up
Methods for cleaning up	: Take up liquid spill into absorbent material. Collect spillage. On land, sweep or shovel into suitable containers.
Other information	: Dispose of materials or solid residues at an authorized site.
6.4. Reference to other sections	
For further information refer to section 13.	

SECTION 7: Handling and storage	
7.1. Precautions for safe handling	
Precautions for safe handling	: Avoid contact with skin and eyes. Do not breathe vapours. Use only outdoors or in a well- ventilated area. Provide good ventilation in process area to prevent formation of vapour. Do not breathe dust/fume/gas/mist/vapours/spray. Wear personal protective equipment.

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Hygiene measures :	Wash contaminated clothing before reuse. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.
7.2. Conditions for safe storage, including an	y incompatibilities
Storage conditions :	Keep container tightly closed. Store in a well-ventilated place. Store locked up. Keep cool.

7.3. Specific end use(s)

No additional information available

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

#### 8.1. Control parameters

#### 8.1.1 National occupational exposure and biological limit values

HYDROCHLORIC ACID 37% ACIPUR (7647-01-0)		
EU - Indicative Occupational Exposure Limit (IOEL)		
Local name	Hydrogen chloride	
IOEL TWA [ppm]	5 ppm	
IOEL STEL	15 mg/m³	
IOEL STEL [ppm]	10 ppm	
Regulatory reference	COMMISSION DIRECTIVE 2000/39/EC	
Germany - Occupational Exposure Limits (TRGS 900)		
AGW (OEL TWA) [1]	3 mg/m <sup>3</sup>	
AGW (OEL TWA) [2]	2 ppm	
Peak exposure limitation factor	2(I)	
Remark	DFG - Senatskommission zur Prüfung gesundheitsschädlicher Arbeitsstoffe der DFG (MAK-Kommission); EU - Europäische Union (Von der EU wurde ein Luftgrenzwert festgelegt: Abweichungen bei Wert und Spitzenbegrenzung sind möglich); Y - Ein Risiko der Fruchtschädigung braucht bei Einhaltung des Arbeitsplatzgrenzwertes und des biologischen Grenzwertes (BGW) nicht befürchtet zu werden	
Regulatory reference	TRGS900	
Portugal - Occupational Exposure Limits		
Local name	Ácido clorídrico	
OEL C	2 mg/m³	
Remark	A4 (Agente não classificável como carcinogénico no Homem)	
Regulatory reference	Norma Portuguesa NP 1796:2014	
United Kingdom - Occupational Exposure Limits		
Local name	Hydrogen chloride	
WEL TWA (OEL TWA) [1]	2 mg/m³ gas and aerosol mists	
WEL TWA (OEL TWA) [2]	1 ppm gas and aerosol mists	
WEL STEL (OEL STEL)	8 mg/m³ gas and aerosol mists	
WEL STEL (OEL STEL) [ppm]	5 ppm gas and aerosol mists	
Regulatory reference	EH40/2005 (Fourth edition, 2020). HSE	

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HYDROCHLORIC ACID 37% ACIPUR (7647-01-0)	
USA - ACGIH - Occupational Exposure Limits	
Local name	Hydrogen chloride
ACGIH OEL C [ppm]	2 ppm
Remark (ACGIH)	TLV® Basis: URT irr. Notations: A4 (Not classifiable as a Human Carcinogen)
Regulatory reference	ACGIH 2022

#### 8.1.2. Recommended monitoring procedures

No additional information available

#### 8.1.3. Air contaminants formed

No additional information available

#### 8.1.4. DNEL and PNEC

No additional information available

#### 8.1.5. Control banding

No additional information available

#### 8.2. Exposure controls

#### 8.2.1. Appropriate engineering controls

#### Appropriate engineering controls:

Ensure good ventilation of the work station.

#### 8.2.2. Personal protection equipment

#### Personal protective equipment symbol(s):



#### 8.2.2.1. Eye and face protection

Eye protection: Chemical goggles or face shield

#### 8.2.2.2. Skin protection

Hand protection: Protective gloves

8.2.2.3. Respiratory protection

**Respiratory protection:** Wear appropriate mask

8.2.2.4. Thermal hazards

No additional information available

8.2.3. Environmental exposure controls

**Environmental exposure controls:** Avoid release to the environment.

#### SECTION 9: Physical and chemical properties

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

Physical state Appearance Molecular mass Colour : Liquid
: Clear liquid.
: 36.46 g/mol
: Colourless.

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Odour Odour threshold pH Relative evaporation rate (butylacetate=1) Melting point Freezing point Boiling point Flash point Auto-ignition temperature Decomposition temperature Flammability (solid, gas) Vapour pressure Relative vapour density at 20 °C Relative density	<ul> <li>pungent odour.</li> <li>No data available</li> <li>&lt; 1 at 20°C</li> <li>No data available</li> <li>Not applicable</li> <li>-30 °C</li> <li>110 °C</li> <li>No data available</li> <li>No tapplicable</li> <li>225 hPa at 20°C</li> <li>1.2</li> <li>No data available</li> </ul>
Flash point	
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Flammability (solid, gas)	: Not applicable
Vapour pressure	: 225 hPa at 20°C
Relative vapour density at 20 °C	: 1.2
Relative density	: No data available
Density	: 1.183 g/ml
Solubility	: Water: Miscible in water
Partition coefficient n-octanol/water (Log Pow)	: No data available
Viscosity, kinematic	: 1.944 mm²/s
Viscosity, dynamic	: 2.3 mPa.s at 15°C
Explosive properties	: No data available
Oxidising properties	: No data available
Explosive limits	: No data available

#### 9.2. Other information

No additional information available

#### SECTION 10: Stability and reactivity

10.1. Reactivity

Thermal decomposition generates : Corrosive vapours.

**10.2. Chemical stability** 

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

Direct sunlight. Overheating. Open flame. Heat.

10.5. Incompatible materials

No additional information available

**10.6. Hazardous decomposition products** 

Thermal decomposition generates : Corrosive vapours.

# SECTION 11: Toxicological information 11.1 Information on toxicological effects Acute toxicity (oral) : Not classified Acute toxicity (dermal) : Not classified Acute toxicity (inhalation) : Not classified Skin corrosion/irritation : Causes severe skin burns. pH: < 1 at 20°C</td> Serious eye damage/irritation : Assumed to cause serious eye damage

pH: < 1 at 20°C

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Respiratory or skin sensitisation :	Not classified
Germ cell mutagenicity :	Not classified
Carcinogenicity :	Not classified
Reproductive toxicity :	Not classified
STOT-single exposure :	May cause respiratory irritation.
Hydrochloric acid (7647-01-0)	
STOT-single exposure	May cause respiratory irritation.
STOT-repeated exposure :	Not classified
Aspiration hazard :	Not classified
HYDROCHLORIC ACID 37% ACIPUR (7647-01-0)	
Viscosity, kinematic	1.944 mm²/s

SECTION 12: Ecological information
12.1. Toxicity
Ecology - general: Before neutralisation, the product may represent a danger to aquatic organisms.Hazardous to the aquatic environment, short-term (acute): Not classifiedHazardous to the aquatic environment, long-term (chronic): Not classified
12.2. Persistence and degradability
No additional information available
12.3. Bioaccumulative potential
No additional information available
12.4. Mobility in soil
No additional information available
12.5. Results of PBT and vPvB assessment
No additional information available
12.6. Other adverse effects
No additional information available
SECTION 13: Disposal considerations

#### 13.1. Waste treatment methods

Waste treatment methods Product/Packaging disposal recommendations : Dispose of contents/container in accordance with licensed collector's sorting instructions.

: Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

#### **SECTION 14: Transport information**

In accordance with ADR / IMDG / IATA / ADN / RID

# 14.1 UN number

UN-No. (ADR)	:	UN 1789
UN-No. (IMDG)	:	UN 1789
UN-No. (IATA)	:	UN 1789
UN-No. (ADN)	:	UN 1789

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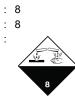
according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

UN-No. (RID)	: UN 1789
14.2. UN proper shipping name	
Proper Shipping Name (ADR) Proper Shipping Name (IMDG) Proper Shipping Name (IATA)	HYDROCHLORIC ACID     HYDROCHLORIC ACID     Hydrochloric acid     HYDROCHLORIC ACID
Proper Shipping Name (ADN) Proper Shipping Name (RID) Transport document description (ADR)	<ul> <li>HYDROCHLORIC ACID</li> <li>HYDROCHLORIC ACID</li> <li>UN 1789 HYDROCHLORIC ACID, 8, II, (E)</li> </ul>
Transport document description (ADA) Transport document description (IMDG) Transport document description (IATA)	: UN 1789 HYDROCHLORIC ACID, 8, II : UN 1789 HYDROCHLORIC ACID, 8, II : UN 1789 Hydrochloric acid, 8, II
Transport document description (ADN) Transport document description (RID)	: UN 1789 HYDROCHLORIC ACID, 8, II : UN 1789 HYDROCHLORIC ACID, 8, II

#### 14.3. Transport hazard class(es)

#### ADR

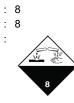
Transport hazard class(es) (ADR) Danger labels (ADR)



:

#### IMDG

Transport hazard class(es) (IMDG) Danger labels (IMDG)



: 8

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#### ΙΑΤΑ

Transport hazard class(es) (IATA) Danger labels (IATA)

#### ADN

Transport hazard class(es) (ADN) Danger labels (ADN)

## RID

Transport hazard class(es) (RID) Danger labels (RID)

#### 14.4. Packing group

Packing group (ADR)

: 11

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Packing group (IMDG)	: 11
Packing group (IATA)	: 11
Packing group (ADN)	: 11
Packing group (RID)	: 11
14.5. Environmental hazards	
Dangerous for the environment	: No
Marine pollutant	: No
Other information	: No supplementary information available
14.6. Special precautions for user	
Overland transport	
Classification code (ADR)	: C1
Special provisions (ADR)	: 520
Limited quantities (ADR)	: 11
Excepted quantities (ADR)	: E2
Packing instructions (ADR)	: P001, IBC02
Mixed packing provisions (ADR)	: MP15
Portable tank and bulk container instructions (ADR)	: T8
	: TP2
(ADR)	
Tank code (ADR)	: L4BN
Tank special provisions (ADR)	: TU42
Vehicle for tank carriage	: AT
Transport category (ADR)	: 2
Hazard identification number (Kemler No.)	: 80
Orange plates	80 1789
Tunnel restriction code (ADR) EAC code	: E : 2R
Transport by sea	
Limited quantities (IMDG)	: 1L
Excepted quantities (IMDG)	: E2
Packing instructions (IMDG)	: P001
IBC packing instructions (IMDG)	: IBC02
IBC special provisions (IMDG)	: B20
Tank instructions (IMDG)	: T8
Tank special provisions (IMDG)	: TP2
EmS-No. (Fire)	: F-A
EmS-No. (Spillage)	: S-B
Stowage category (IMDG)	: C
Segregation (IMDG)	: SGG1A, SG36, SG49
Properties and observations (IMDG)	: Colourless liquid.An aqueous solution of the gas hydrogen chloride. Highly corrosive to most metals. Causes burns to skin, eyes and mucous membranes.
MFAG-No	: 157
Air transport	
PCA Excepted quantities (IATA)	: E2
PCA Limited quantities (IATA)	: Y840
PCA limited quantity max net quantity (IATA)	: 0.5L
PCA packing instructions (IATA)	: 851
PCA max net quantity (IATA)	: 1L
CAO packing instructions (IATA)	: 855
CAO max net quantity (IATA)	: 30L
Special provisions (IATA)	: A3, A803
ERG code (IATA)	: 8L

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Inland waterway transport Classification code (ADN) Special provisions (ADN) Limited quantities (ADN) Excepted quantities (ADN) Carriage permitted (ADN) Equipment required (ADN) Number of blue cones/lights (ADN)	: C1 : 520 : 1 L : E2 : T : PP, EP : 0
Rail transport Classification code (RID) Special provisions (RID) Limited quantities (RID) Excepted quantities (RID) Packing instructions (RID) Mixed packing provisions (RID) Portable tank and bulk container instructions (RID) Portable tank and bulk container special provisions (RID)	
(RID) Tank codes for RID tanks (RID) Special provisions for RID tanks (RID) Transport category (RID) Colis express (express parcels) (RID) Hazard identification number (RID)	: L4BN : TU42 : 2 : CE6 : 80

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

#### Not applicable

#### SECTION 15: Regulatory information

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

#### 15.1.1. EU-Regulations

#### **REACH Annex XVII (Restriction List)**

EU restriction list (REACH Annex XVII)		
Reference code	Applicable on	
3(b)	HYDROCHLORIC ACID 37% ACIPUR	

#### **REACH Annex XIV (Authorisation List)**

Contains no REACH Annex XIV substances

#### **REACH Candidate List (SVHC)**

Contains no substance on the REACH candidate list

#### **PIC Regulation (Prior Informed Consent)**

Contains no substance subject to Regulation (EU) No 649/2012 of the European Parliament and of the Council of 4 July 2012 concerning the export and import of hazardous chemicals.

#### **POP Regulation (Persistent Organic Pollutants)**

Contains no substance subject to Regulation (EU) No 2019/1021 of the European Parliament and of the Council of 20 June 2019 on persistent organic pollutants

#### Ozone Regulation (1005/2009)

Contains no substance subject to REGULATION (EU) No 1005/2009 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 September 2009 on substances that deplete the ozone layer.

#### **Explosives Precursors Regulation (2019/1148)**

Contains no substance subject to Regulation (EU) 2019/1148 of the European Parliament and of the Council of 20 June 2019 on the marketing and use of explosives precursors.

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#### Drug Precursors Regulation (273/2004)

Contains no substance(s) listed on the Drug Precursors list (Regulation EC 273/2004 on drug precursors)

#### 15.1.2. National regulations

#### France

Occupational diseases		
Code E	Description	
RG 66 C	Occupational rhinitis an	d asthma
Germany		
Water hazard class (WGK) Hazardous Incident Ordinance	e (12. BlmSchV)	<ul> <li>WGK 1, Slightly hazardous to water (Classification according to AwSV, Annex 1).</li> <li>Is not subject of the Hazardous Incident Ordinance (12. BImSchV)</li> </ul>
Netherlands		
SZW-lijst van kankerverwekke SZW-lijst van mutagene stoffe SZW-lijst van reprotoxische st SZW-lijst van reprotoxische st Vruchtbaarheid	en toffen – Borstvoeding toffen –	<ul> <li>None of the components are listed</li> </ul>
SZW-lijst van reprotoxische st	toffen – Ontwikkeling	: None of the components are listed
Denmark Danish National Regulations		: Young people below the age of 18 years are not allowed to use the product
15.2. Chemical safety as	sessment	

No chemical safety assessment has been carried out

#### **SECTION 16: Other information**

Abbreviations and acronyms:		
ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways	
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road	
ATE	Acute Toxicity Estimate	
BCF	Bioconcentration factor	
BLV	Biological limit value	
BOD	Biochemical oxygen demand (BOD)	
COD	Chemical oxygen demand (COD)	
DMEL	Derived Minimal Effect level	
DNEL	Derived-No Effect Level	
EC-No.	European Community number	
EC50	Median effective concentration	
EN	European Standard	
IARC	International Agency for Research on Cancer	
ΙΑΤΑ	International Air Transport Association	
IMDG	International Maritime Dangerous Goods	
LC50	Median lethal concentration	
LD50	Median lethal dose	
LOAEL	Lowest Observed Adverse Effect Level	

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Abbreviations and acronyms:		
NOAEC	No-Observed Adverse Effect Concentration	
NOAEL	No-Observed Adverse Effect Level	
NOEC	No-Observed Effect Concentration	
OECD	Organisation for Economic Co-operation and Development	
OEL	Occupational Exposure Limit	
РВТ	Persistent Bioaccumulative Toxic	
PNEC	Predicted No-Effect Concentration	
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail	
SDS	Safety Data Sheet	
STP	Sewage treatment plant	
ThOD	Theoretical oxygen demand (ThOD)	
TLM	Median Tolerance Limit	
VOC	Volatile Organic Compounds	
CAS-No.	Chemical Abstract Service number	
N.O.S.	Not Otherwise Specified	
vPvB	Very Persistent and Very Bioaccumulative	
ED	Endocrine disrupting properties	

Full text of H- and EUH-statements:		
H314	Causes severe skin burns and eye damage.	
H335	May cause respiratory irritation.	
Skin Corr. 1B	Skin corrosion/irritation, Category 1, Sub-Category 1B	
STOT SE 3	Specific target organ toxicity – Single exposure, Category 3, Respiratory tract irritation	

Safety Data Sheet (SDS), EU

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.