

## Hydrochloric acid Standard volumetric solution 0.1 M (0.1 N)

Version number: GHS 2.0  
Replaces version of: 2023-09-05 (GHS 1)

Revision: 2025-09-12

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

#### 1.1 Product identifier

**Trade name** Hydrochloric acid Standard volumetric solution 0.1 M (0.1 N)  
**Alternative number(s)** LC-4579

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

**Relevant identified uses** General use

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

NeoFroxx GmbH  
Marie-Curie-Str. 3  
D-64683 Einhausen  
Germany

Telephone: +49 (6251) 989 24 - 0  
e-mail: info@neofroxx.com  
Website: neofroxx.com

**e-mail (competent person)** info@neofroxx.com (neoFroxx GmbH)

#### 1.4 Emergency telephone number

**Emergency information service** This number is only available during the following office hours: Mon-Fri 9 a.m. - 5 p.m.

Poison centre					
Country	Name	Postal code/city	Telephone	Telefax	Opening hours
United Kingdom	National Poisons Information Service		111		Mon - Fri 09:00 AM - 05:00 PM

### SECTION 2: Hazards identification

#### 2.1 Classification of the substance or mixture

**Classification acc. to GHS**

Section	Hazard class	Category	Hazard class and category	Hazard statement
2.16	substance or mixture corrosive to metals	1	Met. Corr. 1	H290

For full text of abbreviations: see SECTION 16.

#### 2.2 Label elements

##### Labelling

- Signal word warning

- Pictograms

GHS05



- Hazard statements

H290 May be corrosive to metals.

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- Precautionary statements
  - P234 Keep only in original packaging.
  - P390 Absorb spillage to prevent material damage.
  - P406 Store in a corrosion-resistant container with a resistant inner liner.

- Hazardous ingredients for labelling Hydrochloric Acid

### 2.3 Other hazards

#### Results of PBT and vPvB assessment

Does not contain a PBT-/vPvB-substance at a concentration of  $\geq 0,1\%$ .

#### Endocrine disrupting properties

Does not contain an endocrine disruptor (ED) at a concentration of  $\geq 0,1\%$ .

## SECTION 3: Composition/information on ingredients

### 3.1 Substances

Not relevant (mixture)

#### Molecular formula

HCL

#### Molar mass

36.46 g/mol

### 3.2 Mixtures

#### Description of the mixture

Name of substance	Identifier	Wt%	Classification acc. to GHS	Pictograms
Hydrochloric Acid	CAS No 7647-01-0  EC No 231-595-7  Index No 017-002-00-2		Press. Gas C / H280 Acute Tox. 3 / H331 Skin Corr. 1A / H314	

Name of substance	Specific Conc. Limits	M-Factors	ATE	Exposure route
Hydrochloric Acid	-	-	>700 ppmV/4h	inhalation: gas

#### Remarks

For full text of abbreviations: see SECTION 16

## SECTION 4: First aid measures

### 4.1 Description of first aid measures

#### General notes

Do not leave affected person unattended. Remove victim out of the danger area. Keep affected person warm, still and covered. Take off immediately all contaminated clothing. In all cases of doubt, or when symptoms persist, seek medical advice. In case of unconsciousness place person in the recovery position. Never give anything by mouth.

#### Following inhalation

If breathing is irregular or stopped, immediately seek medical assistance and start first aid actions. Provide fresh air.

#### Following skin contact

Wash with plenty of soap and water.

#### Following eye contact

Remove contact lenses, if present and easy to do. Continue rinsing. Irrigate copiously with clean, fresh water for at least 10 minutes, holding the eyelids apart.

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### Following ingestion

Rinse mouth with water (only if the person is conscious). Do NOT induce vomiting.

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

Symptoms and effects are not known to date.

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

none

## SECTION 5: Firefighting measures

### 5.1 Extinguishing media

#### Suitable extinguishing media

Water spray, BC-powder, Carbon dioxide (CO<sub>2</sub>)

#### Unsuitable extinguishing media

Water jet

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

Substance or mixture corrosive to metals.

#### Hazardous combustion products

Carbon monoxide (CO), Carbon dioxide (CO<sub>2</sub>)

### 5.3 Advice for firefighters

In case of fire and/or explosion do not breathe fumes. Co-ordinate firefighting measures to the fire surroundings. Do not allow firefighting water to enter drains or water courses. Collect contaminated firefighting water separately. Fight fire with normal precautions from a reasonable distance.

## SECTION 6: Accidental release measures

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

#### For non-emergency personnel

Remove persons to safety.

#### For emergency responders

Wear breathing apparatus if exposed to vapours/dust/spray/gases.

### 6.2 Environmental precautions

Keep away from drains, surface and ground water. Retain contaminated washing water and dispose of it.

### 6.3 Methods and material for containment and cleaning up

#### Advice on how to contain a spill

Covering of drains

#### Advice on how to clean up a spill

Wipe up with absorbent material (e.g. cloth, fleece). Collect spillage: sawdust, kieselgur (diatomite), sand, universal binder

#### Appropriate containment techniques

Use of adsorbent materials.

#### Other information relating to spills and releases

Place in appropriate containers for disposal. Ventilate affected area.

### 6.4 Reference to other sections

Hazardous combustion products: see section 5. Personal protective equipment: see section 8. Incompatible materials: see section 10. Disposal considerations: see section 13.

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### SECTION 7: Handling and storage

#### 7.1 Precautions for safe handling

##### Recommendations

- Measures to prevent fire as well as aerosol and dust generation  
Use local and general ventilation. Use only in well-ventilated areas.
- Handling of incompatible substances or mixtures
- Keep away from  
Caustic solutions

##### Advice on general occupational hygiene

Wash hands after use. Do not eat, drink and smoke in work areas. Remove contaminated clothing and protective equipment before entering eating areas. Never keep food or drink in the vicinity of chemicals. Never place chemicals in containers that are normally used for food or drink. Keep away from food, drink and animal feedingstuffs.

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

##### Managing of associated risks

- Corrosive conditions  
Store in corrosive resistant container with a resistant inner liner.
- Packaging compatibilities  
Only packagings which are approved (e.g. acc. to ADR) may be used.

#### 7.3 Specific end use(s)

See section 16 for a general overview.

### SECTION 8: Exposure controls/personal protection

#### 8.1 Control parameters

Occupational exposure limit values (Workplace Exposure Limits)											
Country	Name of agent	CAS No	Identifier	TWA [ppm]	TWA [mg/m <sup>3</sup> ]	STEL [ppm]	STEL [mg/m <sup>3</sup> ]	Ceiling-C [ppm]	Ceiling-C [mg/m <sup>3</sup> ]	Notation	Source
EU	hydrogen chloride	7647-01-0	IOELV	5	8	10	15				2000/39/EC
GB	hydrogen chloride	7647-01-0	WEL	1	2	5	8			ga	EH40/2005

##### Notation

Ceiling-C ceiling value is a limit value above which exposure should not occur

ga as gases and aerosols

STEL short-term exposure limit: a limit value above which exposure should not occur and which is related to a 15-minute period (unless otherwise specified)

TWA time-weighted average (long-term exposure limit): measured or calculated in relation to a reference period of 8 hours  
time-weighted average (unless otherwise specified)

#### 8.2 Exposure controls

##### Appropriate engineering controls

General ventilation.

##### Individual protection measures (personal protective equipment)

##### Eye/face protection

Wear eye/face protection.

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### Skin protection

#### - Hand protection

Wear suitable gloves. Chemical protection gloves are suitable, which are tested according to EN 374. Check leak-tightness/impermeability prior to use. In the case of wanting to use the gloves again, clean them before taking off and air them well. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.

#### - Other protection measures

Take recovery periods for skin regeneration. Preventive skin protection (barrier creams/ointments) is recommended. Wash hands thoroughly after handling.

### Respiratory protection

In case of inadequate ventilation wear respiratory protection.

### Environmental exposure controls

Use appropriate container to avoid environmental contamination. Keep away from drains, surface and ground water.

## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

<b>Physical state</b>	liquid
<b>Colour</b>	Colorless, clear solution
<b>Odour</b>	odourless
<b>Melting point/freezing point</b>	not determined
<b>Boiling point or initial boiling point and boiling range</b>	not determined
<b>Flammability</b>	non-combustible
<b>Lower and upper explosion limit</b>	not determined
<b>Flash point</b>	not determined
<b>Auto-ignition temperature</b>	not determined
<b>Decomposition temperature</b>	not relevant
<b>pH (value)</b>	1.2 (20 °C) (acid)
<b>Kinematic viscosity</b>	not determined
<b>Solubility(ies)</b>	not determined

### Partition coefficient

Partition coefficient n-octanol/water (log value)	not relevant (inorganic)
Vapour pressure	not determined

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### Density and/or relative density

Density	not determined
Relative vapour density	information on this property is not available

Particle characteristics	not relevant (liquid)
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### 9.2 Other information

<b>Information with regard to physical hazard classes</b>	there is no additional information
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### Other safety characteristics

Liquid content	0 %
Solid content	0 %

## SECTION 10: Stability and reactivity

### 10.1 Reactivity

Concerning incompatibility: see below "Conditions to avoid" and "Incompatible materials". Substance or mixture corrosive to metals.

### 10.2 Chemical stability

See below "Conditions to avoid".

### 10.3 Possibility of hazardous reactions

No known hazardous reactions.

### 10.4 Conditions to avoid

There are no specific conditions known which have to be avoided.

### 10.5 Incompatible materials

There is no additional information.

### 10.6 Hazardous decomposition products

Reasonably anticipated hazardous decomposition products produced as a result of use, storage, spill and heating are not known. Hazardous combustion products: see section 5.

## SECTION 11: Toxicological information

### 11.1 Information on toxicological effects

Test data are not available for the complete mixture.

#### Classification procedure

The method for classification of the mixture is based on ingredients of the mixture (additivity formula).

#### Classification acc. to GHS

#### Acute toxicity

Shall not be classified as acutely toxic.

Acute toxicity estimate (ATE) of components			
Name of substance	CAS No	Exposure route	ATE
Hydrochloric Acid	7647-01-0	inhalation: gas	>700

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Acute toxicity estimate (ATE) of components			
Name of substance	CAS No	Exposure route	ATE
			ppmV/4h

### Skin corrosion/irritation

Shall not be classified as corrosive/irritant to skin.

### Serious eye damage/eye irritation

Shall not be classified as seriously damaging to the eye or eye irritant.

### Respiratory or skin sensitisation

Shall not be classified as a respiratory or skin sensitizer.

### Germ cell mutagenicity

Shall not be classified as germ cell mutagenic.

### Carcinogenicity

Shall not be classified as carcinogenic.

### Reproductive toxicity

Shall not be classified as a reproductive toxicant.

### Specific target organ toxicity - single exposure

Shall not be classified as a specific target organ toxicant (single exposure).

### Specific target organ toxicity - repeated exposure

Shall not be classified as a specific target organ toxicant (repeated exposure).

### Aspiration hazard

Shall not be classified as presenting an aspiration hazard.

## 11.2 Information on other hazards

There is no additional information.

## SECTION 12: Ecological information

### 12.1 Toxicity

Shall not be classified as hazardous to the aquatic environment.

### 12.2 Persistence and degradability

Data are not available.

### 12.3 Bioaccumulative potential

Data are not available.

### 12.4 Mobility in soil

Data are not available.

### 12.5 Results of PBT and vPvB assessment

Does not contain a PBT-/vPvB-substance at a concentration of  $\geq 0,1\%$ .

### 12.6 Endocrine disrupting properties

Does not contain an endocrine disruptor (ED) at a concentration of  $\geq 0,1\%$ .

### 12.7 Other adverse effects

Data are not available.

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### SECTION 13: Disposal considerations

#### 13.1 Waste treatment methods

##### Waste treatment-relevant information

Recycling/reclamation of other inorganic materials.

##### Sewage disposal-relevant information

Do not empty into drains. Avoid release to the environment. Refer to special instructions/safety data sheets.

##### Waste treatment of containers/packagings

It is a dangerous waste; only packagings which are approved (e.g. acc. to ADR) may be used. Completely emptied packages can be recycled. Handle contaminated packages in the same way as the substance itself.

##### Remarks

Please consider the relevant national or regional provisions. Waste shall be separated into the categories that can be handled separately by the local or national waste management facilities.

### SECTION 14: Transport information

#### 14.1 UN number or ID number

ADR/RID	UN 1789
IMDG-Code	UN 1789
ICAO-TI	UN 1789

#### 14.2 UN proper shipping name

ADR/RID	HYDROCHLORIC ACID
IMDG-Code	HYDROCHLORIC ACID
ICAO-TI	Hydrochloric acid

#### 14.3 Transport hazard class(es)

ADR/RID	8
IMDG-Code	8
ICAO-TI	8

#### 14.4 Packing group

ADR/RID	III
IMDG-Code	III
ICAO-TI	III

#### 14.5 Environmental hazards

non-environmentally hazardous acc. to the dangerous goods regulations

#### 14.6 Special precautions for user

Provisions for dangerous goods (ADR) should be complied within the premises.

#### 14.7 Maritime transport in bulk according to IMO instruments

The cargo is not intended to be carried in bulk.

#### Information for each of the UN Model Regulations

##### Agreement concerning the International Carriage of Dangerous Goods by Road (ADR) - Additional information

Classification code C1

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Danger label(s) 8



Special provisions (SP) 520

Excepted quantities (EQ) E1

Limited quantities (LQ) 5 L

Transport category (TC) 3

Tunnel restriction code (TRC) E

Hazard identification No 80

Emergency Action Code 2R

### Regulations concerning the International Carriage of Dangerous Goods by Rail (RID) - Additional information

Classification code C1

Danger label(s) 8



Special provisions (SP) 520

Excepted quantities (EQ) E1

Limited quantities (LQ) 5 L

Transport category (TC) 3

Hazard identification No 80

### International Maritime Dangerous Goods Code (IMDG) - Additional information

Marine pollutant -

Danger label(s) 8



Special provisions (SP) 223

Excepted quantities (EQ) E1

Limited quantities (LQ) 5 L

EmS F-A, S-B

Stowage category C

Segregation group 1 - Acids

### International Civil Aviation Organization (ICAO-IATA/DGR) - Additional information

Danger label(s) 8



Special provisions (SP) A3

Excepted quantities (EQ) E1

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Limited quantities (LQ)

1 L

### SECTION 15: Regulatory information

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

##### Relevant provisions of the European Union (EU)

###### Deco-Paint Directive

VOC content	1 %
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###### Industrial Emissions Directive (IED)

VOC content	1 %
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###### Directive on the restriction of the use of certain hazardous substances in electrical and electronic equipment (RoHS)

none of the ingredients are listed

###### Regulation concerning the establishment of a European Pollutant Release and Transfer Register (PRTR)

none of the ingredients are listed

###### Water Framework Directive (WFD)

none of the ingredients are listed

###### Regulation on persistent organic pollutants (POP)

none of the ingredients are listed

###### National regulations (GB)

###### Restrictions according to GB REACH, Annex 17

none of the ingredients are listed

Dangerous substances with restrictions (GB REACH, Annex 17)			
Name of substance	Name acc. to inventory	CAS No	No
Hydrochloric acid Standard volumetric solution 0.1 M (0.1 N)	this product meets the criteria for classification in accordance with Regulation No 1272/2008/EC		3

###### National inventories

Country	Inventory	Status
EU	REACH Reg.	all ingredients are listed

###### Legend

REACH Reg. REACH registered substances

#### 15.2 Chemical safety assessment

Chemical safety assessments for substances in this mixture were not carried out.

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### SECTION 16: Other information

#### Indication of changes (revised safety data sheet)

Section	Former entry (text/value)	Actual entry (text/value)	Safety-relevant
2.2		- Hazardous ingredients for labelling: Hydrochloric Acid	yes
2.3	Results of PBT and vPvB assessment: Does not contain a PBT-/vPvB-substance in a concentration of $\geq 0,1\%$ .	Results of PBT and vPvB assessment: Does not contain a PBT-/vPvB-substance at a concentration of $\geq 0,1\%$ .	yes
2.3	Endocrine disrupting properties: Does not contain an endocrine disruptor (EDC) in a concentration of $\geq 0,1\%$ .	Endocrine disrupting properties: Does not contain an endocrine disruptor (ED) at a concentration of $\geq 0,1\%$ .	yes
3.1		Molecular formula: HCL	yes
3.1		Molar mass: 36.46 g/mol	yes
3.2	Description of the mixture: This product does not meet the criteria for classification in any hazard class according to GHS.	Description of the mixture	yes
3.2		Description of the mixture: change in the listing (table)	yes
3.2		Description of the mixture: change in the listing (table)	yes
3.2		Remarks: For full text of abbreviations: see SECTION 16	yes
5.1	Suitable extinguishing media: Water spray, Alcohol resistant foam, BC-powder, Carbon dioxide (CO <sub>2</sub> )	Suitable extinguishing media: Water spray, BC-powder, Carbon dioxide (CO <sub>2</sub> )	yes
5.2		Hazardous combustion products: Carbon monoxide (CO), Carbon dioxide (CO <sub>2</sub> )	yes
6.4	Reference to other sections: Personal protective equipment: see section 8. Incompatible materials: see section 10. Disposal considerations: see section 13.	Reference to other sections: Hazardous combustion products: see section 5. Personal protective equipment: see section 8. Incompatible materials: see section 10. Disposal considerations: see section 13.	yes
7.1		- Handling of incompatible substances or mixtures	yes
7.1		Keep away from: Caustic solutions	yes
8.1	Control parameters: Occupational exposure limit values (Workplace Exposure Limits) this information is not available	Control parameters	yes
8.1		Occupational exposure limit values (Workplace Exposure Limits): change in the listing (table)	yes
9.1	Colour: not determined	Colour: Colorless, clear solution	yes
9.1	Odour: characteristic	Odour: odourless	yes
9.1	pH (value): not determined	pH (value): 1.2 (20 °C) (acid)	yes
9.1	Solubility(ies)	Solubility(ies):	yes

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Section	Former entry (text/value)	Actual entry (text/value)	Safety-relevant
		not determined	
9.1	Water solubility: miscible in any proportion		yes
9.1	Partition coefficient n-octanol/water (log value): this information is not available	Partition coefficient n-octanol/water (log value): not relevant (inorganic)	yes
9.2	Miscibility: Completely miscible with water.		yes
11.1		Acute toxicity estimate (ATE) of components: change in the listing (table)	yes
12.2	Persistence and degradability	Persistence and degradability: Data are not available.	yes
12.2	Biodegradation: The relevant substances of the mixture are readily biodegradable.		yes
12.5	Results of PBT and vPvB assessment: According to the results of its assessment, this substance is not a PBT or a vPvB. Does not contain a PBT-/vPvB-substance in a concentration of $\geq 0,1\%$ .	Results of PBT and vPvB assessment: Does not contain a PBT-/vPvB-substance at a concentration of $\geq 0,1\%$ .	yes
12.6	Endocrine disrupting properties: Does not contain an endocrine disruptor (EDC) in a concentration of $\geq 0,1\%$ .	Endocrine disrupting properties: Does not contain an endocrine disruptor (ED) at a concentration of $\geq 0,1\%$ .	yes
13.1		Waste treatment-relevant information: Recycling/reclamation of other inorganic materials.	yes
14.1		IMDG-Code: UN 1789	yes
14.1		ICAO-TI: UN 1789	yes
14.2		IMDG-Code: HYDROCHLORIC ACID	yes
14.2		ICAO-TI: Hydrochloric acid	yes
14.3		IMDG-Code: 8	yes
14.3		ICAO-TI: 8	yes
14.4		IMDG-Code: III	yes
14.4		ICAO-TI: III	yes
14.7	International Maritime Dangerous Goods Code (IMDG) - Additional information: not assigned	International Maritime Dangerous Goods Code (IMDG) - Additional information	yes
14.7		Marine pollutant: -	yes
14.7		Danger label(s): 8	yes
14.7		Danger label(s): change in the listing (table)	yes
14.7		Special provisions (SP): 223	yes

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14.7		Exempted quantities (EQ): E1	yes
14.7		Limited quantities (LQ): 5 L	yes
14.7		EmS: F-A, S-B	yes
14.7		Stowage category: C	yes
14.7		Segregation group: 1 - Acids	yes
14.7	International Civil Aviation Organization (ICAO-IATA/DGR) - Additional information: not assigned	International Civil Aviation Organization (ICAO-IATA/DGR) - Additional information	yes
14.7		Danger label(s): 8	yes
14.7		Danger label(s): change in the listing (table)	yes
14.7		Special provisions (SP): A3	yes
14.7		Exempted quantities (EQ): E1	yes
14.7		Limited quantities (LQ): 1 L	yes
15.1	VOC content: 0 %	VOC content: 1 %	yes
15.1	VOC content: 0 %	VOC content: 1 %	yes
15.1		Directive on the restriction of the use of certain hazardous substances in electrical and electronic equipment (RoHS): none of the ingredients are listed	yes
15.1		Regulation concerning the establishment of a European Pollutant Release and Transfer Register (PRTR): none of the ingredients are listed	yes
15.1		Water Framework Directive (WFD): none of the ingredients are listed	yes
15.1		Regulation on persistent organic pollutants (POP): none of the ingredients are listed	yes
15.1		National regulations (GB)	yes
15.1		Restrictions according to GB REACH, Annex 17: none of the ingredients are listed	yes
15.1		Dangerous substances with restrictions (GB REACH, Annex 17): change in the listing (table)	yes
15.1		National inventories	yes
15.1		National inventories: change in the listing (table)	yes
16		Abbreviations and acronyms: change in the listing (table)	yes
16		List of relevant phrases (code and full text as	yes

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Section	Former entry (text/value)	Actual entry (text/value)	Safety-relevant
		stated in section 2 and 3): change in the listing (table)	

### Abbreviations and acronyms

Abbr.	Descriptions of used abbreviations
2000/39/EC	Commission Directive establishing a first list of indicative occupational exposure limit values in implementation of Council Directive 98/24/EC
Acute Tox.	Acute toxicity
ADR	Accord relatif au transport international des marchandises dangereuses par route (Agreement concerning the International Carriage of Dangerous Goods by Road)
ATE	Acute Toxicity Estimate
CAS	Chemical Abstracts Service (service that maintains the most comprehensive list of chemical substances)
Ceiling-C	Ceiling value
DGR	Dangerous Goods Regulations (see IATA/DGR)
EC No	The EC Inventory (EINECS, ELINCS and the NLP-list) is the source for the seven-digit EC number, an identifier of substances commercially available within the EU (European Union)
ED	Endocrine disruptor
EH40/2005	EH40/2005 Workplace exposure limits ( <a href="http://www.nationalarchives.gov.uk/doc/open-government-licence/">http://www.nationalarchives.gov.uk/doc/open-government-licence/</a> )
EINECS	European Inventory of Existing Commercial Chemical Substances
ELINCS	European List of Notified Chemical Substances
EmS	Emergency Schedule
GB REACH	The REACH etc. (Amendment etc.) (EU Exit) Regulations 2019, SI 2019/758 (as amended)
GHS	"Globally Harmonized System of Classification and Labelling of Chemicals" developed by the United Nations
IATA	International Air Transport Association
IATA/DGR	Dangerous Goods Regulations (DGR) for the air transport (IATA)
ICAO	International Civil Aviation Organization
ICAO-TI	Technical instructions for the safe transport of dangerous goods by air
IMDG	International Maritime Dangerous Goods Code
IMDG-Code	International Maritime Dangerous Goods Code
index No	The Index number is the identification code given to the substance in Part 3 of Annex VI to Regulation (EC) No 1272/2008
IOELV	Indicative occupational exposure limit value
NLP	No-Longer Polymer
PBT	Persistent, Bioaccumulative and Toxic
ppm	Parts per million
Press. Gas	Gas under pressure
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals
RID	Règlement concernant le transport International ferroviaire des marchandises Dangereuses (Regulations concerning the International carriage of Dangerous goods by Rail)
Skin Corr.	Corrosive to skin

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Abbr.	Descriptions of used abbreviations
Skin Irrit.	Irritant to skin
STEL	Short-term exposure limit
TWA	Time-weighted average
VOC	Volatile Organic Compounds
vPvB	Very Persistent and very Bioaccumulative
WEL	Workplace exposure limit

### Key literature references and sources for data

Agreement concerning the International Carriage of Dangerous Goods by Road (ADR). Regulations concerning the International Carriage of Dangerous Goods by Rail (RID). International Maritime Dangerous Goods Code (IMDG). Dangerous Goods Regulations (DGR) for the air transport (IATA).

### Classification procedure

Physical and chemical properties: The classification is based on tested mixture.

Health hazards, Environmental hazards: The method for classification of the mixture is based on ingredients of the mixture (additivity formula).

### List of relevant phrases (code and full text as stated in section 2 and 3)

Code	Text
H280	Contains gas under pressure; may explode if heated.
H290	May be corrosive to metals.
H314	Causes severe skin burns and eye damage.
H331	Toxic if inhaled.

### Disclaimer

This information is based upon the present state of our knowledge. This SDS has been compiled and is solely intended for this product.