

according to UK REACH Regulation

# Hydrochloric Acid 4.0 mol/l

Revision date: 29.08.2023

Product code: 12833.xxxxx

Page 1 of 12

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

## 1.1. Product identifier

Hydrochloric Acid 4.0 mol/l

UFI:

RSH4-E1EQ-K005-Q9E0

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

#### Use of the substance/mixture

laboratory reagent, Intended for scientific research and development.

#### Uses advised against

Any non-intended use.

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

Company name:	MORPHISTO GmbH	
Street:	Schumannstr. 142/144	
Place:	D-63069 Offenbach	
Telephone:	+49 (0) 69 / 400 3019-60	Telefax: +49 (0) 69 / 400 3019-64
E-mail:	info@morphisto.de	
Contact person:	Morphisto GmbH	
E-mail:	gefahrstoffmanagement@morphisto.de	
Internet:	http://www.morphisto.de	
1.4. Emergency telephone	Poison Information Center Mainz, Germany, 7	Fel: +49(0)6131/19240

# number:

## **SECTION 2: Hazards identification**

## 2.1. Classification of the substance or mixture

#### **GB CLP Regulation**

Met. Corr. 1; H290 Skin Irrit. 2; H315 Eye Irrit. 2; H319 STOT SE 3; H335

Full text of hazard statements: see SECTION 16.

# 2.2. Label elements

**GB CLP Regulation** 

Hazard components for labelling hydrochloric acid %

Signal word:

Pictograms:



#### **Hazard statements**

H290	May be corrosive to metals.
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H335	May cause respiratory irritation.

## Precautionary statements

P234	Keep only in original packaging.
P261	Avoid breathing Vapour.

## according to UK REACH Regulation

Revision date: 29.08.2023	Product code: 12833.xxxxx	Page 2 of 12
P280	Wear protective gloves/protective clothing/eye protection/face protection.	
P332+P313	If skin irritation occurs: Get medical advice/attention.	
P337+P313	If eye irritation persists: Get medical advice/attention.	
P390	Absorb spillage to prevent material damage.	

#### Labelling of packages where the contents do not exceed 125 ml Signal word: Warning

Pictograms:



## 2.3. Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulating and toxic (PBT) or very persistent and very bioaccumulating (vPvB) at levels of 0.1% or higher. Ecological information: The substance/mixture does not contain any components that are considered to be hazardous according to REACH Article 57(f) or Commission Delegated Regulation (EU) 2017/2100 or Commission Delegated Regulation (EU) 2018/605 in amounts of 0.1 % or more have endocrine disrupting properties. Toxicological information: The substance/mixture does not contain any components that are to be classified according to REACH Article 57(f) or Commission Delegated Regulation (EU) 2017/2100 or Commission Delegated Regulation (EU) 2018/605 in quantities of 0.1 % or more have endocrine disrupting properties.

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

## 3.2. Mixtures

#### Hazardous components

CAS No	Chemical name				
	EC No	Index No	REACH No		
	Classification (GB CLP Regulation)				
7647-01-0	hydrochloric acid %	ochloric acid %			
	231-595-7	017-002-01-X	01-2119484862-27		
	Met. Corr. 1, Skin Corr.	1B, Eye Dam. 1, STOT SE 3; H290 H	314 H318 H335		

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

#### Specific Conc. Limits, M-factors and ATE

CAS No	EC No	Chemical name	Quantity
	Specific Conc. L	imits, M-factors and ATE	
7647-01-0	231-595-7	hydrochloric acid %	10 - < 15 %
		l314: >= 25 - 100 Skin Irrit. 2; H315: >= 10 - < 25 Eye Irrit. 2; H319: >= 10 - < 3; H335: >= 10 - 100	

#### **Further Information**

This product contains no substances of very high concern (SVHC) (>0,1%) which are included in the Candidate List according to Article 59 of REACH.

## SECTION 4: First aid measures

# 4.1. Description of first aid measures

#### **General information**

In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).

## After inhalation

Provide fresh air. Medical treatment necessary. In case of respiratory tract irritation, consult a physician. In the case of lung irritation: Primary treatment using corticoide spray, eg. Auxiloson spray, Pulmicort-dosage-spray.



according to UK REACH Regulation

# Hydrochloric Acid 4.0 mol/l

Revision date: 29.08.2023

Product code: 12833.xxxxx

Page 3 of 12

(Auxiloson and Pulmicort are registered trademarks.)

#### After contact with skin

After contact with skin, wash immediately with plenty of water and soap. Take off immediately all contaminated clothing and wash it before reuse. If skin irritation occurs: Get medical advice/attention. Take off immediately all contaminated clothing.

#### After contact with eyes

After contact with the eyes, rinse with water with the eyelids open for a sufficient length of time, then consult an ophthalmologist immediately. In case of contact with eyes, rinse immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart. Subsequently consult an ophthalmologist.

#### After ingestion

Do NOT induce vomiting. Rinse mouth thoroughly with water. Let water be drunken in little sips (dilution effect). Observe risk of aspiration if vomiting occurs. Never give anything by mouth to an unconscious person or a person with cramps. When in doubt or if symptoms are observed, get medical advice.

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

If swallowed danger of perforation of the esophagus and the stomach (strong corrosive effects).

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

Treat symptomatically.

## **SECTION 5: Firefighting measures**

#### 5.1. Extinguishing media

#### Suitable extinguishing media

Co-ordinate fire-fighting measures to the fire surroundings.

# Unsuitable extinguishing media

High power water jet.

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

Non-flammable. In case of fire may be liberated: Hydrogen chloride (HCI).

#### 5.3. Advice for firefighters

Wear a self-contained breathing apparatus and chemical protective clothing. Full protection suit.

#### Additional information

Suppress gases/vapours/mists with water spray jet. Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water. Co-ordinate fire-fighting measures to the fire surroundings.

#### **SECTION 6: Accidental release measures**

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

#### General advice

Provide adequate ventilation. Do not breathe gas/fumes/vapour/spray. Avoid contact with skin, eyes and clothes. Use personal protection equipment.

#### 6.2. Environmental precautions

Do not allow to enter into surface water or drains. Prevent spread over a wide area (e.g. by containment or oil barriers).

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

#### For cleaning up

Absorb with liquid-binding material (sand, diatomaceous earth, acid- or universal binding agents). Treat the recovered material as prescribed in the section on waste disposal.

#### Other information

Treat the recovered material as prescribed in the section on waste disposal. Absorb with liquid-binding material (sand, diatomaceous earth, acid- or universal binding agents). Clean contaminated objects and areas thoroughly observing environmental regulations.



# Hydrochloric Acid 4.0 mol/l

according to UK REACH Regulation

Revision date: 29.08.2023

Product code: 12833.xxxxx

Page 4 of 12

# 6.4. Reference to other sections

Safe handling: see section 7 Personal protection equipment: see section 8 Disposal: see section 13

# **SECTION 7: Handling and storage**

#### 7.1. Precautions for safe handling

#### Advice on safe handling

If handled uncovered, arrangements with local exhaust ventilation have to be used. Do not breathe gas/fumes/vapour/spray. Wear suitable protective clothing. (See section 8.) Conditions to avoid: aerosol or mist formation Avoid contact with skin, eyes and clothes.

## Advice on protection against fire and explosion

Usual measures for fire prevention.

#### Advice on general occupational hygiene

Remove contaminated, saturated clothing immediately. Draw up and observe skin protection programme. Wash hands and face before breaks and after work and take a shower if necessary. When using do not eat, drink, smoke, sniff. Always close containers tightly after the removal of product.

#### Further information on handling

Advices on general occupational hygiene: See section 8.

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

#### Requirements for storage rooms and vessels

Keep container tightly closed. Keep locked up. Store in a place accessible by authorized persons only. Provide adequate ventilation as well as local exhaustion at critical locations. Unsuitable container/equipment material: Metal. Suitable material for Container: polyethylene. Glass.

#### Hints on joint storage

Do not store together with: Peroxides. Radioactive substances. Infectious substances. Oxidizing solids. Oxidizing liquids. Food and fodder.

## Further information on storage conditions

Recommended storage temperature: 15-25 °C Protect against: frost. UV-radiation/sunlight. heat. Humidity

## 7.3. Specific end use(s)

See section 1.

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

# 8.1. Control parameters

#### **Exposure limits (EH40)**

CAS No	Substance	ppm	mg/m³	fibres/ml	Category	Origin
7647-01-0	Hydrogen chloride (gas and aerosol mists)	1	2		TWA (8 h)	WEL
		5	8		STEL (15 min)	WEL

#### 8.2. Exposure controls







according to UK REACH Regulation

# Hydrochloric Acid 4.0 mol/l

Revision date: 29.08.2023

Product code: 12833.xxxxx

Page 5 of 12

## Appropriate engineering controls

If handled uncovered, arrangements with local exhaust ventilation have to be used. Do not breathe gas/fumes/vapour/spray. Provide adequate ventilation.

# Individual protection measures, such as personal protective equipment

#### Eye/face protection

Suitable eye protection: goggles. Wear eye/face protection. EN 166

#### Hand protection

When handling with chemical substances, protective gloves must be worn with the CE-label including the four control digits. The quality of the protective gloves resistant to chemicals must be chosen as a function of the specific working place concentration and quantity of hazardous substances. 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. Wear suitable gloves. Suitable material:

FKM (fluororubber). - Thickness of glove material: 0,4 mm

Breakthrough time >= 8 h

Butyl rubber. - Thickness of glove material: 0,5 mm

Breakthrough time >= 8 h

CR (polychloroprenes, Chloroprene rubber). - Thickness of glove material: 0,5 mm

Breakthrough time >= 8 h

NBR (Nitrile rubber). - Thickness of glove material: 0,35 mm

Breakthrough time >= 8 h

PVC (Polyvinyl chloride). - Thickness of glove material: 0,5 mm

Breakthrough time >= 8 h

The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

Before using check leak tightness / impermeability.

#### Skin protection

Use of protective clothing. Suitable protective clothing: Lab apron. Minimum standard for preventive measures while handling with working materials are specified in the TRGS 500 (D).

#### **Respiratory protection**

In case of inadequate ventilation wear respiratory protection. Respiratory protection necessary at: exceeding exposure limit values Suitable respiratory protective equipment: gas filtering equipment (EN 141). Type: E

#### Environmental exposure controls

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

#### **SECTION 9: Physical and chemical properties**

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

Physical state:	liquid	
Colour:	colourless	
Odour:	stinging	
Melting point/freezing point:		No information available.
Boiling point or initial boiling point and		ca. 100 °C
boiling range:		
Flammability:		No information available.
Lower explosion limits:		No information available.
Upper explosion limits:		No information available.
Flash point:		>100 °C
Auto-ignition temperature:		No information available.
Decomposition temperature:		No information available.



according to UK REACH Regulation

Ну	drochloric Acid 4.0 mol/l	
Revision date: 29.08.2023	Product code: 12833.xxxxx	Page 6 of 12
pH-Value (at 20 °C):	0-1	
Viscosity / kinematic:	No information available.	
Water solubility:	miscible.	
(at 20 °C)		
Solubility in other solvents		
No information available.		
Partition coefficient n-octanol/water:	No information available.	
Vapour pressure: (at 20 °C)	Water:23 hPa	
Vapour pressure:	No information available.	
(at 50 °C)		
Density (at 20 °C):	1,06 g/cm³	
Bulk density:	No information available.	
Relative vapour density:	No information available.	
Particle characteristics:	not applicable	
9.2. Other information		
Information with regard to physical hazard class	ses	
Explosive properties		
The product is not: Explosive. none		
Sustaining combustion:	No data available	
Self-ignition temperature Solid:	No information available.	
Gas:	No information available.	
Oxidizing properties		
none		
Other safety characteristics		
Evaporation rate:	No information available.	
Solvent separation test:	No information available.	
Solvent content:	No information available.	
Solid content:	No information available.	
Sublimation point:	No information available.	
Softening point: Pour point:	No information available. No information available.	
Viscosity / dynamic:	No information available.	
Flow time:	No information available.	

# **SECTION 10: Stability and reactivity**

## 10.1. Reactivity

Corrosive to metals. Possibility of hazardous reactions. No information available.

# 10.2. Chemical stability

Stable under normal storage and handling conditions.

## 10.3. Possibility of hazardous reactions

Exothermic reaction with: Base, Peroxides, Oxidizing agent. Refer to chapter 10.5.

# 10.4. Conditions to avoid

heat. UV-radiation/sunlight.

## 10.5. Incompatible materials

Metal. Keep away from: Base, Oxidizing agent, Peroxides. Oxidizing agents, strong. Nitric acid. aldehydes. strong alkalis.Formaldehyde Aluminium. metal. Fluorine. Amines.

#### 10.6. Hazardous decomposition products

Chlorine (Cl2).



according to UK REACH Regulation

# Hydrochloric Acid 4.0 mol/l

Revision date: 29.08.2023

Product code: 12833.xxxxx

Page 7 of 12

#### **SECTION 11: Toxicological information**

#### 11.1. Information on hazard classes as defined in GB CLP Regulation

#### Acute toxicity

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

#### ATEmix calculated

ATE (oral) > 2000 mg/kg; ATE (dermal) > 2000 mg/kg; ATE (inhalation vapour) > 20 mg/l; ATE (inhalation dust/mist) > 5 mg/l

#### Irritation and corrosivity

Causes skin irritation.

Causes serious eye irritation.

#### Sensitising effects

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

#### Carcinogenic/mutagenic/toxic effects for reproduction

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

#### STOT-single exposure

May cause respiratory irritation. (hydrochloric acid %)

#### 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

#### Endocrine disrupting properties

This product does not contain a substance that has endocrine disrupting properties with respect to humans as no components meets the criteria.

#### Other information

The mixture is classified as hazardous according to regulation (EC) No 1272/2008 [CLP].

## **SECTION 12: Ecological information**

#### 12.1. Toxicity

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

CAS No	Chemical name						
	Aquatic toxicity Dose			[h]   [d]	Species	Source	Method
7647-01-0	hydrochloric acid %						
	Acute fish toxicity LC50 862 mg/l				Leuciscus idus		

#### 12.2. Persistence and degradability

The methods for determining the biological degradability are not applicable to inorganic substances.

## 12.3. Bioaccumulative potential

No information available.

# 12.4. Mobility in soil

No information available.

# 12.5. Results of PBT and vPvB assessment

The substances in the mixture do not meet the PBT/vPvB criteria according to UK REACH.

#### 12.6. Endocrine disrupting properties

This product does not contain a substance that has endocrine disrupting properties with respect to non-target organisms as no components meets the criteria.

## 12.7. Other adverse effects



according to UK REACH Regulation

# Hydrochloric Acid 4.0 mol/l

Revision date: 29.08.2023

Product code: 12833.xxxxx

Page 8 of 12

No information available.

# Further information

Avoid release to the environment. Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

#### **SECTION 13: Disposal considerations**

#### 13.1. Waste treatment methods

#### **Disposal recommendations**

Do not allow to enter into surface water or drains. Dispose of waste according to applicable legislation. Contents / container can be disposed of in accordance with national regulations.

#### List of Wastes Code - residues/unused products

060102 WASTES FROM INORGANIC CHEMICAL PROCESSES; wastes from the manufacture, formulation, supply and use (MFSU) of acids; hydrochloric acid; hazardous waste

#### List of Wastes Code - used product

060102 WASTES FROM INORGANIC CHEMICAL PROCESSES; wastes from the manufacture, formulation, supply and use (MFSU) of acids; hydrochloric acid; hazardous waste

#### List of Wastes Code - contaminated packaging

150110 WASTE PACKAGING; ABSORBENTS, WIPING CLOTHS, FILTER MATERIALS AND PROTECTIVE CLOTHING NOT OTHERWISE SPECIFIED; packaging (including separately collected municipal packaging waste); packaging containing residues of or contaminated by hazardous substances; hazardous waste

#### Contaminated packaging

Wash with plenty of water. Completely emptied packages can be recycled.

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

Land transport (ADR/RID)	
14.1. UN number or ID number:	UN 1789
14.2. UN proper shipping name:	HYDROCHLORIC ACID
14.3. Transport hazard class(es):	8
14.4. Packing group:	III
Hazard label:	8
	8
Classification code:	C1
Special Provisions:	520
Limited quantity:	5 L
Excepted quantity:	E1
Transport category:	3
Hazard No:	80
Tunnel restriction code:	E
Inland waterways transport (ADN)	
14.1. UN number or ID number:	UN 1789
14.2. UN proper shipping name:	HYDROCHLORIC ACID
14.3. Transport hazard class(es):	8
14.4. Packing group:	III
Hazard label:	8
	B



# according to UK REACH Regulation

Revision date: 29.08.2023	Hydrochloric Acid 4.0 mol/l Product code: 12833.xxxx	Page 9 of 12
		1 age 3 01 12
Classification code:	C1	
Special Provisions:	520	
Limited quantity: Excepted quantity:	5 L E1	
Marine transport (IMDG)		
14.1. UN number or ID number:	UN 1789 HYDROCHLORIC ACID	
<u>14.2. UN proper shipping name:</u> 14.3. Transport hazard class(es):	8	
14.4. Packing group:	III	
Hazard label:	8	
	8	
Special Provisions:	223	
Limited quantity:	5 L	
Excepted quantity:	E1	
EmS:	F-A, S-B	
Segregation group:	1 - acids	
Air transport (ICAO-TI/IATA-DGR)		
14.1. UN number or ID number:		
14.2. UN proper shipping name:		
<u>14.3. Transport hazard class(es):</u> 14.4. Packing group:	8 	
Hazard label:	8	
Special Provisions:	A3 A803	
Limited quantity Passenger: Passenger LQ:	1 L Y841	
Excepted quantity:	E1	
IATA-packing instructions - Passenger:	852	
IATA-max. quantity - Passenger:	5 L	
IATA-packing instructions - Cargo:	856	
IATA-max. quantity - Cargo:	60 L	
14.5. Environmental hazards		
ENVIRONMENTALLY HAZARDOUS:	No	
14.6. Special precautions for user Warning: strongly corrosive. No inform 14.7. Maritime transport in bulk according to No information available.		
SECTION 15: Regulatory information		
15.1. Safety, health and environmental regu	Ilations/legislation specific for the substance or mixture	
EU regulatory information		
Restrictions on use (REACH, annex XVII) Entry 3, Entry 75	:	
2010/75/EU (VOC):	No information available.	

Revision No: 2,1 - Replaces version: 2,0

No information available.



Hydrochloric Acid 4.0 mol/l		
Revision date: 29.08.2023	Product code: 12833.xxxxx	Page 10 of 12
Information according to 2012/18/EU (SEVESO III):	Not subject to 2012/18/EU (SEVESO III)	
Additional information		
The mixture is classified as hazardous according to regulation (EC) No 1272/2008 [CLP].		
National regulatory information		
Employment restrictions:	Observe restrictions to employment for juveniles according to the 'juve work protection guideline' (94/33/EC).	enile
Water hazard class (D):	1 - slightly hazardous to water	
15.2. Chemical safety assessment		

For the following substances of this mixture a chemical safety assessment has been carried out: hydrochloric acid %

# **SECTION 16: Other information**

#### Changes

This data sheet contains changes from the previous version in section(s): 14,16. Rev. 2.0: 09.08.2023: Individual safety data sheet based on 11822 collect Rev. 2.1: 29.08.2023: Change of transport labelling

#### Abbreviations and acronyms

ADR: Accord européen sur le transport des marchandises dangereuses par Route AwSV: Verordnung über Anlagen zum Umgang mit wassergefährdenden Stoffen AGW: Arbeitsplatzgrenzwert AVV: Abfallverzeichnisverordnung CAS Chemical Abstracts Service CLP: Classification, Labelling and Packaging of substances and mixtures DNEL: Derived No Effect Level d: dav(s) EAKV: Europäisches Abfallverzeichnis gemäß Entwurf Abfallverzeichnisverordnung EINECS: European INventory of Existing Commercial chemical Substances ELINCS: European LIst of Notified Chemical Substances ECHA: European Chemicals Agency EWC: European Waste Catalogue IARC: INTERNATIONAL AGENCY FOR RESEARCH ON CANCER IMDG: International Maritime Code for Dangerous Goods IATA: International Air Transport Association IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA) ICAO: International Civil Aviation Organization ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO) GHS: Globally Harmonized System of Classification and Labelling of Chemicals GefStoffV: Gefahrstoffverordnung (Ordinance on Hazardous Substances, Germany) h: hour LOAEL: Lowest observed adverse effect level LOAEC: Lowest observed adverse effect concentration LC50: Lethal concentration, 50 percent LD50: Lethal dose, 50 percent NOAEL: No observed adverse effect level NOAEC: No observed adverse effect level NLP: No-Longer Polymers N/A: not applicable OECD: Organisation for Economic Co-operation and Development PNEC: predicted no effect concentration PBT: Persistent bioaccumulative toxic RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)



according to UK REACH Regulation

# Hydrochloric Acid 4.0 mol/l

Revision date: 29.08.2023

Product code: 12833.xxxxx

Page 11 of 12

REACH: Registration, Evaluation, Authorisation of Chemicals SVHC: substance of very high concern TRGS Technische Regeln fuer Gefahrstoffe UN: United Nations VOC: Volatile Organic Compounds VwVwS: Verwaltungsvorschrift wassergefaehrdender Stoffe WGK: Wassergefaehrdungsklasse CLP: Classification, labelling and Packaging REACH: Registration, Evaluation and Authorization of Chemicals GHS: Globally Harmonised System of Classification, Labelling and Packaging of Chemicals UN: United Nations CAS: Chemical Abstracts Service DNEL: Derived No Effect Level DMEL: Derived Minimal Effect Level PNEC: Predicted No Effect Concentration ATE: Acute toxicity estimate LL50: Lethal loading, 50% EL50: Effect loading, 50% EC50: Effective Concentration 50% ErC50: Effective Concentration 50%, growth rate NOEC: No Observed Effect Concentration BCF: Bio-concentration factor PBT: persistent, bioaccumulative, toxic vPvB: very persistent, very bioaccumulative ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road) RID: Regulations concerning the international carriage of dangerous goods by rail ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways (Accord européen relatif au transport international des marchandises dangereuses par voies de navigation intérieures) EmS: Emergency Schedules MFAG: Medical First Aid Guide MARPOL: International Convention for the Prevention of Marine Pollution from Ships IBC: Intermediate Bulk Container For abbreviations and acronyms, see table at http://abbrev.esdscom.eu For abbreviations and acronyms, see: ECHA Guidance on information requirements and chemical safety assessment, chapter R.20 (Table of terms and abbreviations).

# Classification for mixtures and used evaluation method according to GB CLP Regulation

Classification	Classification procedure
Met. Corr. 1; H290	On basis of test data
Skin Irrit. 2; H315	Calculation method
Eye Irrit. 2; H319	Calculation method
STOT SE 3; H335	Calculation method

#### Relevant H and EUH statements (number and full text)

H290	May be corrosive to metals.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H335	May cause respiratory irritation.

#### **Further Information**

The information is based on the present level of our knowledge. It does not, however, give assurance of product properties and establishes no contract legal rights. The receiver of our product is singularly responsible



according to UK REACH Regulation

# Hydrochloric Acid 4.0 mol/l

Revision date: 29.08.2023

Product code: 12833.xxxxx

Page 12 of 12

for adhering to existing laws and regulations. Classification according to Regulation (EC) No 1272/2008 [CLP] - Classification procedure:

Health hazards: Calculation method.

Environmental hazards: Calculation method.

Physical hazards: On basis of test data and / or calculated and / or estimated.

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.

(The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)