

## Safety Data Sheet

according to UK REACH Regulation

### Hydrochloric Acid 0.05 %

Revision date: 21.11.2023

Product code: 13514.xxxxx

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

### 1.1. Product identifier

Hydrochloric Acid 0.05 %

UFI: S8E6-31G2-5005-6S7X

### 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. 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 number:

Morphisto GmbH, Tel: +49(0)69 400 3019-60, Mo-Fr.: 09-16 Uhr

## SECTION 2: Hazards identification

### 2.1. Classification of the substance or mixture

#### GB CLP Regulation

This mixture is not classified as hazardous in accordance with GB CLP Regulation.

### 2.2. Label elements

#### Additional advice on labelling

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

### 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

#### Chemical characterization

aqueous solution

#### Hazardous components

none (according to UK REACH Regulation)

#### Further Information

This product contains no substances of very high concern (SVHC) (&gt;0,1%) which are included in the Candidate

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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). Take off contaminated clothing and wash it before reuse.

###### After inhalation

Provide fresh air. In case of respiratory tract irritation, consult a physician.

###### After contact with skin

Wash with plenty of water. Take off contaminated clothing and wash it before reuse. In case of skin irritation, seek medical treatment.

###### After contact with eyes

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

Observe risk of aspiration if vomiting occurs. Rinse mouth immediately and drink plenty of water. Do NOT induce vomiting. Get medical advice/attention.

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

May cause irritation.

##### 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. Carbon dioxide (CO<sub>2</sub>). Dry extinguishing powder. alcohol resistant foam. Atomized water.

###### 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 (HCl). The product itself does not burn.

##### 5.3. Advice for firefighters

In case of fire: Wear self-contained breathing apparatus.

#### SECTION 6: Accidental release measures

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

###### General advice

Do not breathe gas/fumes/vapour/spray. Avoid contact with skin, eyes and clothes. Use personal protection equipment. Ventilate affected area.

Use a positive-pressure air-supplied respirator if there is any potential for an uncontrolled release, exposure levels are not known, or any other circumstances where air-purifying respirators may not provide adequate protection.

###### For non-emergency personnel

Clear danger zone. Follow emergency plan. Consult an expert.

##### 6.2. Environmental precautions

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

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

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**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. Suitable material for diluting or neutralizing: caustic soda, diluted.

**Other information**

Clear contaminated areas thoroughly.

**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**

Avoid contact with skin, eyes and clothes. Use extractor hood (laboratory). Always close containers tightly after the removal of product.

**Advice on protection against fire and explosion**

The product is not: Combustible. Usual measures for fire prevention.

**Advice on general occupational hygiene**

Take off contaminated clothing. Wash hands before breaks and after work. When using do not eat, drink, smoke, sniff. Always close containers tightly after the removal of product.

**Further information on handling**

When using do not eat, drink, smoke, sniff. Wear suitable protective clothing. Take off contaminated clothing and wash it before reuse. Street clothing should be stored separately from work clothing. Wash hands and face before breaks and after work and take a shower if necessary. Draw up and observe skin protection programme. Ensure cleanliness and dryness in the workplace.

**7.2. Conditions for safe storage, including any incompatibilities**
**Requirements for storage rooms and vessels**

Keep container tightly closed. 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**

Protect from direct sunlight. Recommended storage temperature: 15-25°C.

**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/m <sup>3</sup>	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

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#### DNEL/DMEL values

CAS No	Substance		
DNEL type	Exposure route	Effect	Value
7647-01-0	hydrochloric acid %		
Worker DNEL, acute	inhalation	local	15 mg/m <sup>3</sup>
Worker DNEL, long-term	inhalation	local	8 mg/m <sup>3</sup>

#### 8.2. Exposure controls

##### Appropriate engineering controls

Use extractor hood (laboratory). Provide washing facilities at the workplace, provide an eye shower or eyewash bottle and mark them.

##### Individual protection measures, such as personal protective equipment

##### Eye/face protection

Wear eye/face protection. Tightly sealed safety glasses. 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. Pull-over gloves of rubber. EN ISO 374

Suitable material:

(penetration time (maximum wearing period):  $\geq$  8 h):

Butyl rubber. (0,5 mm)

NBR (Nitrile rubber). (0,35 mm)

Protective clothing should be selected, depending on concentration and quantity of the hazardous substance.

The chemical resistance of the products should be discussed with suppliers.

Before using check leak tightness / impermeability.

##### Skin protection

Use of protective clothing. Material, acid-resistant, Lab apron.

##### Respiratory protection

In case of inadequate ventilation wear respiratory protection. Respiratory protection necessary at: exceeding exposure limit values

Insufficient ventilation.

Suitable respiratory protective equipment: Combination filtering device (EN 14387)

Type: E/P2 Identification color: yellow.

The filter class must be suitable for the maximum contaminant concentration (gas/vapour/aerosol/particulates) that may arise when handling the product. If the concentration is exceeded, self-contained breathing apparatus must be used.

Details on the requirements for use and maximum concentrations can be found in the "Rules for the use of respiratory protective devices" (BGR 190).

##### 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:	characteristic
Melting point/freezing point:	ca. 0 °C
Boiling point or initial boiling point and boiling range:	ca. 100 °C

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Flammability:	not determined
Lower explosion limits:	not determined
Upper explosion limits:	not determined
Flash point:	>100 °C
Auto-ignition temperature:	not determined
Decomposition temperature:	not determined
pH-Value (at 20 °C):	1-2
Viscosity / kinematic:	not determined
Water solubility: (at 20 °C)	miscible.
Solubility in other solvents not determined	
Partition coefficient n-octanol/water:	not determined
Vapour pressure: (at 20 °C)	23 hPa
Vapour pressure: (at 50 °C)	123 hPa
Density (at 20 °C):	1,00 g/cm <sup>3</sup>
Relative vapour density:	not determined
Particle characteristics:	not applicable

**9.2. Other information****Information with regard to physical hazard classes**

Explosive properties

The product is not: Explosive.

Sustaining combustion:

Not sustaining combustion

Oxidizing properties

none

**Further Information**

No information available.

**SECTION 10: Stability and reactivity****10.1. Reactivity**

Possibility of hazardous reactions.

**10.2. Chemical stability**

Stable under normal storage and handling conditions.

**10.3. Possibility of hazardous reactions**

Exothermic reaction with: Base, Peroxides, Oxidizing agent. Reacts with metals: Formation of hydrogen

**10.4. Conditions to avoid**

heat. UV-radiation/sunlight.

**10.5. Incompatible materials**

Keep away from: Base, Oxidizing agent, Peroxides. Substances which in contact with water, emit flammable gases.

Oxidizing agents, strong. Nitric acid. aldehydes. strong alkalis. Formaldehyde Aluminium. metal. Fluorine. Amines.

**10.6. Hazardous decomposition products**

In case of fire may be liberated: Hydrogen chloride (HCl).

**SECTION 11: Toxicological information****11.1. Information on hazard classes as defined in GB CLP Regulation**

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**Acute toxicity**

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

**ATEmix calculated**

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

**Irritation and corrosivity**

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

**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**

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

**STOT-repeated exposure**

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

**Aspiration hazard**

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

**11.2. Information on other hazards****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 not 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.

**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**

The Product is not acutely harmful with a high probability to aquatic organisms. At higher pH values, as they occur naturally in water, an increase in toxicity to aquatic organisms is expected.

**Further information**

Avoid release to the environment.

**SECTION 13: Disposal considerations****13.1. Waste treatment methods****Disposal recommendations**

Dispose of waste according to applicable legislation. Non-contaminated packages may be recycled. Hazardous

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waste according to Directive 2008/98/EC (waste framework directive). Consult the local waste disposal expert about waste disposal. Control report for waste code/ waste marking according to (EWC) European Waste Catalogue:

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

160509 WASTES NOT OTHERWISE SPECIFIED IN THE LIST; gases in pressure containers and discarded chemicals; discarded chemicals other than those mentioned in 16 05 06, 16 05 07 or 16 05 08

**List of Wastes Code - used product**

160509 WASTES NOT OTHERWISE SPECIFIED IN THE LIST; gases in pressure containers and discarded chemicals; discarded chemicals other than those mentioned in 16 05 06, 16 05 07 or 16 05 08

**List of Wastes Code - contaminated packaging**

150106 WASTE PACKAGING; ABSORBENTS, WIPING CLOTHS, FILTER MATERIALS AND PROTECTIVE CLOTHING NOT OTHERWISE SPECIFIED; packaging (including separately collected municipal packaging waste); mixed packaging

**Contaminated packaging**

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

**SECTION 14: Transport information****Land transport (ADR/RID)**

<b>14.1. UN number or ID number:</b>	No dangerous good in sense of this transport regulation.
<b>14.2. UN proper shipping name:</b>	No dangerous good in sense of this transport regulation.
<b>14.3. Transport hazard class(es):</b>	No dangerous good in sense of this transport regulation.
<b>14.4. Packing group:</b>	No dangerous good in sense of this transport regulation.

**Inland waterways transport (ADN)**

<b>14.1. UN number or ID number:</b>	No dangerous good in sense of this transport regulation.
<b>14.2. UN proper shipping name:</b>	No dangerous good in sense of this transport regulation.
<b>14.3. Transport hazard class(es):</b>	No dangerous good in sense of this transport regulation.
<b>14.4. Packing group:</b>	No dangerous good in sense of this transport regulation.

**Marine transport (IMDG)**

<b>14.1. UN number or ID number:</b>	No dangerous good in sense of this transport regulation.
<b>14.2. UN proper shipping name:</b>	No dangerous good in sense of this transport regulation.
<b>14.3. Transport hazard class(es):</b>	No dangerous good in sense of this transport regulation.
<b>14.4. Packing group:</b>	No dangerous good in sense of this transport regulation.

**Air transport (ICAO-TI/IATA-DGR)**

<b>14.1. UN number or ID number:</b>	No dangerous good in sense of this transport regulation.
<b>14.2. UN proper shipping name:</b>	No dangerous good in sense of this transport regulation.
<b>14.3. Transport hazard class(es):</b>	No dangerous good in sense of this transport regulation.
<b>14.4. Packing group:</b>	No dangerous good in sense of this transport regulation.

**14.5. Environmental hazards**

ENVIRONMENTALLY HAZARDOUS: No

**14.6. Special precautions for user**

Refer to section 6-8

**14.7. Maritime transport in bulk according to IMO instruments**

not relevant

**SECTION 15: Regulatory information****15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture****EU regulatory information**

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Restrictions on use (REACH, annex XVII):

Entry 75

Information according to 2012/18/EU  
(SEVESO III):

Not subject to 2012/18/EU (SEVESO III)

#### Additional information

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

#### National regulatory information

Water hazard class (D): - - non-hazardous to water

#### 15.2. Chemical safety assessment

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

### SECTION 16: Other information

#### Changes

This data sheet contains changes from the previous version in section(s): 2,5,6,7,8,9,10,11,13,14,15,16.

Rev. 2,0; 10.02.23, Individual safety data sheet based on 15802\_collect

Rev. 2,1; 17.08.2023; general adjustment(s)

Rev. 2,2; 21.11.2023; Change of classification/labeling, Change of transport labelling



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**Abbreviations and acronyms**

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations

Concerning the International Transport of Dangerous Goods by Rail)

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

OSHA: Occupational Safety and Health Administration

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

NOAEL: No observed adverse effect level

LOAEL: Lowest observed adverse effect level

NOAEC: No observed adverse effect level

LOAEC: Lowest observed adverse effect concentration

DNEL: Derived No Effect Level

PNEC: predicted no effect concentration

TSCA: Toxic Substances Control Act

IARC: INTERNATIONAL AGENCY FOR RESEARCH ON CANCER

NTP: National Toxicology Program

SARA: Superfund Amendments and Reauthorization Act

GefStoffV: Gefahrstoffverordnung (Ordinance on Hazardous Substances, Germany)

PBT: Persistent bioaccumulative toxic

SVHC: substance of very high concern

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

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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).

Met. Corr: Corrosive to metals

Skin Corr: Skin corrosion

Eye Dam: Eye damage

STOT SE: Specific target organ toxicity - single exposure

**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 for adhering to existing laws and regulations. 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.

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