

## Safety Data Sheet

according to Regulation (EC) No 1907/2006

### 884-49 Hydrochloric Acid Standard Solution, 1:1 (6N)

Revision date: 18.05.2015

Product code: 88449

Page 1 of 8

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

##### 1.1. Product identifier

884-49 Hydrochloric Acid Standard Solution, 1:1 (6N)

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

###### Use of the substance/mixture

Water analysis

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

Company name: HACH LANGE GmbH  
Street: Willstätterstr. 11  
Place: D-40549 Düsseldorf  
Telephone: +49 (0)211 5288-383  
e-mail: SDS@hach.com  
Internet: www.de.hach.com  
Responsible Department: HACH LANGE Ltd.  
5, Pacific Way  
Salford Manchester M50 1DL - United Kingdom  
Tel. +44 (0) 161 872 1487 \* Fax +44 (0) 161 848 7324  
e-Mail: info-uk@hach.com

HACH LANGE Ltd.  
Unit 1, Chestnut Road Western Industrial Estate  
IRL-Dublin 12  
Tel. +353 (0)1 4602522  
e-Mail: info-ie@hach.com

##### 1.4. Emergency telephone number:

Poison Control Center Mainz: Tel: +49 (0) 6131 19240 - 24 hour emergency service -

#### SECTION 2: Hazards identification

##### 2.1. Classification of the substance or mixture

###### Regulation (EC) No. 1272/2008

Hazard categories:

Substance or mixture corrosive to metals: Met. Corr. 1

Skin corrosion/irritation: Skin Corr. 1B

Serious eye damage/eye irritation: Eye Dam. 1

Specific target organ toxicity - single exposure: STOT SE 3

Hazard Statements:

May be corrosive to metals.

Causes severe skin burns and eye damage.

May cause respiratory irritation.

##### 2.2. Label elements

###### Regulation (EC) No. 1272/2008

###### Hazard components for labelling

hydrochloric acid ... %

Signal word: Danger

Pictograms:



## Safety Data Sheet

according to Regulation (EC) No 1907/2006

### 884-49 Hydrochloric Acid Standard Solution, 1:1 (6N)

Revision date: 18.05.2015

Product code: 88449

Page 2 of 8

**Hazard statements**

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

**Precautionary statements**

P260	Do not breathe dust/fume/gas/mist/vapours/spray.
P271	Use only outdoors or in a well-ventilated area.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P303+P361+P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310	Immediately call a POISON CENTER/doctor.
P390	Absorb spillage to prevent material damage.

**Additional advice on labelling**

The product is classified as dangerous in accordance with Regulation (EC) No. 1272/2008.

**2.3. Other hazards**

None known.

## SECTION 3: Composition/information on ingredients

**3.2. Mixtures**
**Hazardous components**

CAS No	Chemical name	Quantity
	EC No      Index No      REACH No	
	Classification according to Regulation (EC) No. 1272/2008 [CLP]	
7732-18-5	Water	>70 %
	231-791-2	
-	hydrochloric acid ... %	>25 %
	231-595-7      017-002-01-X	
	Skin Corr. 1B, STOT SE 3; H314 H335	

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

## SECTION 4: First aid measures

**4.1. Description of first aid measures**
**General information**

Take off all contaminated clothing immediately.  
Consult a physician. Show this safety data sheet to the doctor in attendance.

**After inhalation**

Move to fresh air.  
Consult a physician. Show this safety data sheet to the doctor in attendance.

**After contact with skin**

Wash off immediately with plenty of water for at least 15 minutes.  
Consult a physician. Show this safety data sheet to the doctor in attendance.

**After contact with eyes**

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician. Show this safety data sheet to the doctor in attendance.

## Safety Data Sheet

according to Regulation (EC) No 1907/2006

### 884-49 Hydrochloric Acid Standard Solution, 1:1 (6N)

Revision date: 18.05.2015

Product code: 88449

Page 3 of 8

#### After ingestion

Clean mouth with water and drink afterwards plenty of water. Do NOT induce vomiting.  
Consult a physician. Show this safety data sheet to the doctor in attendance.

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

Irritation and corrosion

#### 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

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. The product itself does not burn.

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

Fire may liberate hazardous vapours. Gives off hydrogen by reaction with metals.

### 5.3. Advice for firefighters

In the event of fire, wear self-contained breathing apparatus. In order to avoid contact with skin, keep a safety distance and wear suitable protective clothing.

#### Additional information

Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

## SECTION 6: Accidental release measures

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

Use personal protective equipment.

### 6.2. Environmental precautions

Do not flush into surface water or sanitary sewer system.

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

Soak up with inert absorbent material and dispose of as hazardous waste.

### 6.4. Reference to other sections

13. Disposal considerations

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

#### Advice on safe handling

Use only in well-ventilated areas. Do not breathe vapours/dust.

#### Advice on protection against fire and explosion

See also section 5

#### Further information on handling

Avoid contact with skin, eyes and clothing.

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

#### Requirements for storage rooms and vessels

Keep tightly closed in a dry, cool and well-ventilated place. Protect against light.

### 7.3. Specific end use(s)

Reagent for analysis

## SECTION 8: Exposure controls/personal protection

## Safety Data Sheet

according to Regulation (EC) No 1907/2006

### 884-49 Hydrochloric Acid Standard Solution, 1:1 (6N)

Revision date: 18.05.2015

Product code: 88449

Page 4 of 8

#### 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

##### Additional advice on limit values

None known.

#### 8.2. Exposure controls

##### Appropriate engineering controls

Technical measures and appropriate working operations should be given priority over the use of personal protective equipment.

##### Protective and hygiene measures

The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Wash hands before breaks and after work.

##### Eye/face protection

Safety glasses with side-shields

##### Hand protection

Use barrier skin cream.

Chemical resistant gloves made of butyl rubber or nitrile rubber category III according to EN 374. In full contact:

Gloves material: Viton, Layer thickness: 0.70 mm, Breakthrough time: >480 min. In splash contact: Glove

material: nitrile rubber, Layer thickness 0,20 mm, Breakthrough time: > 30 min

##### Respiratory protection

Breathing apparatus only if aerosol or dust is formed. Recommended Filter type: ABEK-filter

##### Environmental exposure controls

Remove and wash contaminated clothing before re-use.

## SECTION 9: Physical and chemical properties

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

Physical state:	liquid
Colour:	colourless
Odour:	stinging
pH-Value (at 20 °C):	<0,5

##### Changes in the physical state

Melting point:	no data available
Initial boiling point and boiling range:	109 °C
Sublimation point:	not applicable
Softening point:	not applicable
Pour point:	not applicable
Flash point:	not applicable

##### Flammability

Solid:	not applicable
Gas:	not applicable

##### Explosive properties

not applicable

## Safety Data Sheet

according to Regulation (EC) No 1907/2006

### 884-49 Hydrochloric Acid Standard Solution, 1:1 (6N)

Revision date: 18.05.2015

Product code: 88449

Page 5 of 8

Lower explosion limits:	not applicable
Upper explosion limits:	not applicable
Ignition temperature:	not applicable
<b>Auto-ignition temperature</b>	
Solid:	not applicable
Gas:	not applicable
Decomposition temperature:	not applicable
<b>Oxidizing properties</b>	
not applicable	
Vapour pressure:	no data available
Density (at 20 °C):	1,093 g/cm <sup>3</sup>
Bulk density:	not applicable
Water solubility: (at 20 °C)	completely soluble
<b>Solubility in other solvents</b>	
no data available	
Partition coefficient:	no data available
Viscosity / dynamic:	no data available
Viscosity / kinematic:	no data available
Flow time:	no data available
Vapour density: (at 20 °C)	>1
Solvent separation test:	no data available
Solvent content:	no data available
<b>9.2. Other information</b>	
Solid content:	no data available

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

Corrosive to metals

### 10.2. Chemical stability

Stable under recommended storage conditions.

### 10.3. Possibility of hazardous reactions

Reacts with the following substances: Bases, Metals

### 10.4. Conditions to avoid

Extremes of temperature and direct sunlight.

### 10.5. Incompatible materials

Bases, Metals, Oxidizing agents

### 10.6. Hazardous decomposition products

Gives off hydrogen by reaction with metals. Heating can release hazardous gases.

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

#### Acute toxicity

No data is available on the product itself.

## Safety Data Sheet

according to Regulation (EC) No 1907/2006

### 884-49 Hydrochloric Acid Standard Solution, 1:1 (6N)

Revision date: 18.05.2015

Product code: 88449

Page 6 of 8

CAS No	Chemical name				
	Exposure route	Dose	Species	Source	Method
-	hydrochloric acid ... %				
	dermal	LD50 mg/kg	>5010		

#### Irritation and corrosivity

Causes skin and eye burns.

#### Sensitising effects

No known effect.

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

Contains no ingredient listed as a carcinogen

#### STOT-single exposure

The substance or mixture is classified as specific target organ toxicant, single exposure, category 3 with respiratory tract irritation.

#### STOT-repeated exposure

No known effect.

#### Aspiration hazard

No aspiration toxicity classification

#### Further information

Other dangerous properties can not be excluded. Handle in accordance with good industrial hygiene and safety practice.

## SECTION 12: Ecological information

### 12.1. Toxicity

Do not flush into surface water or sanitary sewer system.

CAS No	Chemical name					
	Aquatic toxicity	Dose	[h]   [d]	Species	Source	Method
-	hydrochloric acid ... %					
	Acute fish toxicity	LC50	862 mg/l	96 h	Leuciscus idus	

### 12.2. Persistence and degradability

No data is available on the product itself.

### 12.3. Bioaccumulative potential

No data is available on the product itself.

### 12.4. Mobility in soil

no data available

### 12.5. Results of PBT and vPvB assessment

no data available

### 12.6. Other adverse effects

No known effect.

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

#### Advice on disposal

In accordance with local and national regulations.

#### Waste disposal number of waste from residues/unused products

## Safety Data Sheet

according to Regulation (EC) No 1907/2006

### 884-49 Hydrochloric Acid Standard Solution, 1:1 (6N)

Revision date: 18.05.2015

Product code: 88449

Page 7 of 8

160506 WASTES NOT OTHERWISE SPECIFIED IN THE LIST; gases in pressure containers and discarded chemicals; laboratory chemicals, consisting of or containing hazardous substances, including mixtures of laboratory chemicals; hazardous waste

**Waste disposal number of used product**

160506 WASTES NOT OTHERWISE SPECIFIED IN THE LIST; gases in pressure containers and discarded chemicals; laboratory chemicals, consisting of or containing hazardous substances, including mixtures of laboratory chemicals; hazardous waste

#### SECTION 14: Transport information

**Land transport (ADR/RID)**

**14.1. UN number:** UN 1789  
**14.2. UN proper shipping name:** Hydrochloric acid  
**14.3. Transport hazard class(es):** 8  
**14.4. Packing group:** II

**Inland waterways transport (ADN)****Other applicable information (inland waterways transport)**

Not tested

**Marine transport (IMDG)**

**14.1. UN number:** UN 1789  
**14.2. UN proper shipping name:** Hydrochloric acid  
**14.3. Transport hazard class(es):** 8  
**14.4. Packing group:** II  
Marine pollutant: --  
EmS: F-A,S-B

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

**14.1. UN number:** UN 1789  
**14.2. UN proper shipping name:** Hydrochloric acid  
**14.3. Transport hazard class(es):** 8  
**14.4. Packing group:** II

**14.5. Environmental hazards**

ENVIRONMENTALLY HAZARDOUS: no

**14.6. Special precautions for user**

no data available

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

not applicable

**Other applicable information**

Additional Information: This product may be shipped as part of a chemical kit composed of various compatible dangerous goods for analytical or testing purposes. This kit would have the following classification: Proper Shipping Name: Chemical Kit, Hazard Class: 9, UN Number 3316, Package group II, EMS Code: F-A, S-P  
These transport data apply to the entire pack

#### SECTION 15: Regulatory information

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

Water contaminating class (D): 1 - slightly water contaminating

## Safety Data Sheet

according to Regulation (EC) No 1907/2006

### 884-49 Hydrochloric Acid Standard Solution, 1:1 (6N)

Revision date: 18.05.2015

Product code: 88449

Page 8 of 8

#### 15.2. Chemical safety assessment

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

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

##### **Changes**

Revision: 18.05.2015

Safety datasheet sections which have been updated: 2, 4, 11

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

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

##### **Further Information**

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

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