

**Safety Data Sheet**

according to Regulation (EC) No 1907/2006

**134-49 Hydrochloric Acid, 37%**

Revision date: 29.08.2016

Product code: 13449

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**SECTION 1: Identification of the substance/mixture and of the company/undertaking****1.1. Product identifier**

134-49 Hydrochloric Acid, 37%

**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.

Causes serious 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:**

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#### 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.  
 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.  
 P310 Immediately call a POISON CENTER/doctor.  
 P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

#### 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			60-70 %
	231-791-2			
-	hydrochloric acid ... %			36-38 %
	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.

#### After contact with skin

Wash off immediately with plenty of water for at least 15 minutes.  
 Consult a physician.

#### After contact with eyes

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

#### After ingestion

Clean mouth with water and drink afterwards plenty of water. Do NOT induce vomiting. Never give anything by

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mouth to an unconscious person. Consult a physician.

#### **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.  
Avoid contact with skin and eyes.

##### **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.

##### **Hints on joint storage**

Do not store together with Metals, Bases

#### **7.3. Specific end use(s)**

Reagent for analysis

### SECTION 8: Exposure controls/personal protection

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#### 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

##### Skin protection

Avoid contact with skin, eyes and clothing.

##### Respiratory protection

Provide adequate ventilation. Where reasonably practicable this should be achieved by the use of local exhaust ventilation and good general extraction.

##### 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):	0,1

##### Changes in the physical state

Melting point:	- 74 °C
Initial boiling point and boiling range:	53 °C
Sublimation point:	not applicable
Softening point:	not applicable
Pour point:	not applicable
Flash point:	not applicable

##### Flammability

Solid:	not applicable
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Gas: not applicable

**Explosive properties**

not applicable

Lower explosion limits: not applicable

Upper explosion limits: not applicable

Ignition temperature: not applicable

**Auto-ignition temperature**

Solid: not applicable

Gas: not applicable

Decomposition temperature: not applicable

**Oxidizing properties**

not applicable

Vapour pressure: no data available

Density (at 20 °C): 1,194 g/cm<sup>3</sup>

Bulk density: not applicable

Water solubility:  
(at 20 °C) completely soluble**Solubility in other solvents**

soluble

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

**9.2. Other information**

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**

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#### 11.1. Information on toxicological effects

##### Acute toxicity

LC50/inhalation/1h/rat = 3124 ppm

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

##### Irritation and corrosivity

The product causes burns of eyes, skin and mucous membranes.

##### 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

The substance or mixture is not classified as specific target organ toxicant, repeated exposure.

##### Aspiration hazard

No aspiration toxicity classification

##### Specific effects in experiment on an animal

No toxicology information is available.

##### 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

No data is available on the product itself.

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.

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## 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

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)

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

### Inland waterways transport (ADN)

#### Other applicable information (inland waterways transport)

Not tested

### Marine transport (IMDG)

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

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

<b>14.1. UN number:</b>	UN 1789
<b>14.2. UN proper shipping name:</b>	Hydrochloric acid
<b>14.3. Transport hazard class(es):</b>	8
<b>14.4. Packing group:</b>	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

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## SECTION 15: Regulatory information

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

#### National regulatory information

Employment restrictions: Observe restrictions to employment for juvenils according to the 'juvenile work protection guideline' (94/33/EC).

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

### 15.2. Chemical safety assessment

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

## SECTION 16: Other information

### Changes

Revision: 29.08.2016

Safety datasheet sections which have been updated: 2, 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.)*