

**Safety Data Sheet**

according to Regulation (EC) No 1907/2006

**1446949 Pyridine**

Revision date: 12.02.2018

Product code: 1446949

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

1446949 Pyridine

CAS No: 110-86-1  
Index No: 613-002-00-7  
EC No: 203-809-9

**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:  
Flammable liquid: Flam. Liq. 2  
Acute toxicity: Acute Tox. 4  
Acute toxicity: Acute Tox. 4  
Acute toxicity: Acute Tox. 4  
Hazard Statements:  
Highly flammable liquid and vapour.  
Harmful if inhaled.  
Harmful in contact with skin.  
Harmful if swallowed.

**2.2. Label elements****Regulation (EC) No. 1272/2008****Hazard components for labelling**

pyridine

**Signal word:** Warning

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#### Pictograms:



#### Hazard statements

- H225 Highly flammable liquid and vapour.  
H302+H312+H332 Harmful if swallowed, in contact with skin or if inhaled.

#### Precautionary statements

- P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.  
P261 Avoid breathing dust/fume/gas/mist/vapours/spray.  
P270 Do not eat, drink or smoke when using this product.  
P280 Wear protective gloves/protective clothing/eye protection/face protection.  
P302+P352 IF ON SKIN: Wash with plenty of water.  
P312 Call a POISON CENTER/doctor if you feel unwell.

#### 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

### 3.1. Substances

#### Hazardous components

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	Classification according to Regulation (EC) No. 1272/2008 [CLP]			
110-86-1	pyridine			100 %
	203-809-9	613-002-00-7		
	Flam. Liq. 2, Acute Tox. 4, Acute Tox. 4, Acute Tox. 4; H225 H332 H312 H302			

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.  
Show this safety data sheet to the doctor in attendance.

#### After inhalation

- Move to fresh air.  
If symptoms persist, call a physician.

#### After contact with skin

- Wash off immediately with plenty of water for at least 15 minutes.  
If skin irritation persists, call a physician.

#### After contact with eyes

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

#### After ingestion

- Do NOT induce vomiting. Drink 1 or 2 glasses of water.  
Never give anything by mouth to an unconscious person.

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Consult a physician.

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

No known effect.

### **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**

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

Dry powder

Alcohol-resistant foam

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

#### **Unsuitable extinguishing media**

None known.

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

The product itself does not burn.

Fire may liberate hazardous vapours. Carbon dioxide (CO<sub>2</sub>), carbon monoxide (CO), oxides of nitrogen (NO<sub>x</sub>), dense black smoke.

### **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.

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

#### **Additional information**

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

Keep away from fire, sparks and heated surfaces.

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

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

Use personal protective equipment.

### **6.2. Environmental precautions**

Do not let product enter drains.

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

Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust).

Keep in suitable, closed containers for disposal.

### **6.4. Reference to other sections**

13. Disposal considerations

## **SECTION 7: Handling and storage**

### **7.1. Precautions for safe handling**

#### **Advice on safe handling**

Avoid breathing vapours, mist or gas.

Avoid contact with skin and eyes.

#### **Advice on protection against fire and explosion**

None known.

See also section 5

#### **Further information on handling**

General hygiene considerations

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

##### Requirements for storage rooms and vessels

Keep containers tightly closed in a dry, cool and well-ventilated place.

##### Hints on joint storage

Protect from moisture.

##### Further information on storage conditions

Keep away from fire, sparks and heated surfaces.

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

Reagent for analysis

### 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
110-86-1	Pyridine	5	16		TWA (8 h)	WEL
		10	33		STEL (15 min)	WEL

##### Additional advice on limit values

None known.

#### 8.2. Exposure controls

##### Appropriate engineering controls

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

Ensure that eyewash stations and safety showers are close to the workstation location.

##### Protective and hygiene measures

Wash hands before breaks and at the end of workday.

##### 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: &gt;480 min. In splash contact: Glove material: nitrile rubber, Layer thickness 0,20 mm, Breakthrough time: &gt; 30 min

##### Skin protection

Avoid contact with skin, eyes and clothing.

##### Respiratory protection

Ensure adequate ventilation, especially in confined areas.

In the case of vapour formation use a respirator with an approved filter. Recommended Filter type: (gas filter type ) A, Colour brown

##### Environmental exposure controls

Do not empty into drains.

### SECTION 9: Physical and chemical properties

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

Physical state:	Liquid
Colour:	colourless, light yellow
Odour:	odourless

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**Test method**

pH-Value (at 20 °C):	8,5 (0,2M)
<b>Changes in the physical state</b>	
Melting point:	-42 °C
Initial boiling point and boiling range:	115 °C
Sublimation point:	no data available
Softening point:	no data available
:	no data available
Flash point:	20 °C
<b>Flammability</b>	
Solid:	not applicable
Gas:	not applicable
<b>Explosive properties</b>	
not applicable	
Lower explosion limits:	1,8 vol. %
Upper explosion limits:	12,4 vol. %
Ignition temperature:	no data available
<b>Auto-ignition temperature</b>	
Solid:	no data available
Gas:	482 °C
<b>Oxidizing properties</b>	
no data available	
Vapour pressure:	no data available
Vapour pressure:	no data available
Density (at 20 °C):	0,978 g/cm <sup>3</sup>
Bulk density:	no data available
Water solubility: (at 15 °C)	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:	no data available
Evaporation rate:	no data available
Solvent separation test:	no data available
Solvent content:	no data available
<b>9.2. Other information</b>	
Solid content:	no data available
no data available	

**SECTION 10: Stability and reactivity**

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#### 10.1. Reactivity

No information available.

#### 10.2. Chemical stability

Stable under recommended storage conditions.

#### 10.3. Possibility of hazardous reactions

Reacts with the following substances: Nitric acid, Sulphuric acid, Oxidizing agent, Formaldehyde

#### 10.4. Conditions to avoid

Extremes of temperature and direct sunlight.

Exposure to moisture.

#### 10.5. Incompatible materials

No information available.

#### 10.6. Hazardous decomposition products

Fire may liberate hazardous vapours. Carbon dioxide (CO<sub>2</sub>), carbon monoxide (CO), oxides of nitrogen (NO<sub>x</sub>), dense black smoke.

#### **Further information**

Keep away from fire, sparks and heated surfaces.

### SECTION 11: Toxicological information

#### 11.1. Information on toxicological effects

##### **Toxicokinetics, metabolism and distribution**

no data available

##### **Acute toxicity**

No data is available on the product itself.

CAS No	Chemical name				
	Exposure route	Dose	Species	Source	Method
110-86-1	pyridine				
	oral	ATE 500 mg/kg			
	dermal	ATE 1100 mg/kg			
	inhalation vapour	ATE 11 mg/l			
	inhalation aerosol	ATE 1,5 mg/l			

##### **Irritation and corrosivity**

Irritating to eyes.

##### **Sensitising effects**

None known.

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

Contains no ingredient listed as a carcinogen

##### **STOT-repeated exposure**

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

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

No data is available on the product itself.

##### **Additional information on tests**

no data available

##### **Practical experience**

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**Observations relevant to classification**

no data available

**Other observations**

no data 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.  
Ecological injuries are not known or expected under normal use.

**12.2. Persistence and degradability**

no data available

**12.3. Bioaccumulative potential**

no data available

**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 data available

**Further information**

no data available

**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

**Waste disposal number of contaminated packaging**

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

**Contaminated packaging**

Dispose of as unused product.

**SECTION 14: Transport information****Land transport (ADR/RID)****14.1. UN number:** UN1282**14.2. UN proper shipping name:** PYRIDINE

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**14.3. Transport hazard class(es):** 3

**14.4. Packing group:** II

Hazard label: 3



Classification code: F1

Limited quantity: 1 L

Transport category: 2

Hazard No: 33

Tunnel restriction code: D/E

#### Other applicable information (land transport)

Excepted Quantities: E2

#### Inland waterways transport (ADN)

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

Not tested

#### Marine transport (IMDG)

**14.1. UN number:** UN1282

**14.2. UN proper shipping name:** PYRIDINE

**14.3. Transport hazard class(es):** 3

**14.4. Packing group:** II

Hazard label: 3



Marine pollutant: -

Special Provisions: -

Limited quantity: 1 L

EmS: F-E, S-D

#### Other applicable information (marine transport)

Excepted Quantities: E2

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

**14.1. UN number:** UN1282

**14.2. UN proper shipping name:** PYRIDINE

**14.3. Transport hazard class(es):** 3

**14.4. Packing group:** II

Hazard label: 3



Limited quantity Passenger: 1 L

IATA-packing instructions - Passenger: 353

IATA-max. quantity - Passenger: 5 L

IATA-packing instructions - Cargo: 364

IATA-max. quantity - Cargo: 60 L

#### Other applicable information (air transport)

Excepted Quantities: E2

Passenger-LQ: Y341



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**14.5. Environmental hazards**

ENVIRONMENTALLY HAZARDOUS: no

**14.6. Special precautions for user**

Not relevant

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

Not relevant

**Other applicable information**

-

**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). Observe employment restrictions under the Maternity Protection Directive (92/85/EEC) for expectant or nursing mothers.

Water contaminating class (D): 2 - clearly 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: 12.02.2018

Safety datasheet sections which have been updated: 2, 6, 8, 13, 15

Revision: 27.12.2012

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

H225 Highly flammable liquid and vapour.  
H302 Harmful if swallowed.  
H302+H312+H332 Harmful if swallowed, in contact with skin or if inhaled.  
H312 Harmful in contact with skin.  
H332 Harmful if inhaled.

**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.