Scientific Laboratory Supplies - Safety Data Sheet CHE3146

(in accordance with regulation (EU) 2015/830 and regulation (EC) 1272/2008)

Revision: 2.1 Revision date: 16 April 2021
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Section 1. Identification

1.1 Product Identifier CHE3146

Product Name PYRIDINE pure 500ml.

CAS Number 110-86-1

REACH Registration No A registration number is not available as the substance or its uses are exempt, the annual tonnage does not require a registration or the registration is envisaged for a later date.

Molecular Formula C_5H_5N =79.10

1.2 Relevent identified uses of the substance or mixure & uses advised against

Uses of Material Chemical for industrial and laboratory use. Not suitable for domestic use.

1.3 Supplier Scientific Laboratory Supplies

Unit 6, Foresters Avenue
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Nottingham
NG11 2AF
UNITED KINGDOM

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(24hr) 112
(Have this document to hand)

Section 2. Hazards Identification

2.1 Classification of the substance or mixture

Classification according to regulation 1272/2008/EC

Flammable liquid, category 2	H225: Highly flammable liquid and vapour.
Acute toxicity, category 4 (oral)	H302: Harmful if swallowed.
Skin corrosion/irritation, category 2	H315: Causes skin irritation.
Acute toxicity, category 4 (dermal)	H312: Harmful in contact with skin.
Acute toxicity, category 4 (inhalation)	H332: Harmful if inhaled.
Serious eye damage/irritation, category 2	H319: Causes serious eye irritation.

2.2 Label elements

Labelling according to regulation 1272/2008/EC

Signal word Danger

Hazard Pictograms

Hazard Statements	Highly flammable liquid and vapour. Harmful if inhaled. Harmful in contact with skin. Harmful if swallowed. Causes skin irritation. Causes serious eye irritation.
Precautionary Statements	Keep away from heat / sparks/open flames/hot surfaces - No smoking. Wear protective gloves / protective clothing. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do and continue rinsing. IF ON SKIN: Wash with plenty of soap and water.

Section 3. Composition

3.1 Substances

Component	CAS No.	EEC No.	REACH No.	Conc w/w	CLP Classification (1272/2008/CE)
Pyridine	110-86-1	203-809-9		>99%	Flam. Liq. 2,Acute Tox. 4 (O),Skin Irrit. 2,Acute Tox. 4 (D),Acute Tox. 4 (I),Eye Irrit. 2

Section 4. First Aid

4.1 Description of first aid measures

Eyes	Irrigate thoroughly with plenty of water for at least 10 minutes, holding the eye open. OBTAIN MEDICAL ATTENTION.
Skin	Wash off skin thoroughly with water. Remove contaminated clothing immediately and wash before re-use. In severe cases or if exposure has been great, OBTAIN MEDICAL ATTENTION.
Inhalation	Remove from exposure. Keep warm and at rest. If there is difficulty in breathing give oxygen if available. If breathing stops or shows signs of failing, apply artificial resuscitation. If unconscious place in the recovery position. OBTAIN MEDICAL ATTENTION URGENTLY.
Ingestion	If conscious give plenty of water to drink. Do not induce vomiting. If there is difficulty in breathing give oxygen if available. If breathing stops or shows signs of failing, apply artificial resuscitation. If unconscious place in the recovery position. OBTAIN MEDICAL ATTENTION URGENTLY.
Personal protection for first aiders	Wear protective gloves / eye protection.

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

No further relevant information available.

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

No further relevant information available.

Section 5. Fire Fighting

5.1 Extinguishing media

Extinguishing Media	Alcohol resistant foam, dry powder, carbon dioxide or vaporising liquid. Use water spray to keep fire exposed containers cool.
Unsuitable Media	Do not use water jet.

5.2 Special hazards arising from the substance or mixture

Hazards	Vapour-air mixtures are explosive. Vapours may flow along surfaces to distant ignition sources and flash back.

5.3 Advice for firefighters

Advice for firefighters	Evacuate area immediately. Keep up wind. Avoid exposure to toxic vapours and fumes. Fire-fighters should wear protective clothing and breathing apparatus.

Section 6. Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal Protection	Ensure no sources of ignition. Avoid breathing vapour. Use approved personal protective equipment. Evacuate area immediately. Do not allow general use of area until it is safe to do so. Beware : vapour is heavier than air and will tend to accumulate at low spots.

6.2 Environmental precautions

Enviromental	Keep material out of sewers, storm drains, surface waters and soil. Notify the Environmental Agency and local Environmental Health Officer if major spillage occurs.

6.3 Methods and material for containment and cleaning up

Major Spillage	Contain and absorb on inert material. Transfer absorbent to salvage container for removal. Wash area down with copious amounts of water.
Minor Spillage	Contain and absorb on inert material. Transfer absorbent to container for removal. Allow solvent to evaporate in remote area, then dispose of absorbent as solid chemical waste. Wash area down with copious amounts of water.

6.4 Reference to other sections

See section 8.2 for information on protective equipment and section 13 for information on disposal.

Section 7. Storage & Handling

7.1 Precautions for safe handling

All transfer systems should be earthed to prevent accumulation of static electricity. Avoid contact with skin and eyes. Do not breath vapours. Do not allow to contaminate clothing.

Ensure Local Exhaust Ventilation maintains vapour concentrations below the recommended limits.

7.2 Conditions for safe storage, including any incompatibilities

Well ventilated, cool, dry storage . Protect from direct sun and store away from sources of ignition. Keep containers closed when not in use. Keep well separated from oxidising agents.

7.3 Specific end use(s)

See section 1.2.

Section 8. Workplace Exposure & Personal Protection

8.1 Control parameters

Component	CAS No	Concentration	Workplace Exposure Limits			
			Long Term (8hr TWA)		Short Term 15min period)	
Pyridine	110-86-1	>99%	5.0 ppm	10.0 mg/m-3	16.0 ppm	33.0 mg/m-3

Exposure data source(s) IOELV: Indicative Occupational Exposure Limit Value.

8.2 Exposure controls

Respiratory Protection	Use L.E.V. or natural ventilation to maintain vapour concentrations below exposure limits. If not, use a well maintained chemical cartridge organic vapour respirator, or use self contained breathing apparatus.
Hand Protection	Use solvent resistant gloves.
Eye Protection	Use tightly fitting chemical splash proof glasses or goggles.
Skin Protection	Avoid contact with skin. If skin contact or contamination of clothing is likely, protective clothing must be worn.
Special Hazards	No special precautions required.

Section 9. Physical & Chemical Properties

9.1 Information on basic physical and chemical properties

Appearance	Clear colourless to pale yellow liquid.
Odour	Penetrating, nauseating odour and burning taste.
pH	9 @ 20 °C
Boiling Point	115 °C

Melting Point	-42 °C
Flash Point	20 °C (Closed cup)
Upper Flammable Limit	12.4%
Lower Flammable Limit	1.8%
Auto Ignition	900 °C
Explosive Properties	Moderate/severe in confined spaces.
Oxidising Properties	No.
Vapour Pressure	26.7 hPa @ 20°C
Relative Density	0.982
Water Solubility	Completely miscible in water.

9.2 Other information

No data available.

Section 10. Stability & Reactivity

10.1	Reactivity	No data available.
10.2	Chemical Stability	Stable under normal conditions
10.3	Possibility of hazardous reactions	No data available.
10.4	Conditions to Avoid	Hot surfaces, naked flames or other sources of ignition.
10.5	Incompatable Materials	Strong oxidising agents. Mineral acids. Chlorosulphonic acid and sulphur trioxide.
10.6	Hazardous Decomposition Products	Will evolve very toxic fumes of cyanide if involved in a fire or heated to decomposition.

Section 11. Toxicological Information

11.1 Information on toxicological effects

Eyes	Both the vapour and liquid will, be irritating to the eyes but unlikely to cause serious injury.
Skin	Can be absorbed through the skin and may cause irritation and dermatitis. Skin sensitisation and photosensitisation may occur.
LD50 Skin	1000 - 2000 mg/kg Rabbit
Ingestion	Ingestion of large amounts will cause damage to the central nervous system, heart, liver and kidneys.
LD50 Oral	800 - 1600 mg/kg Rat
Inhalation	Exposure to vapour concentrations above the occupational exposure limits will produce irritation of the eyes and respiratory tract. Symptoms include drowsiness, mental confusion and unconsciousness. effects the central nervous system resulting in gastrointestinal tract causing, headache, nausea, giddiness, vomiting, insomnia and anorexia.
LD50 Inhalation	4900 ppm Rat
TCLo	4000ppm
Carcinogenicity	Not considered to be a carcinogen.
Mutagenicity	Not considered to be a mutagen.
Reproductive Effects	At low concentrations possesses no hazard to reproduction or teratogenic effects.
Other Information	The vapour can be detected from its smell at 1ppm. This does not, however, act as a reliable warning due to olfactory fatigue.

Section 12. Ecological

12.1	Toxicity	Moderately toxic to mammals, fish and bacteria.
	LC50 Algal	320 mg/L Green algae (72 hours)
	LC50 Crustacea	320 mg/L Daphnia magna (48 hours)
	LC50 Fish	560 - 1000 mg/L Fish
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 & vPvB assessment	Assessment not required.
12.6	Other adverse effects	None known at present.

Section 13. Disposal Considerations

13.1 Waste treatment methods

Disposal Methods	Dispose of in a licensed incinerator for organic solvents. Do not dispose of as domestic waste. Never dispose of into water courses or sewerage systems due to high risk of explosion.
Contaminated Packaging	Use a licensed waste disposer. Do not attempt to burn any residual liquids due to risk of explosion.

Section 14. Transport Information

14.1	**UN Number**	1282
14.2	**Proper Shipping Name**	Pyridine
14.3	**Transport classes**	
	UN classification	3
	Subsidiary hazard(s)	None
	Transport category	2
	ADR Hazard ID	33
	Tunnel Restriction Code	D/E
14.4	**Packing Group**	II
14.5	**Environment hazards**	See section 12.
14.6	**Special precautions for user**	No special precautions required.
14.7	**Transport in bulk**	Not transported in bulk.

Section 15. Regulatory Information

15.1 Safety, health and environment regulations specific for subtance/mixture.

Classification, Labeling & Packaging of Substances & Mixtures Regulations (1272/2008/CE)

Classification	Flammable liquid, category 2; Acute toxicity, category 4 (oral); Skin corrosion/irritation, category 2; Acute toxicity, category 4 (dermal); Acute toxicity, category 4 (inhalation); Serious eye damage/irritation, category 2
Signal word	Danger
Hazard Pictograms	
Hazard Statements	H225, H332, H312, H302, H315, H319 Highly flammable liquid and vapour. Harmful if inhaled. Harmful in contact with skin. Harmful if swallowed. Causes skin irritation. Causes serious eye irritation.
Precautionary Statements	P210, P280, P305+P351+P338, P302+P352 Keep away from heat / sparks/open flames/hot surfaces - No smoking. Wear protective gloves / protective clothing. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do and continue rinsing. IF ON SKIN: Wash with plenty of soap and water.

15.2 Chemical safety assessment

Assessment not required.

Section 16. Other Information

The information contained in this document only covers the hazards presented by this material, it DOES NOT constitute a workplace risk assessment. See sections 11 for toxicological information and section 12 for ecological information.

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