UN1282 Pyridine AGR, ACS, Ph Eur

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Date of issue: 23/09/2016 Revision date: 14/10/2022 Supersedes version of: 19/04/2018 Version: 1.2

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

1.1. Product identifier

Product form	:	Substance
Trade name	:	UN1282 Pyridine AGR, ACS, Ph Eur
Chemical name	:	pyridine
IUPAC name	:	pyridine
EC Index-No.	:	613-002-00-7
EC-No.	:	203-809-9
CAS-No.	:	110-86-1
Product code	:	PYRI-00A

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

1.2.1. Relevant identified uses

Main use category : Laboratory use

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

labbox labware s.l.
Migjorn, 1
P.O. Box Barcelona (SPAIN)
08338 Premia de Dalt – SPAIN
ES
T +34 937 07 79 70 - F +34 937 909 532
info@labbox.com - www.labbox.com

1.4. Emergency telephone number

Emergency number : +34 937 077 970 (For technical information_Office Hours) In case of medical emergency phone 112 or to your local emergency number.

Country	Organisation/Company	Address	Emergency number	Comment
United Kingdom	National Poisons Information Service (Belfast Centre) Royal Victoria Hospital	Grosvenor Road BT12 6BA	0344 892 0111	

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Flammable liquids, Category 2	H225
Acute toxicity (inhal.), Category 4	H332
Acute toxicity (dermal), Category 4	H312
Acute toxicity (oral), Category 4	H302

Full text of H and EUH statements: see section 16

Adverse physicochemical, human health and environmental effects

No additional information available

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP) :



GHS02 GHS07

Signal word (CLP) : Danger

Hazard statements (CLP) : H225 - Highly flammable liquid and vapour.
H332 - Harmful if inhaled.
H312 - Harmful in contact with skin.
H302 - Harmful if swallowed.

Precautionary statements (CLP) : P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P233 - Keep container tightly closed.
P302+P352 - IF ON SKIN: Wash with plenty of water.

2.3. Other hazards

No additional information available

SECTION 3: Composition/information on ingredients

3.1. Substances

Substance type : Mono-constituent

Name	Product identifier	%
Pyridine	CAS-No.: 110-86-1 EC-No.: 203-809-9 EC Index-No.: 613-002-00-7	≥ 100

3.2. Mixtures

Not applicable

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing. If experiencing respiratory symptoms: Call a poison center or a doctor.

First-aid measures after skin contact : Gently wash with plenty of soap and water. If skin irritation occurs: Get medical advice/attention.

First-aid measures after eye contact : Rinse eyes with water as a precaution. Remove contact lenses, if present and easy to do. Continue rinsing. Consult an ophtalmologist if irritation persists.

First-aid measures after ingestion : Rinse mouth. Do not induce vomiting. Drink plenty of water. If you feel unwell, seek medical advice.

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

Symptoms/effects after inhalation : May cause headache, nausea and irritation of respiratory tract. May cause drowsiness or dizziness.

Symptoms/effects after skin contact : Slight irritation.

Symptoms/effects after eye contact : Causes eye irritation.

Symptoms/effects after ingestion : nausea, vomiting. Abdominal pain.

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

Never give anything by mouth to an unconscious person.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Water spray. ABC-powder.

Unsuitable extinguishing media : Water.

5.2. Special hazards arising from the substance or mixture

Fire hazard : Highly flammable liquid and vapour.

Hazardous decomposition products in case of fire : fume. Toxic fumes may be released.

5.3. Advice for firefighters

Precautionary measures fire : Stop leak if safe to do so.

Firefighting instructions : Exercise caution when fighting any chemical fire.

Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : Remove ignition sources. Avoid dust formation. Do not inhale vapour.

6.1.1. For non-emergency personnel

Emergency procedures : Mechanically ventilate the spillage area.

6.1.2. For emergency responders

Protective equipment : Equip cleanup crew with proper protection. Do not attempt to take action without suitable protective equipment.

Emergency procedures : Stop leak if safe to do so.

6.2. Environmental precautions

Prevent entry to sewers and public waters.

6.3. Methods and material for containment and cleaning up

For containment : Collect spillage.

Methods for cleaning up : Small quantities of liquid spill: take up in non-combustible absorbent material and shovel into container for disposal. Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible.

Other information : Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections

See Heading 8. For further information refer to section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Ensure good ventilation of the work station. Eliminate all ignition sources if safe to do so. Prevent the build-up of electrostatic charge.

Hygiene measures : Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures : Comply with applicable regulations.

Storage conditions : Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Store in a well-ventilated place. Keep container tightly closed.

Storage area : Store in a well-ventilated place. Store away from heat.

Special rules on packaging : Keep only in original container. Store in a closed container.

7.3. Specific end use(s)

Laboratory chemicals.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.1.1 National occupational exposure and biological limit values

UN1282 Pyridine AGR, ACS, Ph Eur (110-86-1)	
EU - Indicative Occupational Exposure Limit (IOEL)	
Local name	Pyridine
IOEL TWA	15 mg/m³
IOEL TWA [ppm]	5 ppm
Remark	skin. SCOEL Recommendations (2004)
France - Occupational Exposure Limits	
Local name	Pyridine
VME (OEL TWA)	15 mg/m³
VME (OEL TWA) [ppm]	5 ppm
VLE (OEL Ceiling/STEL)	30 mg/m³
VLE (OEL Ceiling/STEL) [ppm]	10 ppm
Remark	Valeurs recommandées/admises
Portugal - Occupational Exposure Limits	
Local name	Piridina
OEL TWA [ppm]	1 ppm
Spain - Occupational Exposure Limits	
Local name	Piridina
VLA-ED (OEL TWA) [1]	3 mg/m³
VLA-ED (OEL TWA) [2]	1 ppm
United Kingdom - Occupational Exposure Limits	
Local name	Pyridine
WEL TWA [1]	16 mg/m³
WEL TWA [2]	5 ppm
WEL STEL	33 mg/m³
WEL STEL (ppm)	10 ppm

8.1.2. Recommended monitoring procedures

No additional information available

8.1.3. Air contaminants formed

No additional information available

8.1.4. DNEL and PNEC

UN1282 Pyridine AGR, ACS, Ph Eur (110-86-1)	
DNEL/DMEL (Workers)	
Acute - systemic effects, dermal	0,42 mg/kg bodyweight/day

UN1282 Pyridine AGR, ACS, Ph Eur (110-86-1)	
Acute - systemic effects, inhalation	7,5 mg/m³
Long-term - systemic effects, dermal	0,14 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	2,5 mg/m³
DNEL/DMEL (General population)	
Long-term - systemic effects,oral	0,07 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	0,6 mg/m³
Long-term - systemic effects, dermal	0,07 mg/kg bodyweight/day
PNEC (Water)	
PNEC aqua (freshwater)	0,3 mg/l
PNEC aqua (marine water)	0,03 mg/l
PNEC aqua (intermittent, freshwater)	3 mg/l
PNEC (Sediment)	
PNEC sediment (freshwater)	3,2 mg/kg dwt
PNEC sediment (marine water)	0,32 mg/kg dwt
PNEC (Soil)	
PNEC soil	0,46 mg/kg dwt
PNEC (STP)	
PNEC sewage treatment plant	2 mg/l

8.1.5. Control banding

No additional information available

8.2. Exposure controls

8.2.1. Appropriate engineering controls

Appropriate engineering controls:
Do not inhale vapour. Ensure good ventilation of the work station. Use a receptor hood for fumes/vapours.

8.2.2. Personal protection equipment

Personal protective equipment:
EN 374.

Personal protective equipment symbol(s):



8.2.2.1. Eye and face protection

Eye protection:
Safety glasses

8.2.2.2. Skin protection

Hand protection:
protective gloves

8.2.2.3. Respiratory protection

Respiratory protection:
Wear appropriate mask

8.2.2.4. Thermal hazards

No additional information available

8.2.3. Environmental exposure controls

Other information:

The present safety data sheet is consistent with the specific conditions relied on to justify the registration of the substance in accordance with Article 17 or 18 of the REACH regulation. Do not eat, drink or smoke during use. Wash hands with water as a precaution.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	:	Liquid
Colour	:	light yellow.
Appearance	:	Liquid.
Molecular mass	:	79,11 g/mol
Odour	:	Not available
Odour threshold	:	Not available
Melting point	:	-41,6 °C Atm. press.: 1,013 hPa
Freezing point	:	Not available
Boiling point	:	115,2 °C Atm. press.: 1,013 hPa
Flammability	:	Not available
Explosive limits	:	Not available
Lower explosion limit	:	1,8 vol %
Upper explosion limit	:	12,4 vol %
Flash point	:	20 °C Atm. press.: 1,013 hPa
Auto-ignition temperature	:	482 °C
Decomposition temperature	:	Not available
pH	:	8,81 Temp.: 20 °C Concentration: 100 vol%
Viscosity, kinematic	:	0,897 mm²/s
Viscosity, dynamic	:	0,879 mPa·s Temp.: 'other:25.0°C' Parameter: 'dynamic viscosity (in mPa s)'
Solubility	:	Soluble in water. Soluble in ethanol. Soluble in ether. Soluble in acetone. Soluble in chloroform. Soluble in petroleum spirit. Soluble in ligroin. Soluble in oils/fats. Water: 100 % Ethanol: 100 % Acetone: 100 %
Partition coefficient n-octanol/water (Log Kow)	:	Not available
Partition coefficient n-octanol/water (Log Pow)	:	0,65 – 1,04
Vapour pressure	:	20 mm Hg Temp.: 25 °C
Vapour pressure at 50 °C	:	100 hPa
Critical pressure	:	56323 hPa
Density	:	0,98 g/ml
Relative density	:	Not available
Relative vapour density at 20 °C	:	2,7
Relative density of saturated gas/air mixture	:	1,03
Particle characteristics	:	Not applicable

9.2. Other information

9.2.1. Information with regard to physical hazard classes

No additional information available

9.2.2. Other safety characteristics

Relative evaporation rate (ether=1)	:	12,5
Specific conductivity	:	5300000 pS/m
VOC content	:	100 %

SECTION 10: Stability and reactivity

10.1. Reactivity

No additional information available

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No additional information available

10.4. Conditions to avoid

No additional information available

10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

No additional information available

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity (oral) : Harmful if swallowed.
Acute toxicity (dermal) : Harmful in contact with skin.
Acute toxicity (inhalation) : Harmful if inhaled.

UN1282 Pyridine AGR, ACS, Ph Eur (110-86-1)	
LD50 oral rat	800 – 1600 mg/kg bodyweight Animal: rat, Guideline: other:No information on method
LD50 dermal rabbit	1000 – 2000 mg/kg bodyweight Animal: rabbit, Guideline: OECD Guideline 402 (Acute Dermal Toxicity)

Skin corrosion/irritation : Not classified
pH: 8,81 Temp.: 20 °C Concentration: 100 vol%

Serious eye damage/irritation : Not classified
pH: 8,81 Temp.: 20 °C Concentration: 100 vol%

Respiratory or skin sensitisation : Not classified
Germ cell mutagenicity : Not classified
Carcinogenicity : Not classified
Reproductive toxicity : Not classified
STOT-single exposure : Not classified
STOT-repeated exposure : Not classified
Aspiration hazard : Not classified

UN1282 Pyridine AGR, ACS, Ph Eur (110-86-1)	
Viscosity, kinematic	0,897 mm²/s

11.2. Information on other hazards

No additional information available

SECTION 12: Ecological information

12.1. Toxicity

Hazardous to the aquatic environment, short-term (acute) : Not classified
Hazardous to the aquatic environment, long-term (chronic) : Not classified

UN1282 Pyridine AGR, ACS, Ph Eur (110-86-1)	
EC50 - Daphnia [1]	320 mg/l Test organisms (species): Daphnia magna
EC50 72h - Algae [1]	320 mg/l Test organisms (species): Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum)

12.2. Persistence and degradability

UN1282 Pyridine AGR, ACS, Ph Eur (110-86-1)	
Persistence and degradability	Readily biodegradable.
Biochemical oxygen demand (BOD)	1,15 g O_2/g substance
Chemical oxygen demand (COD)	0,05 g O_2/g substance
ThOD	2,23 g O_2/g substance
BOD (% of ThOD)	0,52 % ThOD

12.3. Bioaccumulative potential

UN1282 Pyridine AGR, ACS, Ph Eur (110-86-1)	
Partition coefficient n-octanol/water (Log Pow)	0,65 – 1,04
Bioaccumulative potential	Low.

12.4. Mobility in soil

UN1282 Pyridine AGR, ACS, Ph Eur (110-86-1)	
Surface tension	0,038 N/m

12.5. Results of PBT and vPvB assessment

No additional information available

12.6. Endocrine disrupting properties

No additional information available

12.7. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Regional legislation (waste) : Disposal must be done according to official regulations.

Waste treatment methods : Must follow special treatment according to local regulation.

European List of Waste (LoW) code : 15 01 10* - packaging containing residues of or contaminated by dangerous substances
07 01 04* - other organic solvents, washing liquids and mother liquors

SECTION 14: Transport information

In accordance with ADR / IMDG / IATA / ADN / RID

14.1. UN number or ID number

UN-No. (ADR) : UN 1282

UN-No. (IMDG) : UN 1282

UN-No. (IATA) : UN 1282

UN-No. (ADN) : UN 1282

UN-No. (RID) : UN 1282

14.2. UN proper shipping name

Proper Shipping Name (ADR) : PYRIDINE
Proper Shipping Name (IMDG) : PYRIDINE
Proper Shipping Name (IATA) : Pyridine
Proper Shipping Name (ADN) : PYRIDINE
Proper Shipping Name (RID) : PYRIDINE
Transport document description (ADR) : UN 1282 PYRIDINE, 3, II, (D/E)
Transport document description (IMDG) : UN 1282 PYRIDINE, 3, II (17°C c.c.)
Transport document description (IATA) : UN 1282 Pyridine, 3, II
Transport document description (ADN) : UN 1282 PYRIDINE, 3, II
Transport document description (RID) : UN 1282 PYRIDINE, 3, II

14.3. Transport hazard class(es)

ADR

Transport hazard class(es) (ADR) : 3
Danger labels (ADR) : 3
:



IMDG

Transport hazard class(es) (IMDG) : 3
Danger labels (IMDG) : 3
:



IATA

Transport hazard class(es) (IATA) : 3
Danger labels (IATA) : 3
:



ADN

Transport hazard class(es) (ADN) : 3
Danger labels (ADN) : 3
:



RID

Transport hazard class(es) (RID) : 3
Danger labels (RID) : 3
:



14.4. Packing group

Packing group (ADR) : II

Packing group (IMDG)	:	II
Packing group (IATA)	:	II
Packing group (ADN)	:	II
Packing group (RID)	:	II

14.5. Environmental hazards

Dangerous for the environment	:	No
Marine pollutant	:	No
Other information	:	No supplementary information available

14.6. Special precautions for user

Overland transport

Classification code (ADR)	:	F1
Limited quantities (ADR)	:	1l
Excepted quantities (ADR)	:	E2
Packing instructions (ADR)	:	P001, IBC02, R001
Mixed packing provisions (ADR)	:	MP19
Portable tank and bulk container instructions (ADR)	:	T4
Portable tank and bulk container special provisions (ADR)	:	TP2
Tank code (ADR)	:	LGBF
Vehicle for tank carriage	:	FL
Transport category (ADR)	:	2
Special provisions for carriage - Operation (ADR)	:	S2, S20
Hazard identification number (Kemler No.)	:	33
Orange plates	:	
Tunnel restriction code (ADR)	:	D/E
EAC code	:	•2WE
APP code	:	A(fl)

Transport by sea

Limited quantities (IMDG)	:	1 L
Excepted quantities (IMDG)	:	E2
Packing instructions (IMDG)	:	P001
IBC packing instructions (IMDG)	:	IBC02
Tank instructions (IMDG)	:	T4
Tank special provisions (IMDG)	:	TP2
EmS-No. (Fire)	:	F-E
EmS-No. (Spillage)	:	S-D
Stowage category (IMDG)	:	B
Stowage and handling (IMDG)	:	SW2
Flash point (IMDG)	:	17°C c.c.
Properties and observations (IMDG)	:	Colourless or slightly yellow liquid with a pungent odour. Flashpoint: 17°C c.c. Explosive limits: 1.8% to 12.4% Miscible with water. Harmful by inhalation.

Air transport

PCA Excepted quantities (IATA)	:	E2
PCA Limited quantities (IATA)	:	Y341
PCA limited quantity max net quantity (IATA)	:	1L
PCA packing instructions (IATA)	:	353
PCA max net quantity (IATA)	:	5L
CAO packing instructions (IATA)	:	364
CAO max net quantity (IATA)	:	60L
ERG code (IATA)	:	3L

Inland waterway transport

Classification code (ADN)	:	F1
Limited quantities (ADN)	:	1 L

Excepted quantities (ADN)	:	E2
Carriage permitted (ADN)	:	T
Equipment required (ADN)	:	PP, EX, A
Ventilation (ADN)	:	VE01
Number of blue cones/lights (ADN)	:	1

Rail transport

Classification code (RID)	:	F1
Limited quantities (RID)	:	1L
Excepted quantities (RID)	:	E2
Packing instructions (RID)	:	P001, IBC02, R001
Mixed packing provisions (RID)	:	MP19
Portable tank and bulk container instructions (RID)	:	T4
Portable tank and bulk container special provisions (RID)	:	TP2
Tank codes for RID tanks (RID)	:	LGBF
Transport category (RID)	:	2
Colis express (express parcels) (RID)	:	CE7
Hazard identification number (RID)	:	33

14.7. Maritime transport in bulk according to IMO instruments

Not applicable

SECTION 15: Regulatory information

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

15.1.1. EU-Regulations

REACH Annex XVII (Restriction List)

EU restriction list (REACH Annex XVII)	
Reference code	**Applicable on**
3.	UN1282 Pyridine AGR, ACS, Ph Eur
3(a)	UN1282 Pyridine AGR, ACS, Ph Eur
3(b)	UN1282 Pyridine AGR, ACS, Ph Eur
40.	UN1282 Pyridine AGR, ACS, Ph Eur

REACH Annex XIV (Authorisation List)

UN1282 Pyridine AGR, ACS, Ph Eur is not on the REACH Annex XIV List

REACH Candidate List (SVHC)

UN1282 Pyridine AGR, ACS, Ph Eur is not on the REACH Candidate List

PIC Regulation (Prior Informed Consent)

UN1282 Pyridine AGR, ACS, Ph Eur is not subject to Regulation (EU) No 649/2012 of the European Parliament and of the Council of 4 july 2012 concerning the export and import of hazardous chemicals.

POP Regulation (Persistent Organic Pollutants)

UN1282 Pyridine AGR, ACS, Ph Eur is not subject to Regulation (EU) No 2019/1021 of the European Parliament and of the Council of 20 June 2019 on persistent organic pollutants

Ozone Regulation (1005/2009)

Pyridine is not subject to REGULATION (EU) No 1005/2009 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 September 2009 on substances that deplete the ozone layer.

VOC Directive (2004/42)

VOC content : 100 %

Explosives Precursors Regulation (2019/1148)

Contains no substance subject to Regulation (EU) 2019/1148 of the European Parliament and of the Council of 20 June 2019 on the marketing and use of explosives precursors.

Drug Precursors Regulation (273/2004)

Contains no substance subject to Regulation (EC) 273/2004 of the European Parliament and of the Council of 11 February 2004 on the manufacture and the placing on market of certain substances used in the illicit manufacture of narcotic drugs and psychotropic substances.

15.1.2. National regulations

France

Occupational diseases	
Code	Description
RG 84	Conditions caused by liquid organic solvents for professional use: saturated or unsaturated aliphatic or cyclic liquid hydrocarbons and mixtures thereof; liquid halogenated hydrocarbons; nitrated derivatives of aliphatic hydrocarbons; alcohols; glycols, glycol ethers; ketones; aldehydes; aliphatic and cyclic ethers, including tetrahydrofuran; esters; dimethylformamide and dimethylacetamine; acetonitrile and propionitrile; pyridine; dimethylsulfone and dimethylsulfoxide

Germany

Water hazard class (WGK) : WGK 2, Significantly hazardous to water (Classification according to VwVwS, Annex 1 or 2; ID No. 179).

Hazardous Incident Ordinance (12. BImSchV) : Is not subject of the Hazardous Incident Ordinance (12. BImSchV)

Netherlands

SZW-lijst van kankerverwekkende stoffen : The substance is not listed

SZW-lijst van mutagene stoffen : The substance is not listed

NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Borstvoeding : The substance is not listed

NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Vruchtbaarheid : The substance is not listed

NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Ontwikkeling : The substance is not listed

Denmark

Class for fire hazard : Class I-1

Store unit : 1 liter

Classification remarks : F <Flam. Liq. 2>; Emergency management guidelines for the storage of flammable liquids must be followed

Danish National Regulations : Young people below the age of 18 years are not allowed to use the product
Pregnant/breastfeeding women working with the product must not be in direct contact with the product

15.2. Chemical safety assessment

No additional information available

SECTION 16: Other information

Full text of H- and EUH-statements:	
Acute Tox. 4 (Dermal)	Acute toxicity (dermal), Category 4
Acute Tox. 4 (Inhalation)	Acute toxicity (inhal.), Category 4
Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4
Flam. Liq. 2	Flammable liquids, Category 2
H225	Highly flammable liquid and vapour.
H302	Harmful if swallowed.
H312	Harmful in contact with skin.

Full text of H- and EUH-statements:	
H332	Harmful if inhaled.

Safety Data Sheet (SDS), EU

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.