

Safety Data Sheet

according to Regulation (EC) No 1907/2006

1-Methylpyrrolidine

Revision Date: 5/21/2025

Version: 3

1 IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND THE COMPANY/UNDERTAKING

1.1 Product identifier

Product name 1-Methylpyrrolidine

Product code KI-0034

CAS 120-94-5

EC-Number 204-438-5

REACH No. A registration number is not available for this substance as the substance or its uses are exempted from registration, the annual tonnage does not require a registration or the registration is envisaged for a later registration deadline.

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

Identified uses Laboratory chemicals, Manufacture of substances

1.3 Details of the supplier of the safety data sheet

Supplier IoLiTec
Ionic Liquids Technologies GmbH
Im Zukunftspark 9
D – 74076 Heilbronn
Germany

Telephone +49 (0)7131-89839-0

Fax +49 (0)7131-89839-109

Email msds@iolitec.de

1.4 Emergency telephone number

Emergency telephone +49 (0)151-41255671

Safety Data Sheet

according to Regulation (EC) No 1907/2006

1-Methylpyrrolidine

Revision Date: 5/21/2025

Version: 3

2 HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

Classification (REGULATION (EC) No 1272/2008)

Flammable liquid (Category 2)

Acute toxicity, Oral (Category 3)

Acute toxicity, Inhalation (Category 4)

Skin corrosion (Category 1A)

Eye Damage (Category 1)

Hazardous to the aquatic environment, Chronic (Category 2)

2.2 Label elements

Labelling (REGULATION (EC) No 1272/2008)



Pictogram

Signal word

Warning

H-phrases

H225

Highly flammable liquid and vapour.

H301

Toxic if swallowed.

H314

Causes severe skin burns and eye damage.

H332

Harmful if inhaled.

H411

Toxic to aquatic life with long lasting effects.

Safety Data Sheet

according to Regulation (EC) No 1907/2006

1-Methylpyrrolidine

Revision Date: 5/21/2025

Version: 3

P-phrases

P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P233	Keep container tightly closed.
P240	Ground and bond container and receiving equipment.
P241	Use explosion-proof electrical / ventilating / light / equipment.
P242	Use only non-sparking tools.
P243	Take precautionary measures to prevent static discharges.
P260	Do not breathe dust / fume / gas / mist / vapours / spray.
P264	Wash skin thoroughly after handling.
P270	Do not eat, drink or smoke when using this product.
P271	Use only outdoors or in a well-ventilated area.
P273	Avoid release to the environment.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P301 + P330 + P310 + P331	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. Immediately call a POISON CENTER or doctor/physician.
P303 + P361 + P353	IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water.
P304 + P340	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

Safety Data Sheet

according to Regulation (EC) No 1907/2006

1-Methylpyrrolidine

Revision Date: 5/21/2025

Version: 3

P305 + P351 + P338	IF IN EYES: Rinse continuously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing.
P310	Immediately call a POISON CENTER or doctor/physician.
P363	Wash contaminated clothing before reuse.
P370 + P378	In case of fire: Evacuate area.
P403 + P235	Store in a well-ventilated place. Keep cool.
P405	Store locked up.
P391	Collect spillage.

2.3 Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

Ecological information:

The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

Toxicological information:

The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

Safety Data Sheet

according to Regulation (EC) No 1907/2006

1-Methylpyrrolidine

Revision Date: 5/21/2025

Version: 3

3 COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances

1-Methylpyrrolidine

CAS: 120-94-5

EC-Number: 204-438-5

Ingredient name	Contents	Classification
1-Methylpyrrolidine	>98%	Flamm. Liq. 2, Acute Tox. 3, Skin Corr. 1A, Eye Dam. 1, Aquatic Chronic 2

4 FIRST AID MEASURES

4.1 Description of first aid measures

General

Immediately call a doctor/physician. Show this safety data sheet. Wash contaminated clothing before reuse.

Inhalation

Remove victim to fresh air and keep at rest in a position comfortable for breathing. Consult a poison center or doctor.

Ingestion

Do NOT induce vomiting. Rinse mouth with water. Immediately consult a poison center or doctor.

Skin

Take off contaminated clothing and shoes immediately. Wash off with soap and plenty of water. Consult a poison center or doctor.

Eyes

Rinse continuously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing. Immediately call a poison center or doctor.

4.2 Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in the labelling (see

Safety Data Sheet

according to Regulation (EC) No 1907/2006

1-Methylpyrrolidine

Revision Date: 5/21/2025

Version: 3

section 2.2) and/or in section 11

4.3 Indication of any immediate medical attention and special treatment needed

No data available

5 FIRE FIGHTING MEASURES

5.1 Extinguishing media

Use: Water spray, fog or mist. Carbon dioxides (CO₂). Dry chemicals, sand, dolomite etc.

5.2. Special hazards arising from the substance or mixture

Avoid water in straight hose stream, will scatter and spread fire. Keep run-off water out of sewers and water sources. Dike for water control. Vapours may form explosive mixture with air.

5.3. Advice for firefighters

Wear self-contained breathing apparatus as combustion may produce hazardous fumes.

6 ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Wear protective clothing and avoid inhalation of vapor, skin or eye contact.

6.2 Environmental precautions

Avoid washing into water courses. Avoid contaminating public drains or water supply.
[Avoid release to the environment. Collect spillage.](#)

6.3 Methods and materials for containment and cleaning up

Avoid contact with skin or inhalation of spillage, dust or vapor. Avoid dust formation. Collect and reclaim or dispose in sealed containers in license waste. Extinguish all ignition sources. Avoid sparks, flames, heat and smoking. Ventilate.

6.4 Reference to other sections

For disposal see section 13.

Safety Data Sheet

according to Regulation (EC) No 1907/2006

1-Methylpyrrolidine

Revision Date: 5/21/2025

Version: 3

7 HANDLING AND STORAGE

7.1 Precautions for safe handling

Avoid formation of dust and aerosols. Provide appropriate exhaust ventilation at places where dust is formed. [Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Use only outdoors or in a well-ventilated area. Ground and bond container and receiving equipment. Use explosion-proof electrical / ventilating / light / equipment. Take precautionary measures to prevent static discharges. Do not eat, drink or smoke when using this product.](#)

7.2 Conditions for safe storage, including any incompatibilities

Store in cool place. Keep container tightly closed in a dry and well-ventilated place.

Chemical storage. [Store locked up.](#)

[Storage class \(TRGS 510\): LGK 3](#)

7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

8 EXPOSURE CONTROLS AND PERSONAL PROTECTION

8.1 Control parameters

Ingredients with workplace control parameters

8.2 Exposure controls

Eye/face protection

Safety glasses with side-shields conforming to EN166 Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Safety Data Sheet

according to Regulation (EC) No 1907/2006

1-Methylpyrrolidine

Revision Date: 5/21/2025

Version: 3

The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

Body Protection

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

Respiratory protection

For nuisance exposures use type P95 (US) or type P1 (EU EN 143) particle respirator. For higher level protection use type OV/AG/P99 (US) or type ABEK-P2 (EU EN 143) respirator cartridges. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

9 PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

a) Appearance	liquid
b) Color	Colorless to yellow
c) Odor/taste	No characteristic odor.
d) Melting point/freezing point	< -80 °C
e) Initial boiling point	78 – 82 °C
f) Flammability	no data available
g) Upper/lower explosive limits	no data available
h) Flash point	-17.8 °C
i) Autoignition temperature	no data available
j) Decomposition temperature	no data available
k) pH	11.1 at 10 g/L aq. Sol.
l) Viscosity, kinematic	no data available
m) Water solubility	soluble
n) Partition coefficient	no data available
o) Vapor pressure	no data available
p) Density	0.819 g/cm ³

Safety Data Sheet

according to Regulation (EC) No 1907/2006

1-Methylpyrrolidine

Revision Date: 5/21/2025

Version: 3

q) Relative vapor density	no data available
r) Particle characteristics	not relevant
s) Explosive properties	not relevant
t) Oxidizing properties	not relevant

9.2 Other safety information

No data available

10 STABILITY AND REACTIVITY

10.1 Reactivity

No data available

10.2 Chemical stability

Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions

May react strongly with acids.

10.4 Conditions to avoid

Avoid contact to acids and strong oxidizers.

10.5 Incompatible materials

Strong oxidizing agents and acids.

10.6 Hazardous decomposition products

High temperatures generate: Corrosive gases/ vapor/ fumes of: Carbon dioxide (CO₂).
Carbon monoxide (CO). Nitrous gases (NO_x).

11 TOXICOLOGICAL INFORMATION

11.1 Information on hazard classes

Acute toxicity

Acute toxicity, Oral (Cat. 3)

Acute toxicity, Dermal – no data available

Acute toxicity, Inhalation (Cat. 4)

Safety Data Sheet

according to Regulation (EC) No 1907/2006

1-Methylpyrrolidine

Revision Date: 5/21/2025

Version: 3

Skin corrosion/irritation

Skin corrosion (Cat. 1A)

Serious eye damage/eye irritation

Eye damage (Cat. 1)

Respiratory or skin sensitization

no data available

Germ cell mutagenicity

not classified

Carcinogenicity

no data available

Reproductive toxicity

no data available

Specific target organ toxicity - single exposure

no data available

Specific target organ toxicity - repeated exposure

no data available

Aspiration hazard

not classified

Potential health effects

Inhalation Harmful if inhaled.

Ingestion Toxic if swallowed.

Skin Causes severe skin burns.

Eyes Causes serious eye damage.

Signs and Symptoms of Exposure

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

11.2 Information on other hazards

Endocrine disrupting properties

The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated

Safety Data Sheet

according to Regulation (EC) No 1907/2006

1-Methylpyrrolidine

Revision Date: 5/21/2025

Version: 3

regulation (EU) 2017/2100 or Commission Regulation (EU)2018/605 at levels of 0.1% or higher.

Additional Information

RTECS: Not available.

12 ECOLOGICAL INFORMATION

12.1 Toxicity

Hazardous to the aquatic environment, Chronic (Cat. 2)

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

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

12.6 Endocrine disrupting properties

The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU)2018/605 at levels of 0.1% or higher.

12.7 Other adverse effects

No data available

13 DISPOSAL CONSIDERATIONS

Safety Data Sheet

according to Regulation (EC) No 1907/2006

1-Methylpyrrolidine

Revision Date: 5/21/2025

Version: 3

13.1 Waste treatment methods

Contact specialist disposal companies. Dispose of in accordance with Local Authority requirements. Recover and reclaim or recycle, if practical. [Do not dispose in communal waste water.](#)

14 TRANSPORT INFORMATION

14.1 UN number

UN3286

14.2 UN proper shipping name

FLAMMABLE LIQUID, TOXIC, CORROSIVE, N.O.S. (1-Methylpyrrolidine)

14.3 Transport hazard class(es)

ADR/RID: 3 (8, 6.1)

IMDG: 3 (8, 6.1)

IATA: 3 (8, 6.1)

14.4 Packaging group

ADR/RID: II

IMDG: II

IATA: II

14.5 Environmental hazards

ADR/RID: yes

IMDG Marine pollutant: yes

IATA: yes

14.6 Special precautions for user

No data available

15 REGULATORY INFORMATION

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

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

15.2 Chemical safety assessment

no data available

Safety Data Sheet

according to Regulation (EC) No 1907/2006

1-Methylpyrrolidine

Revision Date: 5/21/2025

Version: 3

Country specific information

Germany

WGK: 2

(Self-Classification)

16 OTHER INFORMATION

DISCLAIMER

THE ABOVE INFORMATION IS BELIEVED TO BE CORRECT BUT DOES NOT PURPOSED TO BE ALL INCLUSIVE AND SHALL BE USED ONLY AS A GUIDE. IOLITEC SHALL NOT BE HELD LIABLE FOR ANY DAMAGE RESULTING FROM HANDLING OR FROM CONTACT WITH THE ABOVE PRODUCT. THIS INFORMATION RELATES ONLY TO THE SPECIFIC MATERIAL DESIGNATED AND MAY NOT BE VALID FOR SUCH MATERIAL USED IN COMBINATION WITH ANY OTHER MATERIALS OR ANY PROCESS. IT IS THE USER'S RESPONSIBILITY TO SATISFY HIMSELF AS TO THE SUITABILITY OF SUCH INFORMATION FOR HIS OWN PARTICULAR USE.

IN NO WAY SHALL IOLITEC BE LIABLE FOR ANY CLAIMS, LOSSES OR DAMAGES OF ANY THIRD PARTY OR FOR THE LOST PROFITS OR ANY SPECIAL, INDIRECT, INCIDENTAL, CONSEQUENTIAL OR EXEMPLARY DAMAGES, HOWSOEVER ARISING, EVEN IF THE COMPANY HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.