

Safety Data Sheet

according to Regulation (EC) No 1907/2006

1-Ethyl-3-methylimidazolium nitrate

Revision Date: 5/6/2025

Version: 4

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

1.1 Product identifier

| | |
|--------------|---|
| Product name | 1-Ethyl-3-methylimidazolium nitrate |
| Product code | IL-0005 |
| CAS | 143314-14-1 |
| EC-Number | 626-456-6 |
| 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 |
|---------------------|---------------------|

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2 HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

Classification (REGULATION (EC) No 1272/2008)

Oxidising Solids (Category 2)

Skin Corrosion/ Irritation (Category 2)

Eye Irritation (Category 2)

Specific Target Organ Toxicity after Single Exposure (Category 3)

2.2 Label elements

Labelling (REGULATION (EC) No 1272/2008)

Pictogram



Signal word

Danger

Hazard statements

H-phrases

H272

May intensify fire; oxidiser.

H315

Causes skin irritation.

H319

Causes serious eye irritation.

H335

May cause respiratory irritation.

Precautionary statements

P phrases

P210

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

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| | |
|---------------------|--|
| P220 | Keep away from clothing and other combustible materials. |
| P261 | Avoid breathing dust/fume/gas/mist/vapours/spray. |
| P264 | Wash hands thoroughly after handling. |
| P280: | Wear protective gloves/ protective clothing/ eye protection/ face protection. |
| P302 + P352 | IF ON SKIN: Wash with plenty of water |
| P305 + P351 + P338: | IF IN EYES: Rinse continuously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing. |
| P312 | Call a POISON CENTER or doctor if you feel unwell. |
| P337 + P313 | If eye irritation persists: Get medical advice/attention. |
| P362 + P364 | Take off contaminated clothing and wash it before reuse. |
| P403 + P233 | Store in a well-ventilated place. Keep container tightly closed. |

Reduced labelling for bottles < 125 mL (according to Art. 29.2)

Pictogram



Signal word

Danger

Hazard statements

H-phrases

No Hazard statements required

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Precautionary statements

P phrases

| | |
|------|---|
| P202 | Do not handle until all safety precautions have been read and understood. |
| P220 | Keep away from clothing and other combustible materials. |
| P280 | Wear protective gloves/ protective clothing/ eye protection/ face protection. |

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.

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3 COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances

1-Ethyl-3-methylimidazolium nitrate

CAS: 143314-14-1

EC-Number: 626-456-6

| Ingredient name | Contents | Classification |
|-------------------------------------|----------|--|
| 1-Ethyl-3-methylimidazolium nitrate | >95% | Ox. Sol. (Category 2) Skin Irrit. (Category 2) Eye Irrit. (Category 2) STOT SE (Category 3) |

4 FIRST AID MEASURES

4.1 Description of first aid measures

General

Contaminated clothing should be removed and washed before being reused.

Contaminated clothing should not be allowed out of the work place.

Inhalation

Move the exposed person to fresh air at once. If respiratory problems, provide artificial respiration/oxygen. Get medical attention if you feel unwell.

Ingestion

Immediately rinse mouth and provide fresh air. Do not induce vomiting. Get medical attention if you feel unwell.

Skin

Wash the skin immediately with soap and water. Get medical attention if you feel unwell.

Eyes

Promptly wash eyes with plenty of water while lifting the eye lids. Continue to rinse for at least 15 minutes. Get medical attention if eye irritation persists or if you feel unwell. Continue to rinse.

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4.2 Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in the labelling (see 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. Fire causes formation of toxic gases.

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.

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.

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7 HANDLING AND STORAGE

7.1 Precautions for safe handling

Keep away from heat, sparks and open flame. Do not use in confined spaces without adequate ventilation and/or respirator.

7.2 Conditions for safe storage, including any incompatibilities

Store at moderate temperatures in dry, well-ventilated area. [Chemical storage](#).

[Storage class \(TRGS 510\): LGK 5.1B](#)

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.

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.

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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) Physical state | Solid |
| b) Color | Colorless to beige |
| c) Odor | no characteristic odor |
| d) Melting point/freezing point | 38 °C |
| e) Initial boiling point | no data available |
| f) Flammability | no data available |
| g) Upper/lower explosive limits | no data available |
| h) Flash point | no data available |
| i) Autoignition temperature | no data available |
| j) Decomposition temperature | no data available |
| k) pH | no data available |
| l) Viscosity, kinematic | 17,08 mm ² /s |
| m) Water solubility | soluble |
| n) Partition coefficient | not relevant |
| o) Vapor pressure | no data available |
| p) Density | 1.247 g/cm ³ |
| q) Relative vapor density | not relevant |
| r) Particle characteristics | not relevant |
| s) Explosive properties | no data available |
| t) Oxidizing properties | Oxidizer |

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9.2 Other safety information

No data available.

10 STABILITY AND REACTIVITY

10.1 Reactivity

No data available.

10.2 Chemical stability

No data available. [Oxidizer](#)

10.3 Possibility of hazardous reactions

No data available.

10.4 Conditions to avoid

[Avoid contact to incompatible materials.](#) [Excess heat.](#)

10.5 Incompatible materials

[Strong reducing agents.](#) [Combustible material.](#)

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

[Not classified.](#)

Skin corrosion/irritation

[Category 2](#)

Serious eye damage/eye irritation

[Category 2](#)

Respiratory or skin sensitization

[Not classified.](#)

Germ cell mutagenicity

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Not classified.

Carcinogenicity

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

Reproductive toxicity

Not classified.

Specific target organ toxicity - single exposure

Category 3

Specific target organ toxicity - repeated exposure

Not classified.

Aspiration hazard

Not classified.

Potential health effects

Inhalation May cause respiratory irritation.

Ingestion No data available.

Skin Causes skin irritation

Eyes Causes serious eye irritation.

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

Product:

| | |
|------------|--|
| Assessment | 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. |
|------------|--|

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Additional Information

RTECS: Not available.

12 ECOLOGICAL INFORMATION

12.1 Toxicity

No data available.

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

Product:

Assessment

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

13.1 Waste treatment methods

Contact specialist disposal companies. Dispose of in accordance with Local Authority

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requirements. Recover and reclaim or recycle, if practical. [Do not dispose in communal waste water.](#)

14 TRANSPORT INFORMATION

14.1 UN number

ADR/RID: [UN1479](#)

IMDG: [UN1479](#)

IATA: [UN1479](#)

14.2 UN proper shipping name

ADR/RID: [Oxidizing solid, n.o.s; \(1-Ethyl-3-methylimidazolium nitrate\)](#)

IMDG: [Oxidizing solid, n.o.s; \(1-Ethyl-3-methylimidazolium nitrate\)](#)

IATA: [Oxidizing solid, n.o.s; \(1-Ethyl-3-methylimidazolium nitrate\)](#)

14.3 Transport hazard class(es)

ADR/RID: [5.1](#)

IMDG: [5.1](#)

IATA: [5.1](#)

14.4 Packaging group

ADR/RID: [II](#)

IMDG: [II](#)

IATA: [II](#)

14.5 Environmental hazards

ADR/RID: no

IMDG Marine pollutant: no

IATA: no

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.

Lis

15.2 Chemical safety assessment

No data available.

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Country specific information

Germany

WGK: 3

(Self-Classification)

16 OTHER INFORMATION

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