# Material Safety Data Sheet

**Version: 02**
**Revision Date : 30-7-2025**

| Section 1. Product Information and Company Identification | | | |
|---|---|---|---|
| **Product name** | Isoamyl Alcohol | | |
| **Mol. formula** | C5H12O | **CAS No.** | 123-51-3 |
| **Mol.wt** | 88,15 g/mol | | |
| **manufacturer name** | Pioneers for laboratory chemicals | | |
| **Brand name** | Piochem | | |
| **Address** | Area 540, Industrial Zone 6th October city Giza, Egypt. | | |
| **Website** | www.piochem.com | | |
| **E-mail** | info@piochem.com | | |
| **Phone number** | 0 12 05700001 | | |

## SECTION 2: Hazards identification

### 2.1 Classification of the substance or mixture

**Classification according to Regulation (EC) No 1272/2008**
Flammable liquids (Category 3), H226
Acute toxicity, Inhalation (Category 4), H332
Skin irritation (Category 2), H315
Eye irritation (Category 2), H319
Specific target organ toxicity - single exposure (Category 3), Respiratory system, H335

For the full text of the H-Statements mentioned in this Section, see Section 16.

### 2.2 Label elements

**Labelling according Regulation (EC) No 1272/2008**
Pictogram


Signal word Warning

Hazard statement(s)
H226 Flammable liquid and vapour.

| | |
|---|---|
| H315 | Causes skin irritation. |
| H319 | Causes serious eye irritation. |
| H332 | Harmful if inhaled. |
| H335 | May cause respiratory irritation. |
| Precautionary statement(s) | |
| 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. |
| P280 | Wear eye protection/ face protection. |
| P304 + P340 + P312 | IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or doctor/ physician if you feel unwell. |
| P337 + P313 | If eye irritation persists: Get medical advice/ attention. |
| P403 + P235 | Store in a well-ventilated place. Keep cool. |
| Supplemental Hazard Statements | none |

**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.

## SECTION 3: Composition/information on ingredients

**3.1 Substances**

| | | |
|---|---|---|
| Synonyms | : | 3-Methyl-1-butanol<br>Isoamyl alcohol<br>Isopentyl alcohol |
| Formula | : | C5H12O |
| Molecular weight | : | 88,15 g/mol |
| CAS-No. | : | 123-51-3 |
| EC-No. | : | 204-633-5 |
| Index-No. | : | 603-006-00-7 |

**Hazardous ingredients according to Regulation (EC) No 1272/2008**

| Component | | Classification | Concentration |
|---|---|---|---|
| **3-Methylbutan-1-ol** | | | |
| CAS-No. | 123-51-3 | Flam. Liq. 3; Acute Tox. 4; Skin Irrit. 2; Eye Irrit. 2; STOT SE 3; H226, H332, H315, H319, H335 | <= 100 % |
| EC-No. | 204-633-5 | | |
| Index-No. | 603-006-00-7 | | |

For the full text of the H-Statements mentioned in this Section, see Section 16.

## SECTION 4: First aid measures

**4.1 Description of first aid measures**

**General advice**

Consult a physician. Show this safety data sheet to the doctor in attendance.

**If inhaled**

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

**In case of skin contact**

Wash off with soap and plenty of water. Consult a physician.

**In case of eye contact**

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

**If swallowed**
Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

**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

## SECTION 5: Firefighting measures

**5.1 Extinguishing media**

**Suitable extinguishing media**
Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

**5.2 Special hazards arising from the substance or mixture**
Carbon oxides

**5.3 Advice for firefighters**
Wear self-contained breathing apparatus for firefighting if necessary.

**5.4 Further information**
Use water spray to cool unopened containers.

## SECTION 6: Accidental release measures

**6.1 Personal precautions, protective equipment and emergency procedures**
Use personal protective equipment. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas.
For personal protection see section 8.

**6.2 Environmental precautions**
Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

**6.3 Methods and materials for containment and cleaning up**
Contain spillage, and then collect with an electrically protected vacuum cleaner or by wet-brushing and place in container for disposal according to local regulations (see section 13).

**6.4 Reference to other sections**
For disposal see section 13.

## SECTION 7: Handling and storage

**7.1 Precautions for safe handling**
Avoid contact with skin and eyes. Avoid inhalation of vapour or mist.
Keep away from sources of ignition - No smoking.Take measures to prevent the build up of electrostatic charge.
For precautions see section 2.2.

**7.2 Conditions for safe storage, including any incompatibilities**
Store in cool place. Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.
Storage class (TRGS 510): Flammable liquids

**7.3 Specific end use(s)**
Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

## SECTION 8: Exposure controls/personal protection

**8.1 Control parameters**

**Components with workplace control parameters**

**8.2 Exposure controls**

**Appropriate engineering controls**

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

**Personal protective equipment**

**Eye/face protection**

Face shield and safety glasses 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.

**Body Protection**

Complete suit protecting against chemicals, Flame retardant antistatic protective 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**

Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

**Control of environmental exposure**

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

## SECTION 9: Physical and chemical properties

**9.1 Information on basic physical and chemical properties**

| | | |
|---|---|---|
| a) | Appearance | Form: liquid, clear<br>Colour: colourless |
| b) | Odour | No data available |
| c) | Odour Threshold | No data available |
| d) | pH | 5,6 at 25 g/l at 20 °C |
| e) | Melting point/freezing point | Melting point/range: -117 °C - lit. |
| f) | Initial boiling point and boiling range | 130 °C - lit. |
| g) | Flash point | 43 °C - closed cup |
| h) | Evaporation rate | No data available |
| i) | Flammability (solid, gas) | No data available |
| j) | Upper/lower flammability or explosive limits | Upper explosion limit: 9 %(V)<br>Lower explosion limit: 1,2 %(V) |
| k) | Vapour pressure | 3 hPa at 20 °C<br>23,6 hPa at 50 °C |
| l) | Vapour density | 3,04 - (Air = 1.0) |
| m) | Relative density | 0,809 g/cm3 at 25 °C |

| | | |
|---|---|---|
| n) | Water solubility | soluble |
| o) | Partition coefficient: n-octanol/water | log Pow: 1,35 at 23 °C |
| p) | Auto-ignition temperature | 335 °C at 1.013 - 1.017 hPa |
| q) | Decomposition temperature | No data available |
| r) | Viscosity | 5,32 mm2/s at 20 °C - |
| s) | Explosive properties | No data available |
| t) | Oxidizing properties | No data available |

**9.2 Other safety information**

| | |
|---|---|
| Bulk density | 808 kg/m3 |
| Relative vapour density | 3,04 - (Air = 1.0) |

## SECTION 10: Stability and reactivity

**10.1 Reactivity**

No data available

**10.2 Chemical stability**

Stable under recommended storage conditions.
Stable under recommended storage conditions.

**10.3 Possibility of hazardous reactions**

No data available

**10.4 Conditions to avoid**

Heat, flames and sparks.

**10.5 Incompatible materials**

Strong oxidizing agents, Acid chlorides, Acid anhydrides, Reducing agents

**10.6 Hazardous decomposition products**

Other decomposition products - No data available
In the event of fire: see section 5

## SECTION 11: Toxicological information

**11.1 Information on toxicological effects**

**Acute toxicity**
LD50 Oral - Rat - male and female - > 5.000 mg/kg
(OECD Test Guideline 401)
LC0 Inhalation - Rat - male - 7 h - 11,05 mg/l
(OECD Test Guideline 403)
LD50 Dermal - Rabbit - male - 3.216 mg/kg

**Skin corrosion/irritation**
Skin - Rabbit
Result: Irritating to skin. - 24 h

**Serious eye damage/eye irritation**
Eyes - Rabbit
Result: Eye irritation

**Respiratory or skin sensitisation**
in vivo assay - Guinea pig
Result: Does not cause skin sensitisation.
(OECD Test Guideline 406)

**Germ cell mutagenicity**
No data available

Hamster
fibroblast
Result: negative

OECD Test Guideline 474
Mouse - male and female
Result: negative

**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**

No data available

**Specific target organ toxicity - single exposure**
No data available

**Specific target organ toxicity - repeated exposure**
No data available

**Aspiration hazard**
No data available
**Additional Information**
Repeated dose toxicity: Rat - male and female - Oral - NOAEL : 1.250 mg/kg - OECD Test Guideline 408
RTECS: EL5425000
prolonged or repeated exposure can cause:, Nausea, Headache, Vomiting, To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

## SECTION 12: Ecological information

### 12.1 Toxicity

| | |
|---|---|
| Toxicity to fish | static test LC50 - Oncorhynchus mykiss (rainbow trout) - 700 mg/l - 96 h (OECD Test Guideline 203) |
| Toxicity to daphnia and other aquatic invertebrates | static test EC50 - Daphnia magna (Water flea) - 255 mg/l - 48 h (DIN 38412) |
| Toxicity to algae | static test EC50 - Desmodesmus subspicatus (Scenedesmus subspicatus) - 274 mg/l - 96 h |

### 12.2 Persistence and degradability

Biodegradability: aerobic - Exposure time 27 d
Result: 84 % - Readily biodegradable
(OECD Test Guideline 301F)

### 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 Other adverse effects

No data available

## SECTION 13: Disposal considerations

### 13.1 Waste treatment methods

**Product**
Burn in a chemical incinerator equipped with an afterburner and scrubber but exert extra care in igniting as this material is highly flammable. Offer surplus and non-recyclable solutions to a licensed disposal company.

**Contaminated packaging**
Dispose of as unused product.

## SECTION 14: Transport information

### 14.1 UN number

ADR/RID: 1105 IMDG: 1105 IATA: 1105

### 14.2 UN proper shipping name

ADR/RID: PENTANOLS
IMDG: PENTANOLS
IATA: Pentanols

### 14.3 Transport hazard class(es)

ADR/RID: 3 IMDG: 3 IATA: 3

### 14.4 Packaging group

ADR/RID: III IMDG: III IATA: III

### 14.5 Environmental hazards

ADR/RID: no IMDG Marine pollutant: no IATA: no

### 14.6 Special precautions for user

No data available

## SECTION 15: Regulatory information

This safety datasheet complies with the requirements of Regulation (EC) No. 453/2010.

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

### 15.2 Chemical Safety Assessment

For this product a chemical safety assessment was not carried out

## SECTION 16: Other information

**Full text of H-Statements referred to under sections 2 and 3.**

| | |
|---|---|
| H226 | Flammable liquid and vapour. |
| H315 | Causes skin irritation. |
| H319 | Causes serious eye irritation. |
| H332 | Harmful if inhaled. |
| H335 | May cause respiratory irritation. |