

Section 1. Product and Company Identification

Product Name Isoamyl Alcohol
CAS Number 123-51-3

Parchem - fine & specialty chemicals
415 Huguenot Street
New Rochelle, NY 10801
☎ (914) 654-6800 ☎ (914) 654-6899
🌐 parchem.com ✉ info@parchem.com

EMERGENCY RESPONSE NUMBER
CHEMTEL
Toll Free US & Canada: 1 (800) 255-3924
All other Origins: 1 (813) 248-0585
Collect Calls Accepted

Section 2. Hazards Identification

Classification of the substance or mixture

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

Flammable liquids (Category 3), H226
Acute toxicity, Inhalation (Category 4), H332
Skin irritation (Category 2), H315
Eye irritation (Category 2A), H319
Specific target organ toxicity - single exposure (Category 3), Respiratory system, H335

GHS Label Elements

Pictograms:



Signal word: WARNING

Hazard and precautionary statements

Hazard Statements

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

Precautionary Statements

P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
P233 Keep container tightly closed.
P240 Ground/bond container and receiving equipment.
P241 Use explosion-proof electrical/ventilating/lighting/equipment.

P242 Use only non-sparking tools.
P243 Take precautionary measures against static discharge.
P261 Avoid breathing dust/fume/gas/mist/vapors/spray.
P264 Wash skin thoroughly after handling.
P271 Use only outdoors or in a well-ventilated area.
P280 Wear protective gloves/ eye protection/ face protection.
P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
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.
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P332 + P313 If skin irritation occurs: Get medical advice/ attention.
P337 + P313 If eye irritation persists: Get medical advice/ attention.
P362 Take off contaminated clothing and wash before reuse.
P370 + P378 In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish.
P403 + P233 Store in a well-ventilated place. Keep container tightly closed.
P403 + P235 Store in a well-ventilated place. Keep cool.
P405 Store locked up.
P501 Dispose of contents/ container to an approved waste disposal plant.

Hazards not otherwise classified (HNOC) or not covered by GHS: May form explosive peroxides

Section 3. Composition / Information on Ingredients

Common Name Isoamyl Alcohol
Synonym(s) 3-Methylbutan-1-ol; 3-Methyl-1-butanol; Isoamyl alcohol; Isopentyl alcohol
Formula C₅H₁₂O
CAS Number 123-51-3

COMPONENT	CAS NUMBER	CONCENTRATION
Isoamyl Alcohol	123-51-3	≤ 100%

Section 4. First Aid Measures

Description of first-aid measures

General advice: Consult a physician. Show this safety data sheet to the doctor in attendance.
Move out of dangerous area.

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

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

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

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

Most important symptoms and effects, both acute and delayed: The most important known symptoms and effects are described in the labelling and/or in section 11.

Indication of any immediate medical attention and special treatment needed: No data available

Section 5. Firefighting Measures

Extinguishing media

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

Special hazards arising from the substance or mixture: Carbon oxides

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

Further information: Use water spray to cool unopened containers.

Section 6. Accidental Release Measures

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

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

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).

Reference to other sections: For disposal see section 13.

Section 7. Handling and Storage

Precautions for safe handling: Avoid contact with skin and eyes. Avoid inhalation of vapor or mist. Keep away from sources of ignition - No smoking. Take measures to prevent the build-up of electrostatic charge.

Conditions for safe storage, including any incompatibilities: 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

Section 8. Exposure Controls / Personal Protection

Control parameters

Components with workplace control parameters

Component	CAS Number	Value	Control Parameters	Basis
3-Methylbutan-1-ol	123-51-3	TWA	100.000000 ppm	USA ACGIH Threshold Limit Values (TLV)
	Remarks	Upper Respiratory Tract Irritation Eye Irritation		
		STEL	125.000000 ppm	USA ACGIH Threshold Limit Values (TLV)
		Upper Respiratory Tract Irritation Eye Irritation		
		TWA	100.000000 ppm 360.000000 mg/m ³	USA. NIOSH Recommended Exposure Limits
		ST	125.000000 ppm 450.000000 mg/m ³	USA. NIOSH Recommended Exposure Limits
		TWA	100.000000 ppm 360.000000 mg/m ³	USA. Occupational Exposure Limits (OSHA) - Table Z-1 Limits for Air Contaminants
		The value in mg/m ³ is approximate		
		TWA	100 ppm	USA. ACGIH Threshold Limit Values (TLV)
		Upper Respiratory Tract Irritation Eye Irritation		
		STEL	125 ppm	USA. ACGIH Threshold Limit Values (TLV)
		Upper Respiratory Tract Irritation Eye Irritation		
		TWA	100 ppm 360 mg/m ³	USA. NIOSH Recommended Exposure Limits
		ST	125 ppm 450 mg/m ³	USA. NIOSH Recommended Exposure Limits
		TWA	100 ppm 360 mg/m ³	USA. Occupational Exposure Limits (OSHA) - Table Z-1 Limits for Air Contaminants
		The value in mg/m ³ is approximate		

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 multipurpose 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

Form: Liquid, clear

Color: Colorless

Odor: No data available

Odor Threshold: No data available

pH: 5.6 at 25 g/l at 20°C (68°F)

Melting point/range: -117°C (-179°F) - lit.

Initial boiling point and boiling range: 130°C (266°F) - lit.

Flash point (Closed Cup): 43°C (109°F)

Evaporation rate: No data available

Flammability (solid, gas): No data available

Upper/lower flammability or explosive limits

Upper explosion limit: 9% (V)

Lower explosion limit: 1.2% (V)

Vapor pressure: 3 hPa (2 mmHg) at 20°C (68°F)

Vapor pressure: 23.6 hPa (17.7 mmHg) at 50°C (122°F)

Vapor density: 3.04 - (Air = 1.0)

Relative density: 0.809 g/cm³ at 25 °C (77 °F)

Water solubility: Soluble

Partition coefficient (n-Octanol/water): log Pow: 1.35 at 23°C (73°F)

Auto-ignition temperature: 335°C (635°F) at 1,013 - 1,017 hPa (760 - 763 mmHg)

Decomposition temperature: No data available

Viscosity: 5.32 mm²/s at 20°C (68°F)

Explosive properties: No data available

Oxidizing properties: No data available

Other safety information

Bulk Density: 808 kg/m³

Relative Vapor Density: 3.04 - (Air = 1.0)

Section 10. Stability and Reactivity

Reactivity: No data available

Chemical stability: Stable under recommended storage conditions.

Test for peroxide formation before distillation or evaporation. Test for peroxide formation or discard after 1 year. Stable under recommended storage conditions.

Possibility of hazardous reactions: No data available

Conditions to avoid: Heat, flames and sparks.

Incompatible materials: Strong oxidizing agents, Acid chlorides, Acid anhydrides, Reducing agents

Hazardous decomposition products

Other decomposition products: No data available

In the event of fire: see section 5

Section 11. Toxicological Information

Information on toxicological effects

Acute toxicity

LD50 Oral - Rat (male and female): > 5,000 mg/kg
(OECD Test Guideline 401)

LC0 Inhalation - Rat (male): 11.05 mg/l (7 h)
(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 sensitization

in vivo assay - Guinea pig

Result: Does not cause skin sensitization.

(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.

ACGIH: No component of this product, present at levels greater than or equal to 0.1%, is identified as a carcinogen or potential carcinogen by ACGIH.

NTP: No component of this product, present at levels greater than or equal to 0.1%, is identified as a known or anticipated carcinogen by NTP.

OSHA: No component of this product, present at levels greater than or equal to 0.1%, is identified as a carcinogen or potential carcinogen by OSHA.

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 - No observed adverse effect level - 1,250 mg/kg

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

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 (96h)

Persistence and degradability

Biodegradability aerobic - Exposure time 27 d

Result: 84 % - Readily biodegradable
(OECD Test Guideline 301F)

Bioaccumulative potential: No data available

Mobility in soil: No data available

Results of PBT and vPvB assessment: PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

Other adverse effects: No data available

Section 13. Disposal Considerations

Waste Treatment Methods: Dispose of product and contaminated packaging in accordance with all local, state, and federal environmental control regulations.

Section 14. Transport Information

DOT (US)

UN number: 1105

Class: 3

Packing group: III

Proper shipping name: Pentanols

Reportable Quantity (RQ): N/A

Poison Inhalation Hazard: No

IMDG

UN number: 1105

Class: 3

Packing group: III

EMS-No: F-E, S-D

Proper shipping name: PENTANOLS

IATA

UN number: 1105

Class: 3

Packing group: III

Proper shipping name: Pentanols

Section 15. Regulatory Information

SARA 302 Components: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.



SARA 313 Components: This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

SARA 311/312 Hazards: Fire Hazard, Acute Health Hazard

Massachusetts Right to Know Components

3-Methylbutan-1-ol (CAS-No. 123-51-3)

Revision Date: 2007-03-01

Pennsylvania Right to Know Components

3-Methylbutan-1-ol (CAS-No. 123-51-3)

Revision Date: 2007-03-01

New Jersey Right to Know Components

3-Methylbutan-1-ol (CAS-No. 123-51-3)

Revision Date: 2007-03-01

California Prop. 65 Components: This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

HMIS Rating

Health: 2

Flammability: 2

Reactivity: 0

NFPA Rating

Health: 2

Flammability: 2

Reactivity: 0

Section 16. Other Information

Disclaimer: The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product.

REVISION DATE: 10/2/2015