



SAFETY DATA SHEET ISOHOL

SECTION 1: IDENTIFICATION

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|------------------------|-----------------------------|
| Product Name: | Isohol |
| Product Code: | I40 |
| Product Use: | Fuel Line Anti-freeze |
| Manufacturer's Name: | E-ZOIL Products, Inc. |
| Address: | 234 Fillmore Avenue |
| Address: | Tonawanda, NY 14150 USA |
| Business Phone: | 855-693-9645 |
| Emergency Phone: | 800-633-8253 PERS |
| Date of Preparation: | October 1, 2015 |
| Date of Last Revision: | October 1, 2015 |
| Regulatory Standard: | CFR29 1910.1200 HazCom 2012 |

SECTION 2: HAZARDS IDENTIFICATION

GHS-US classification
Flammable Liquid 2
Acute toxicity 3 (Oral)
Acute toxicity 3 (Dermal)
Acute toxicity 3 (Inhalation)
Eye Irritation 2A
Carcinogenicity 2
Reproductive toxicity 1B
Specific target organ toxicity - Single exposure 2
Specific target organ toxicity - Single exposure 3
Specific target organ toxicity - Repeated exposure 2

Hazard pictograms (GHS-US):



Signal word (GHS-US): Danger

Hazard statements (GHS-US): Highly flammable liquid and vapor. Toxic if swallowed, in contact with skin or if inhaled. Causes serious eye irritation. Suspected of causing cancer. May damage fertility or the unborn child. May cause damage to organs. May cause drowsiness or dizziness May cause damage to organs through prolonged or repeated exposure.

Precautionary statements (GHS-US): Keep away from heat/sparks/open flames/hot surfaces. No smoking. Keep container tightly closed. Ground/Bond container and receiving equipment. Use explosion-proof electrical/ventilating/lighting/equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Wash hands thoroughly after handling. Do not eat, drink or smoke when using this product. Use only outdoors or in a well-ventilated area. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective gloves/protective clothing/eye protection/face protection. Do not breathe dust/fume/gas/mist/vapors/spray. If exposed or concerned: Get medical advice/ attention. If on skin (or hair): Take off immediately all contaminated clothing and wash it before reuse. Rinse skin with water/shower. Call a poison center/doctor

if you feel unwell. If swallowed: Immediately call a poison center/doctor. Rinse mouth. If inhaled: Remove person to fresh air and keep comfortable for breathing. Call a poison center or doctor. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention. Store in a well-ventilated place. Keep cool. Keep container tightly closed. Store locked up. Dispose of contents/container in accordance with local, regional, national and international regulations.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

| Name | CAS Number | % |
|-------------------|------------|-----|
| Isopropyl alcohol | 67-63-0 | 100 |

SECTION 4: FIRST AID MEASURES

- First-aid measures after inhalation: If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get immediate medical advice/attention.
- First-aid measures after skin contact: In case of contact, immediately flush skin with plenty of water. Remove contaminated clothing and shoes. Wash clothing before reuse. Get medical advice/attention if you feel unwell.
- First-aid measures after eye contact: In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. If easy to do, remove contact lenses, if worn. If irritation persists, get medical attention.
- First-aid measures after ingestion: If swallowed, do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Rinse mouth. Immediately call a POISON CENTER or doctor/physician.
- Symptoms/injuries after inhalation: Toxic if inhaled. May cause respiratory tract irritation. Vapors may cause narcosis with headache, difficulty breathing, lightheadedness, drowsiness, unconsciousness and possibly death.
- Symptoms/injuries after skin contact: Toxic in contact with skin. May cause skin irritation. Symptoms may include redness, edema, drying, defatting and cracking of the skin. Other symptoms are similar to those experienced through inhalation and ingestion.
- Symptoms/injuries after eye contact: Causes serious eye irritation. Symptoms may include discomfort or pain, excess blinking and tear production, with marked redness and swelling of the conjunctiva.
- Symptoms/injuries after ingestion: Toxic if swallowed. May be fatal if swallowed and enters airways. May cause stomach distress, nausea or vomiting. Ingestion may cause headache, dizziness, drowsiness, metabolic acidosis, coma, seizures.

Symptoms may not appear immediately. In case of accident or if you feel unwell, seek medical advice immediately (show the label or SDS where possible).

SECTION 5: FIRE FIGHTING MEASURES

- Suitable extinguishing media: Foam. Dry chemical. Carbon dioxide.
- Unsuitable extinguishing media: None known.

Fire hazard: Highly flammable liquid and vapor. Products of combustion may include, and are not limited to oxides of carbon.

Explosion hazard: May form flammable/explosive vapor-air mixture.

Protection during firefighting: Keep upwind of fire. Wear full firefighting turn-out gear (full Bunker gear) and respiratory protection (SCBA). Vapors may be heavier than air and may travel along the ground to a distant ignition source and flash back.

SECTION 6: ACCIDENTAL RELEASE MEASURES

General measures: Use personal protection recommended in Section 8. Isolate the hazard area and deny entry to unnecessary and unprotected personnel. Eliminate sources of ignition.

For containment: Contain and/or absorb spill with inert material (e.g. sand, vermiculite), then place in a suitable container. Do not flush into sewer or allow to enter waterways. Use appropriate Personal Protective Equipment (PPE).

Methods for cleaning up: Scoop up material and place in a disposal container. Provide ventilation.

See section 8 for further information on protective clothing and equipment and section 13 for advice on waste disposal.

SECTION 7: HANDLING AND STORAGE

Additional hazards when processed: Handle empty containers with care because residual vapors are flammable.

Precautions for safe handling: Keep away from sources of ignition - No smoking. Take precautionary measures against static discharge. Use only non-sparking tools. Use only outdoors or in a well-ventilated area. Avoid contact with skin and eyes. Do not breathe dust/fume/gas/mist/vapors/ spray. Do not swallow. Handle and open container with care. When using, do not eat, drink or smoke.

Hygiene measures: Launder contaminated clothing before reuse. Wash hands before eating, drinking, or smoking.

Technical measures: Proper grounding procedures to avoid static electricity should be followed.

Storage conditions: Keep out of the reach of children. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatibles. Keep container tightly closed when not in use.

Storage temperature: 39 - 120°F

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

| Isopropyl alcohol | | |
|--------------------------|------------------|---------|
| ACGIH | ACGIH TWA (ppm) | 200 ppm |
| ACGIH | ACGIH STEL (ppm) | 250 ppm |

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| OSHA | OSHA PEL (TWA) (mg/m ³) | 980 mg/m ³ |
| OSHA | OSHA PEL (TWA) (ppm) | 400 ppm |
| OSHA | OSHA STEL (TWA) (mg/m ³) | 500 ppm |
| OSHA | OSHA STEL (TWA) (mg/m ³) | 1225 mg/m ³ |

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| Appropriate engineering controls: | Use ventilation adequate to keep exposures (airborne levels of dust, fume, vapor, etc.) below recommended exposure limits. |
| Hand protection: | Wear chemically resistant protective gloves. |
| Eye protection: | Wear safety glasses with side shields or goggles. |
| Skin and body protection: | Wear suitable protective clothing. |
| Respiratory protection: | In case of insufficient ventilation, wear suitable respiratory equipment. |
| Environmental exposure controls: | Maintain levels below community environmental protection thresholds. |
| Other information: | Do not eat, smoke or drink where material is handled, processed or stored. Wash hands carefully before eating or smoking. Handle according to established industrial hygiene and safety practices. |

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

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| Physical state: | Liquid |
| Appearance: | Transparent |
| Color: | Colorless |
| Odor: | Alcohol odor |
| Odor threshold: | No data available |
| pH: | No data available |
| Melting point: | -130°F (-90°C) |
| Freezing point: | No data available |
| Boiling point: | 181.4°F (83°C) |
| Flash point: | 53.1°F (11.7°C) |
| Relative evaporation rate: | No data available |
| Flammability (solid, gas): | Flammable |
| Explosive limits: | No data available |
| Explosive properties: | No data available |
| Oxidizing properties: | No data available |
| Vapor pressure: | 33.0 MM Hg |
| Relative density: | 0.79 |
| Relative vapor density at 20°C: | 2.1 (Air =1) |
| Solubility: | 100% |
| Partition coefficient: | n-octanol/water: 0.05 |
| Log Kow: | No data available |
| Auto-ignition temperature: | 852.8°F (456°C) |
| Decomposition temperature: | No data available |
| Viscosity: | No data available |
| Viscosity, kinematic: | No data available |
| Viscosity, dynamic: | No data available |

SECTION 10: STABILITY AND REACTIVITY

Reactivity: No dangerous reaction known under conditions of normal use.

Chemical Stability: Stable under normal storage conditions. May form flammable/explosive vapor-air mixture.

Possibility of hazardous reactions: No dangerous reaction known under conditions of normal use.

Conditions to avoid: Heat. Incompatible materials. Sources of ignition.

Incompatible materials: Oxidizers. Acids. Bases. Metals.

Hazardous decomposition products: May include, and are not limited to: oxides of carbon and formaldehyde.

SECTION 11: TOXICOLOGICAL INFORMATION

Acute toxicity: Toxic if swallowed, in contact with skin or if inhaled.

| Isohol | |
|---------------------|---|
| LD50 oral rat | 5000 mg/kg (Calculated using ATE values) |
| LD50 dermal rat | 12800 mg/kg (Calculated using ATE values) |
| LC50 inhalation rat | 45248 ppm (Calculated using ATE values) |

Skin corrosion/irritation: Based on available data, the classification criteria are not met.

Serious eye damage/irritation: Causes serious eye irritation.

Respiratory or skin sensitization: Based on available data, the classification criteria are not met.

Germ cell mutagenicity: Based on available data, the classification criteria are not met.

Carcinogenicity: No data available.

| Isopropanol | |
|--------------------|--|
| IARC group | 3 - Not classifiable as to its carcinogenicity to humans |

Reproductive toxicity: No data available.

Specific target organ toxicity (single exposure): May cause damage to organs. May cause drowsiness or dizziness.

Specific target organ toxicity (repeated exposure): May cause damage to organs through prolonged or repeated exposure.

Aspiration hazard: Based on available data, the classification criteria are not met.

Symptoms/injuries after inhalation: Toxic if inhaled. May cause respiratory tract irritation. Vapors may cause narcosis with headache, difficulty breathing, lightheadedness, drowsiness, unconsciousness and possibly death.

Symptoms/injuries after skin contact: Toxic in contact with skin. May cause skin irritation. Symptoms may include redness, edema, drying, defatting and cracking of the skin. Other symptoms are similar to those experienced through inhalation and ingestion.

Symptoms/injuries after eye contact: Causes serious eye irritation. Symptoms may include discomfort or pain, excess blinking and tear production, with marked redness and swelling of the conjunctiva.

Symptoms/injuries after ingestion: Toxic if swallowed. May be fatal if swallowed and enters airways. May cause stomach distress, nausea or vomiting. Ingestion may cause headache, dizziness, drowsiness, metabolic acidosis, coma, seizures.

SECTION 12: ECOLOGICAL INFORMATION

Toxicity: Ecology – general. May cause long-term adverse effects in the aquatic environment.

Persistence and degradability:

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| Isohol | |
| Persistence and degradability | Not established. |

Bioaccumulative potential:

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|---------------------------|---|
| Isohol | |
| Bioaccumulative potential | No known significant effects or critical hazards. |

Mobility in soil: No additional information available

Other adverse effects: Effect on the global warming – no known ecological damage caused by this product.

SECTION 13: DISPOSAL CONSIDERATIONS

Waste disposal recommendations: This material must be disposed of in accordance with all local, state, provincial, and federal regulations. The generation of waste should be avoided or minimized wherever possible.

Additional information: Handle empty containers with care because residual vapors are flammable.

SECTION 14: TRANSPORT INFORMATION

UN number: UN1219

Proper shipping name: Isopropanol or Isopropyl Alcohol

Transport hazard class(es): 3 (6.1)

Hazard labels:



Packing group: II

Other information: No supplementary information available.

Special transport precautions: Do not handle until all safety precautions have been read and understood.

SECTION 15: REGULATORY INFORMATION

Federal regulations:

All components of this product are listed, or excluded from listing, on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory.

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| Isohol | |
| Subject to reporting requirements of United States SARA Section 313 | |
| SARA Section 313 - Emission | 1.0 % |

State regulations:

SECTION 16: OTHER INFORMATION

Other information: None.

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