



# Safety Data Sheet

Revised 02/10/2014

## Isopropyl Alcohol

### 1. Product and Company Identification

|                        |   |
|------------------------|---|
| Product Name           | Isopropyl Alcohol   |
| Synonyms               | Isopropanol, 2-Propanol, Dimethylcarbinol                               |
| MSDS Number            | D11579  |
| Company Identification | Cloverleaf Chemical Company<br>192 S Locust Street<br>Manteno, IL 60914 |
| Telephone              | Cloverleaf Chemical Company – 815.932.0060<br>CHEMTREC – 800.424.9300   |

*NFPA diamond and HMIS ratings for this product may be found in section 16 of this Safety Data Sheet.*

### 2. Hazards Identification

|                            |  |
|----------------------------|--|
| Form                       | Liquid   |
| Color                      | Clear, colorless   |
| Odor                       | Slight alcohol odor  |
| OSHA/HCS Status            | This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200): flammable liquid, target organ effect (nerves, liver kidney, cardiovascular system, gastrointestinal tract), irritant.   |
| GHS Classification         | Flammable liquids (Category 2)<br>Skin irritation (Category 3)<br>Eye irritation (Category 2A)<br>Specific target organ toxicity – single exposure (Category 3), central nervous system  |
| Pictogram                  |  |
| Signal Word                | Danger   |
| Hazard Statement(s)        | H225 Highly flammable liquid and vapor.<br>H316 Causes mild skin irritation.<br>H319 Causes serious eye irritation.<br>H336 May cause drowsiness or dizziness.   |
| Precautionary Statement(s) | P210 Keep away from heat/sparks/open flames/hot surfaces. No smoking.<br>P261 Avoid breathing dust/fume/gas/mist/vapor/spray.<br>P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. |

### Potential Acute Health Effects

|            |  |
|------------|--|
| Inhalation | May be harmful if inhaled. Causes respiratory tract irritation. Vapors may cause drowsiness and dizziness. |
| Ingestion  | May be harmful if swallowed.   |
| Skin       | May be harmful if absorbed through skin. Can cause skin irritation.  |



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Eyes Causes eye irritation.

See section 11 for more detailed information on health effects and symptoms

## 3. Composition/Information on Ingredients

| <u>Ingredient Name</u> | <u>CAS Number</u> | <u>WT %</u> |
|------------------------|-------------------|-------------|
| Isopropyl Alcohol      | 67-63-0           | 99.8        |

## 4. First Aid Measures

|                                   |  |
|-----------------------------------|--|
| Eye Contact                       | Rinse thoroughly with plenty of water for at least 15 minutes. Consult a physician.  |
| Skin Contact                      | Wash off with soap and plenty of water. Consult a physician.   |
| Inhalation                        | If inhaled, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.  |
| Ingestion                         | Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.  |
| Protection of First Aid Personnel | No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. If it is suspected that dust, vapor, mist, or gas are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. |

## 5. Fire-fighting Measures

|                             |   |
|-----------------------------|---|
| Flammability of the Product | Flammable in the presence of a source of ignition when the temperature is above the flash point. Keep away from heat/sparks/open flame/hot surface. No smoking. |
| Flash Point (Method)        | 53 °F (12 °C) – closed cup  |
| Auto Ignition Temperature   | 750 °F (399 °C)   |

### Extinguishing Media

|  |   |
|--|---|
| Suitable                                   | Water spray, dry chemical, carbon dioxide, or alcohol resistant foam.   |
| Special Fire-fighting Procedures & Hazards | Vapors may ignite and cause flashback. Wear chemical protective clothing and positive pressure self-contained breathing apparatus. Approach upwind to avoid toxic vapors. |
| Unusual Fire & Explosion Hazards           | Container may explode in heat of fire. Do not allow runoff to sewer, it may create fire or explosion.   |

## 6. Accidental Release Measures

|                           |   |
|---------------------------|---|
| Personal Precautions      | 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. |
| Environmental Precautions | Prevent further leakage or spillage if safe to do so. Do not let product enter drains.  |
| Spill                     | Contain spillage, and then collect with an electrically protected vacuum cleaner or by wet-brushing. Place in container for disposal according to local regulations.  |

## 7. Handling and Storage

|          |   |
|----------|---|
| Handling | Avoid contact with skin and eyes. Avoid inhalation of vapor or mist. Use explosion-proof equipment. Keep away from sources of ignition – No Smoking. Take measures to prevent the build-up of electrostatic charge. |
|----------|---|



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**Storage** 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.

## 8. Exposure Controls/Personal Protection

| <u>Ingredient Name</u>      | <u>ACGIH TLV</u>   | <u>OSHA PEL</u> |
|-----------------------------|--|-----------------|
| Isopropyl Alcohol           | 200 ppm - TWA  | 400 ppm - TWA   |
| <b>Engineering Measures</b> | Use mechanical ventilation such as dilution and local exhaust. Supply ample air replacement.   |                 |
| <b>Hygiene Measures</b>     | Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product.   |                 |
| <b>Respiratory</b>          | If airborne concentrations are above the applicable exposure limits, use NIOSH-approved respiratory protection. If respiratory protection is needed, use only protection authorized in the U.S. Federal OSHA Standard (29 CFR 1910.134). |                 |
| <b>Eyes and Face</b>        | Wear safety glasses with side shields (or goggles) and a face shield.  |                 |
| <b>Skin</b>                 | Wear chemically impervious gloves, made of any waterproof material. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.                    |                 |

## 9. Physical and Chemical Properties

|   |                         |
|---|-------------------------|
| Appearance                                      | Clear, colorless liquid |
| Odor  | Slight alcohol odor     |
| pH (1 oz/gal)                                   | Not applicable          |
| Water Solubility                                | Infinite                |
| Vapor Density (air = 1)                         | 2.07                    |
| Evaporation rate (butyl acetate = 1)            | 1.7                     |
| Boiling Point (°F)                              | 180.5 °F (82.5 °C)      |
| Freezing Point (°F)                             | -127.3 °F (-88.5 °C)    |
| Specific Gravity (H <sub>2</sub> O = 1 @ 70 °F) | 0.7854                  |
| Vapor Pressure (mm Hg, 20 °C)                   | 44 mm Hg @ 20 °C        |
| Volatile Organic (VOC) Content                  | 100%                    |

## 10. Stability and Reactivity

|                        |  |                           |         |                   |
|------------------------|--|---------------------------|---------|-------------------|
| Stable: X              | Unstable:  | Hazardous Polymerization: | Occurs: | Does Not Occur: X |
| Conditions to Avoid    | Excessive heat and ignition sources.   |                           |         |                   |
| Materials to Avoid     | Peroxides.   |                           |         |                   |
| Decomposition Products | Acid smoke and irritating fumes. Carbon monoxide or carbon dioxide can evolve. |                           |         |                   |

## 11. Toxicological Information

|                   |                                  |
|-------------------|----------------------------------|
| Eye               | May cause eye irritation.        |
| Isopropyl Alcohol | Eye irritation – rabbit – 24 hr. |



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|                   |  |
|-------------------|--|
| Dermal            | May be harmful if absorbed through skin. Can cause skin irritation.  |
| Isopropyl Alcohol | LD50 (rabbit) – 12,800 mg/kg<br>Mild skin irritation – rabbit  |
| Inhalation        | May be harmful if inhaled. Causes respiratory tract irritation. Vapors may cause drowsiness and dizziness. |
| Isopropyl Alcohol | LC50 (rat) – 16,000 ppm– 8 hr.   |
| Oral              | May be harmful if swallowed.   |
| Isopropyl Alcohol | LD50 (rat) – 5045 mg/kg  |

## Potential Chronic Health Effects

|                       |  |
|-----------------------|--|
| Carcinogenicity       | IARC:<br>3 – Group 3: Not classifiable as to its carcinogenicity to humans (2-Propanol).<br><br>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 OSHA or NTP. |
| Other Adverse Effects | May cause drowsiness or dizziness. Central nervous system depression, prolonged or repeated exposure can cause: nausea, headache, vomiting, and/or narcosis. Overexposure may cause mild, reversible liver effects.  |

## 12. Ecological Information

|                  |   |
|------------------|---|
| Biodegradability | No data available   |
| Ecotoxicity      | Toxicity to fish:<br>LC50 – Pimephales promelas (fathead minnow) – 9640.00 mg/l – 96 hr.<br>Toxicity to algae:<br>EC50 – Desmodesmus subspicatus (green algae) - > 2000.00 mg/l – 72 hr.<br>Toxicity to aquatic invertebrates:<br>EC50 – Daphnia magna (water flea) – 5102.00 mg/l – 24 hr. |

## 13. Disposal Considerations

|                |  |
|----------------|--|
| Waste Disposal | 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. Contact a licensed professional waste disposal service to dispose of this material. |
| RCRA           | Product not listed as a hazardous waste.   |

## 14. Transportation

The data provided in this section is for information only and may not be specific to your package size or mode of transport. You will need to apply the appropriate regulations to properly classify your shipment for transportation.

| <u>US DOT 49 CFR 172.101</u> | <u>Non-bulk Shipments (Drums/Totes)</u> | <u>Bulk Shipments (Tank Trucks/Rail Cars)</u> |
|------------------------------|---|---|
| Proper Shipping Name         | Isopropanol                             | Same  |
| Hazard Class                 | 3                                       | Same  |
| Identification Number        | UN1219                                  | Same  |
| Packing Group                | II                                      | Same  |



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|                       |                |                            |
|-----------------------|----------------|----------------------------|
| Reportable Quantities | Not applicable | RQ=1000 lbs. (Nitric Acid) |
| Placards/Labels       | Flammable      | Same                       |

## 15. Regulatory Information

**CERCLA / SARA  
Emergency Reporting** A spill or release of this material may trigger the emergency release reporting requirements under CERCLA (40 CFR Part 300) and/or SARA Title III (40 CFR Part 355). State or local reporting requirements may differ from federal requirements. Consult counsel for further guidance on your responsibilities under these laws.

**No components listed**

**SARA Title III Section 313** The following components are subject to reporting levels established by SARA Title III, Section 313:

**No components listed**

**Clean Water Act (CWA)  
Section 311** The following chemicals are listed under Section 311 as hazardous substances requiring the submission of a National Pollutant Discharge Elimination System (NPDES) permit application to EPA.

**No components listed**

**TSCA – Toxic Substances  
Control Act** All components of this product are listed on the Toxic Substances Control Act Inventory or are excluded from listing requirements.

**RCRA – Resource  
Conservation and Recovery  
Act** The requirements of the federal hazardous waste regulations do not apply unless the waste fails to pass any of EPA's four tests for determining hazardous wastes. Note: If this product is altered, it is the responsibility of the user to determine whether the material meets the criteria for hazardous waste at the time of disposal.

**No components listed**

### State Regulations

**Massachusetts** **RTK Substances:** The following components are listed: 2-Propanol (CAS# 67-63-0)

**New Jersey** **RTK Substances:** The following components are listed: 2-Propanol (CAS# 67-63-0)

**Pennsylvania** **RTK Substances:** The following components are listed: 2-Propanol (CAS# 67-63-0)

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

## 16. Other Information

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NFPA





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HMIS

|                        |          |
|------------------------|----------|
| <b>HEALTH</b>          | <b>2</b> |
| <b>FLAMMABILITY</b>    | <b>3</b> |
| <b>PHYSICAL HAZARD</b> | <b>0</b> |
| <b>PPE</b>             |          |

Caution: NFPA and HMIS ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although these ratings are not required on SDSs under 29 CFR 1910.1200, the preparer may choose to provide them.

The customer is responsible for determining the PPE code for this material.

### Notice to Reader

The information contained herein is provided in good faith and is believed to be correct as of the date hereof. However, Cloverleaf Chemical Company makes no representation as to the comprehensiveness or accuracy of the information. It is expected that individuals receiving the information will exercise their independent judgment in determining the appropriateness for a particular purpose. Accordingly, Cloverleaf Chemical Company will not be responsible for damages of any kind resulting from the use of or reliance upon such information. No representations, or warranties, either expressed or implied, of merchantability fitness for a particular purpose or any other nature are made hereunder with respect to the information set forth herein or the product to which the information refers.