SECTION 1. Identification

Product Code: 10600

Product Name: Isopropyl Alcohol 99% USP Kosher

Supplied by: EMCO Chemical Distributors, Inc.
8601 95th Street
Pleasant Prairie, Wisconsin 53158
(262) 427-0400
E-Mail: information@emcochem.com

24 hr. Emergency:
CHEMTREC: 1-800-424-9300
International: +1-703-527-3887

NOTE: CHEMTREC emergency numbers to be used only in the event of chemical emergencies involving a spill, leak, fire, exposure or accident involving chemicals.

SECTION 2. Hazard(s) Identification

*** EMERGENCY OVERVIEW ***: Highly flammable liquid and vapor. Causes serious eye irritation.

GHS Classification
Eye Irrit. 2, Flam. Liq. 2, STOT SE 3 NE

Symbol(s) of Product

Signal Word
Danger

GHS HAZARD STATEMENTS
Eye Irritation, category 2 H319 Causes serious eye irritation.
Flammable Liquid, category 2 H225 Highly flammable liquid and vapor.
STOT, single exposure, category 3, NE H336 May cause drowsiness or dizziness.

GHS PRECAUTIONARY STATEMENTS
P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
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 thoroughly after handling.
P271 Use only outdoors or in a well-ventilated area.
P280 Wear protective gloves/protective clothing/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 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P312 Call a POISON CENTER/doctor/physician if you feel unwell.
P337+P313 If eye irritation persists: Get medical advice/attention.
SECTION 3. Composition/Information on Ingredients

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS-No.</th>
<th>Wt. %</th>
<th>GHS Symbols</th>
<th>GHS Statements</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-propanol</td>
<td>67-63-0</td>
<td>75-100</td>
<td>GHS02-GHS07</td>
<td>H225-319-336</td>
</tr>
</tbody>
</table>

The text for GHS Hazard Statements shown above (if any) is given in the “Other information” Section.

SECTION 4. First-Aid Measures

FIRST AID - EYE CONTACT: Immediately flush eyes with water. Flush eyes with water for a minimum of 15 minutes, occasionally lifting and lowering upper lids. Get medical attention promptly.

FIRST AID - SKIN CONTACT: Immediately wash with soap and water. Get medical attention promptly if irritation develops or persists. Remove contaminated shoes and clothes and clean before reuse.

FIRST AID - INHALATION: Rescuers should put on appropriate protective gear. Remove from area of exposure. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Keep victim warm. Get immediate medical attention. To prevent aspiration, keep head below knees.

FIRST AID - INGESTION: Do not induce vomiting. Do not give liquids. Obtain emergency medical attention.

SECTION 5. Fire-Fighting Measures

UNUSUAL FIRE AND EXPLOSION HAZARDS: Vapors/dust may cause flash fire or explosion. Highly flammable liquid and vapor. Vapors can travel to a source of ignition and flash back. Empty containers retain product residue (liquid and/or vapor) and can be dangerous. DO NOT pressurize, cut, weld, braze, solder, drill, grind, or expose such containers to heat, flame, sparks, static electricity, or other sources of ignition. Also, do not reuse container without commercial cleaning or reconditioning.

SPECIAL FIREFIGHTING PROCEDURES: As in any fire, wear self-contained breathing apparatus pressure-demand (MSHA/NIOSH approved or equivalent) and full protective gear. Water runoff can cause environmental damage. Dike and collect water used to fight fire. Water spray to cool containers or protect personnel. Use with caution. Avoid use of solid water streams. Use water spray to knock down vapors.

EXTINGUISHING MEDIA: Carbon Dioxide, Dry Chemical, Water Fog

SECTION 6. Accidental Release Measures

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASE OR SPILLED: Absorb spill with inert material (e.g. dry sand or earth), then place in a chemical waste container. Avoid runoff into storm sewers and ditches which lead to waterways. Use only non-combustible material for clean-up. Recover by pumping (use an explosion proof or hand pump). Use clean, non-sparking tools to collect absorbed materials. Eliminate all ignition sources. Prevent additional discharge of material if able to do so safely. If leak or spill has not ignited, use water spray to disperse the vapors. Do not touch or walk through spilled material. Stay upwind of spill. Ventilate spill area. Wear appropriate personal protective equipment. (See Exposure Controls / Personal Protection Section.)

SECTION 7. Handling and Storage

HANDLING: Use only in a well ventilated area. Follow all MSDS/label precautions even after containers are emptied because they may retain product residues. Ground and bond containers when transferring material. Use spark-proof tools and explosion proof equipment. Avoid contact with eyes, skin, and clothing. Always open containers slowly to allow any excess pressure to vent. Avoid breathing vapor, fumes or mist.

STORAGE: Keep away from heat, sparks, and flame. Keep container closed when not in use. Protect from direct sunlight. Store containers in a cool, well ventilated place.
SECTION 8. Exposure Controls/Personal Protection

Ingredients with Occupational Exposure Limits

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>ACGIH TLV-TWA</th>
<th>ACGIH-TLV STEL</th>
<th>OSHA PEL-TWA</th>
<th>OSHA PEL-CEILING</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-propanol</td>
<td>200 ppm</td>
<td>400 ppm</td>
<td>400 ppm</td>
<td>N.D.</td>
</tr>
</tbody>
</table>

Personal Protection

RESPIRATORY PROTECTION: NIOSH/MSHA approved respirators may be necessary if airborne concentrations are expected to exceed exposure limits.

SKIN PROTECTION: Wear protective gear as needed - apron, suit, boots. Wear impervious protective gloves. Wear long sleeves when contact is likely to occur.

EYE PROTECTION: Wear safety glasses with side shields (or goggles) and a face shield.

OTHER PROTECTIVE EQUIPMENT: Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower.

HYGENIC PRACTICES: Wash thoroughly after handling. Wash hands before eating. Remove contaminated clothing and wash before reuse. Avoid breathing vapors. Do not eat, drink, or smoke in areas where this material is used.

SECTION 9. Physical and Chemical Properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>Clear, colorless liquid</td>
</tr>
<tr>
<td>Odor</td>
<td>Typical</td>
</tr>
<tr>
<td>Density, g/cm³</td>
<td>0.790</td>
</tr>
<tr>
<td>Freeze Point, °F</td>
<td>N.D.</td>
</tr>
<tr>
<td>Solubility in Water</td>
<td>Soluble</td>
</tr>
<tr>
<td>Boiling Range, °F</td>
<td>180 - 181</td>
</tr>
<tr>
<td>Evaporation Rate, °F</td>
<td>2.88 (n-Bu Acetate=1)</td>
</tr>
<tr>
<td>Vapor Density</td>
<td>Heavier than air</td>
</tr>
<tr>
<td>Physical State</td>
<td>Liquid</td>
</tr>
<tr>
<td>Odor Threshold</td>
<td>N.D.</td>
</tr>
<tr>
<td>pH</td>
<td>N.D.</td>
</tr>
<tr>
<td>Viscosity</td>
<td>N.D.</td>
</tr>
<tr>
<td>Explosive Limits, vol%</td>
<td>2.0 - 12.7</td>
</tr>
<tr>
<td>Flash Point, °F</td>
<td>53</td>
</tr>
<tr>
<td>Auto-ignition Temp., °F</td>
<td>N.D.</td>
</tr>
<tr>
<td>Vapor Pressure</td>
<td>32.25 mm Hg @ 20°C</td>
</tr>
</tbody>
</table>

(See "Other information" Section for abbreviation legend)

SECTION 10. Stability and Reactivity

STABILITY: No Information

CONDITIONS TO AVOID: Avoid impact, friction, heat, sparks, flame and source of ignition.

INCOMPATIBILITY: Prevent contact with strong oxidizing agents. Avoid contact with caustics. Avoid contact with amines. Avoid contact with chlorinated compounds.

HAZARDOUS DECOMPOSITION PRODUCTS: During combustion carbon monoxide may be formed.

HAZARDOUS POLYMERIZATION: No Information
SECTION 11. Toxicological Information

Primary Route(s) of Entry: Eye Contact, Ingestion, Inhalation, Skin Contact

EFFECTS OF OVEREXPOSURE - INHALATION: Vapors can cause irritation of the respiratory tract. High concentrations can cause headache, nausea, weakness, lightheadedness, and stupor (CNS depression). May cause dizziness and drowsiness.

EFFECTS OF OVEREXPOSURE - SKIN CONTACT: Prolonged or repeated contact can result in defatting and drying of the skin which may result in skin irritation and dermatitis (rash).

EFFECTS OF OVEREXPOSURE - EYE CONTACT: Causes serious eye irritation. Symptoms may include stinging, tearing, redness and swelling.

EFFECTS OF OVEREXPOSURE - INGESTION: May cause dizziness and drowsiness and/or stupor.

EFFECTS OF OVEREXPOSURE - CHRONIC HAZARDS: No Information

Carcinogenicity

<table>
<thead>
<tr>
<th>CAS-No.</th>
<th>Name</th>
<th>IARC</th>
<th>NTP</th>
</tr>
</thead>
<tbody>
<tr>
<td>67-63-0</td>
<td>2-propanol</td>
<td>3- Not classifiable as to its carcinogenicity to humans.</td>
<td>Not Listed</td>
</tr>
</tbody>
</table>

Acute Toxicity Values

The acute effects of this product have not been tested. Data on individual components are tabulated below:

<table>
<thead>
<tr>
<th>CAS-No.</th>
<th>Name</th>
<th>Oral LD50, mg/kg</th>
<th>Dermal LD50, mg/kg</th>
<th>Vapor LC50, mg/L</th>
</tr>
</thead>
<tbody>
<tr>
<td>67-63-0</td>
<td>2-propanol</td>
<td>5,840</td>
<td>13,900</td>
<td>&gt;25</td>
</tr>
</tbody>
</table>

SECTION 12. Ecological Information

ECOLOGICAL INFORMATION: No Information

SECTION 13. Disposal Considerations

For more guidance and information contact our Waste Services Division at (262) 658-4000.

Always dispose of any waste in accordance with all local, state, and federal regulations.

DISPOSAL METHOD: Dispose of waste in accordance with all local, state and federal regulations.

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASE OR SPILLED: Absorb spill with inert material (e.g. dry sand or earth), then place in a chemical waste container. Avoid runoff into storm sewers and ditches which lead to waterways. Use only non-combustible material for clean-up. Recover by pumping (use an explosion proof or hand pump). Use clean, non-sparking tools to collect absorbed materials. Eliminate all ignition sources. Prevent additional discharge of material if able to do so safely. If leak or spill has not ignited, use water spray to disperse the vapors. Do not touch or walk through spilled material. Stay upwind of spill. Ventilate spill area. Wear appropriate personal protective equipment. (See Exposure Controls / Personal Protection Section.)

SECTION 14. Transport Information

DOT Proper Shipping Name: Isopropanol Packing Group: II

DOT Hazard Class: 3 Hazard SubClass: No Information

DOT UN/NA Number: UN1219 Resp. Guide Page: 129
# SECTION 15. Regulatory Information

## U.S. Federal Regulations:

### CERCLA - SARA Hazard Category

This product has been reviewed according to the EPA 'Hazard Categories' promulgated under Sections 311 and 312 of the Superfund Amendment and Reauthorization Act of 1986 (SARA Title III) and is considered, under applicable definitions, to meet the following categories:

- Fire Hazard
- Acute Health Hazard
- Chronic Health Hazard

### SARA SECTION 313:

This product contains the following substances subject to the reporting requirements of Section 313 of Title III of the Superfund Amendment and Reauthorization Act of 1986 and 40 CFR part 372:

No SARA 313 components exist in this product.

### TOXIC SUBSTANCES CONTROL ACT:

This product contains the following chemical substances subject to the reporting requirements of TSCA 12(B) if exported from the United States:

No TSCA components exist in this product.

## U.S. State Regulations:

### NEW JERSEY RIGHT-TO-KNOW:

The following materials are non-hazardous, but are among the top five components in this product.

No NJ Right-To-Know components exist in this product.

### PENNSYLVANIA RIGHT-TO-KNOW

The following non-hazardous ingredients are present in the product at greater than 3%.

No PA Right-To-Know components exist in this product.

### CALIFORNIA PROPOSITION 65 CARCINOGENS

Warning: The following ingredients present in the product are known to the state of California to cause Cancer.

No Proposition 65 Carcinogens exist in this product.

### CALIFORNIA PROPOSITION 65 REPRODUCTIVE TOXINS

Warning: The following ingredients present in the product are known to the state of California to cause birth defects, or other reproductive hazards.

No Proposition 65 Reproductive Toxins exist in this product.

## International Regulations: As follows -

### CANADIAN WHMIS:

This SDS has been prepared in compliance with Controlled Product Regulations except for the use of the 16 headings.

**WHMIS Class:** No Information
SECTION 16. Other Information

Revision Date: 3/2/2018
Supersedes Date: 12/30/2015

Datasheet produced by: EH&S - Regulatory Department

HMIS Ratings:

<table>
<thead>
<tr>
<th>Health</th>
<th>Flammability</th>
<th>Reactivity</th>
<th>Personal Protection</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>3</td>
<td>0</td>
<td>X</td>
</tr>
</tbody>
</table>

Volatile Organic Compounds, gr/ltr: 0

DISCLAIMER: THE VOLATILE ORGANIC COMPOUND (VOC) CONTENT REPORTED HEREIN, IF ANY, IS BASED ON A MATERIAL VOC CALCULATION. NOTE THAT SEVERAL METHODS ARE USED FOR CALCULATING VOC CONTENT AND THAT STANDARDS/REQUIREMENTS REGARDING VOC CONTENT VARY BY LOCATION/JURISDICTION. ACCORDINGLY, EMCO MAKES NO REPRESENTATIONS OR WARRANTIES, EXPRESS OR IMPLIED, REGARDING THIS MATERIAL'S COMPLIANCE WITH VOC STANDARDS/REQUIREMENTS APPLICABLE IN LOCATIONS/JURISDICTIONS WHERE THIS MATERIAL MAY BE SOLD OR USED.

Text for GHS Hazard Statements shown in Section 3 describing each ingredient:

H225 Highly flammable liquid and vapor.
H319 Causes serious eye irritation.
H336 May cause drowsiness or dizziness.

Icons for GHS Pictograms shown in Section 3 describing each ingredient:

- GHS02
- GHS07

Legend: N.A. - Not Applicable, N.E. - Not Established, N.D. - Not Determined, N.I. - No Information

The information on this SDS was obtained from sources which we believe to be reliable. However, the information provided is without any warranty, expressed or implied, regarding its correctness. Some information presented and conclusions drawn herein are from sources other than direct test data on the product itself. The information and recommendations are offered for the user's consideration and examination and should be used to make an independent determination of the methods to safeguard workers and the environment. The conditions or methods of handling, storage, use and disposal of the product are beyond our control and may be beyond our knowledge. For these reasons we do not assume responsibility and expressly disclaim any liability for loss, damage, or expense arising out of or in any way connected with handling, storage, use, or disposal of this product. If the product is used as a component in another product, this SDS may not be applicable. It is the responsibility of the user to comply with all Federal, State, and Local laws and regulations.