



## 1. CHEMICAL PRODUCT/COMPANY IDENTIFICATION

**Name:** MS-282  
IPA Clean

**Product Use:** Cleaning Solvent

### **MANUFACTURER/DISTRIBUTOR:**

Miller-Stephenson Chemical  
55 Backus Ave.  
Danbury, Conn. 06810 USA  
(203) 743-4447

**Emergency Phone Number:**  
(800) 424-9300

## 2. HAZARDS IDENTIFICATION

### **Hazard classification**

Flammable liquids: Category 2

Serious Eye Damage/Eye Irritation: Category 2A

Specific Target Organ Toxicity (single exposure): Category 3

### **Label elements:**

#### **Signal word**

Danger

#### **Pictograms**



### **Hazardous warnings**

Highly flammable liquid and vapor.

Causes serious eye irritation.

May cause drowsiness or dizziness

### **Precautionary Statements**

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.  
 Avoid breathing fumes/gas/vapor/spray.  
 Wash skin thoroughly after handling.  
 Use only outdoors or in a well-ventilated area.  
 Wear protective gloves/eye protection/face protection.  
 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing.  
 Rinse skin with water/shower.  
 IF INHALED: Remove person to fresh air and keep at rest in a position comfortable for breathing.  
 Call a POISON CENTER or doctor/ physician if you feel unwell.  
 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.  
 In case of fire: Use appropriate media to extinguish.  
 Store in a well-ventilated place. Keep container tightly closed.  
 Store in a well-ventilated place. Keep cool.  
 Dispose of contents/container to an approved waste disposal plant.

**Other Hazards**

May form explosive peroxides.

**3. INGREDIENTS**

<u>Material (s)</u>	<u>CAS No.</u>	<u>Approximate %</u>
Isopropyl Alcohol	67-63-0	100

**4. FIRST AID MEASURES**

**Inhalation:** Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell.

**Eye:** Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if irritation develops and persists.

**Skin:** Take off immediately all contaminated clothing. Rinse skin with water/shower. Wash contaminated clothing before reuse. Get medical attention if irritation develops and persists.

**Oral:** Rinse mouth. Never give anything by mouth to an unconscious person. Get medical attention if symptoms occur.

**5. FIRE FIGHTING MEASURES**

**Flash Point:** 53°F /12°C

**Method:** Tag Closed Cup

**Autoignition Temperature:** 797°F /425°C

**Flammable Limits in Air, % by Vol.:**  
 LEL: 2.0  
 UEL: 12.7

**Suitable Extinguishing Media:** Water for, Alcohol-resistant foam, Dry chemical, Carbon dioxide (CO2)

**Unsuitable extinguishing media:** Do not use waterjet, as this will spread the fire.

**Special hazards:** Flammable liquid. Fire and explosion hazard. Vapors are heavier than air and may spread along the floor. Vapors or gases may travel considerable distances to ignition sources and flash back. Hazardous gases/vapors produced in fire are carbon monoxide, carbon dioxide.

**Special Fire Fighting Instruction:** In the event of fire, wear self-contained breathing apparatus and other protective clothing to prevent contact with the skin and eyes. Evacuate personnel to safe area.

**Further information:** Keep unopened containers cool by spraying with water.

## 6. ACCIDENTAL RELEASE MEASURES

**Personal precautions, protective equipment and emergency procedures:** Flammable liquid. Use personal protective equipment. Avoid breathing vapors, mist or gas. Evacuate personnel to safe area. Remove all sources of ignition. Beware of vapors accumulating to form explosive concentrations. Vapors accumulate in low areas. In case of insufficient ventilation, wear suitable respiratory equipment.

**Environmental precautions:** If containers rupture, prevent material from entering sewers, waterways, or low areas. Should not be released into the environment.

**Methods and material for containment and cleaning up:** Immediately notify authorities of any reportable spill as may be required pursuant to regulations. Eliminate all ignition sources. Take precautionary measures against static discharge. Use only non-sparking tools. The product is miscible in water. Absorb with earth, sand, or other non-combustible material and transfer to container for disposal according to local regulations. Clean surface completely to remove residual contamination.

## 7. HANDLING AND STORAGE

**Handling:** Avoid contact with eyes, skin, or clothing. Do not inhale vapor or mist. Wash thoroughly after handling. Keep away from heat, sparks, and open flame. Explosion-proof general and local exhaust ventilation. Take measures to prevent the buildup of electrostatic charge. Use non-sparking tools to open and close containers.

**Storage Conditions:** Keep container tightly closed and store in a clean, cool and dry area that is well-ventilated. Prevent electrostatic charge build-up by using common bonding and grounding techniques. Eliminate sources of ignition. Do not store sources of heat, in direct sunlight or where temperatures exceed 120°F/49°C.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**Exposure Limits:**

Isopropyl Alcohol

**TWA (ACGIH)**

200 ppm, TWA

**TWA (OSHA)**

400 ppm, TWA

Use only with adequate ventilation.

Vapors are heavier than air posing a hazard of asphyxia if they are trapped in enclosed or low places. Explosion-proof general and local exhaust ventilation should be used in these areas.

**Eye Protection:** Wear safety glasses or coverall chemical splash goggles.

**Respiratory Protection:** Where there is potential for airborne exposures to be above the applicable limits, wear NIOSH approved respiratory protection.

**Skin Protection:** Where there is potential for skin contact have available and wear as appropriate impervious gloves. Gloves of nitrile rubber are recommended.

Do not smoke in area. Wash after handling. Do not eat or drink when using the material.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

**Boiling Point:** 180°F/82°C

**Percent Volatile by Volume:** 100

**Density:** 0.785 g/cc @ 70°F/20°C

**Vapor Pressure:** 44 mmHg 77°F/25°C

**Vapor Density (Air=1):** 2.1

**Solubility in H<sub>2</sub>O:** Soluble in water

**pH Information:** N.A.

**Evaporation Rate (CC14=1):** N.A.

**Form:** Liquid

**Appearance:** Clear & Colorless

**Color:** Colorless

**Odor:** Alcohol odor

## 10. STABILITY AND REACTIVITY

**Chemical Stability:** Stable at normal temperatures and storage conditions.

**Possibility of hazardous reactions:** Hazardous polymerization does not occur.

**Conditions to Avoid:** Heat, sparks, and flames. Exposure to elevated temperatures, direct sunlight. Avoid static discharge.

**Incompatible Materials:** Avoid contact with: Aluminum, Halogenated organics. Halogens. Strong acids. Strong oxidizers.

**Hazardous decomposition products:** Thermal decomposition products may include toxic oxides of carbon.

## 11. TOXICOLOGICAL INFORMATION

### Isopropyl Alcohol

#### Acute Toxicity

**Oral:** LD50, Rat, >5,000 mg/kg

**Skin Absorption:** LD50, Rat, >5,000 mg/kg

**Inhalation:** LC50, 4 h, Vapor, Rat, 72.6 mg/l

**Skin Corrosion/Irritation:** No skin irritation in rabbits.

**Serious Eye Damage/Irritation:** Irritation to eyes in Rabbits, reversing within 21 days.

**Skin Sensitization:** Not classified based on available information.

**Respiratory Sensitization:** Not classified based on available information.

**Germ Cell Mutagenicity:** In vitro and In vivo - Not Mutagenic

**Carcinogenicity:** Negative based in inhalation testing in rats.

**Reproductive Toxicity:** Not classified based on available information.

**STOT- single exposure:** May cause drowsiness or dizziness

**STOT- repeated exposure:** Not classified based on available information.

**Aspiration toxicity:** Not classified based on available information.

## 12. ECOLOGICAL INFORMATION

### Isopropyl Alcohol:

**Toxicity to fish:** LC50, fathead minnow (*Pimephales promelas*), 96 h: 9,640 mg/l

**Toxicity to daphnia and other aquatic invertebrates:** EC50, water flea (*Daphnia magna*), 24 h: >10,000 mg/l

**Toxicity to microorganisms:** EC50, (*Pseudomonas putida*), 16 h: >1,050 mg/l

**Persistence and degradability:** Rapidly degradable.

**Bioaccumulative potential:** Partition coefficient: n-octanol/water: log Pow: 0.05

**Mobility in soil:** No data available.

## 13. DISPOSAL CONSIDERATIONS

Empty containers must not be burned because of the explosive hazard. Recover and reclaim or recycle, if practical. Comply with Federal, State/Provincial and Local regulations. Remove to a permitted waste disposal facility.

## 14. TRANSPORT INFORMATION

### U.S. DOT

**Proper Shipping Name:** Isopropanol

**Hazard Class:** 3

**Identification No.** UN1219

**Packing Group:** II

### IATA

**Proper Shipping Name:** Isopropanol

**Hazard Class:** 3

**Identification No.** UN1219

**Packing Group:** II

### IMDG

**Proper Shipping Name:** Isopropanol

**Hazard Class:** 3

**Identification No.** UN1219

**Packing Group:** II

## 15. REGULATORY INFORMATION

### U.S. Federal Regulations

**TSCA:** All ingredients are listed in TSCA inventory.

### **SARA 311/312 Hazards**

Fire Hazard, Acute Health Hazard, Chronic Health Hazard

## **16. OTHER INFORMATION**

### **NPCA-HMIS Ratings:**

Health - 2  
Flammability - 3  
Reactivity - 0

Personal Protective rating to be supplied by user depending on the conditions.

### **FOR INDUSTRIAL USE ONLY**

### **REVISION DATE: AUGUST 2020**

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text. Final determination of suitability of any material is the sole responsibility of the user.