



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.

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 dry sand, dry chemical or alcohol-resistant foam for extinction.
 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: If inhaled, immediately remove to fresh air. Keep person calm. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Call a physician immediately

Eye: In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Call a physician immediately.

Skin: Wash off with soap and large amounts water for 15 mins. Remove contaminated clothing immediately and wash before reuse. Get medical attention immediately.

Oral: DO NOT INDUCE VOMITING. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs. Never give anything by mouth to an unconscious person. Get medical attention.

5. FIRE FIGHTING MEASURES

Flash Point: 53°F /12°C

Method: Tag Closed Cup

Autoignition Temperature: 750°F /399°C

Flammable Limits in Air, % by Vol.:

LEL: 2%

UEL: 12%

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

Unsuitable extinguishing media: No not use waterjet.

Special hazards: Flammable liquid. Vapor forms explosive mixture with air. 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.

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

6. ACCIDENTAL RELEASE MEASURES

Safeguards (Personnel): 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.

Spill Cleanup: Contain spillage using explosion proof equipment. Use non-flammable absorbent and transfer the absorbent material, using non-sparking tools into an approved container for disposal according to local regulations.

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. 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. Do not store sources of heat, in direct sunlight or where temperatures exceed 120°F/49°C.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

<u>Exposure Limits:</u>	<u>TWA (ACGIH)</u>	<u>TWA (OSHA)</u>
Isopropyl Alcohol	200 ppm , TWA	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. Mechanical 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 in excess of 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

Density: 0.785 g/cc @ 70°F/20°C

Vapor Density (Air=1): 2.1

pH Information: N.A.

Form: Liquid

Color: Colorless

Percent Volatile by Volume: 100

Vapor Pressure: 44 mmHg 77°F/25°C

Solubility in H₂O: Soluble in water

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

Appearance: Clear & Colorless

Odor: Alcohol odor

10. STABILITY AND REACTIVITY

Chemical Stability: Stable at normal temperatures and storage conditions.

Possibility of hazardous reactions: Vapors may form flammable mixture in air.

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

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

Hazardous decomposition products: Carbon oxides.

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: 10,000 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: DECEMBER 2018

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