



1. CHEMICAL PRODUCT/COMPANY IDENTIFICATION

Name: MS-280
K0201A
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 aerosol: Category 1

Eye Irritation: Category 2A

Specific Target Organ Toxicity (single exposure): Category 3

Label elements:

Signal word

Danger

Pictograms



Hazardous warnings

Highly flammable aerosol.

Causes serious eye irritation.

May cause drowsiness or dizziness

Precautionary Statements

Keep away from heat/sparks/open flames/hot surfaces – No smoking.

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 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
 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
 Pressurized container: Do not pierce or burn, even after use.
 Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F.
 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	75 - 85
1,1,1,2-Tetrafluoroethane	811-97-2	18 - 22

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 of 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

Flammability: This product is flammable.

Test Method: Ignition distance test and Enclosed space ignition test

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 applicable data available.

Special hazards: Flammable aerosol. 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 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.

Storage Conditions: 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. Do not pierce or burn, even after use.

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. 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: N.A.

Density: 0.785 g/cc @ 70°F/20°C

Vapor Density (Air=1): 2.1

pH Information: N.A.

Form: Aerosol

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, Ketones. 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: Consumer Commodity

Hazard Class: ORM-D

Identification No. None

Packing Group: None

IATA

Proper Shipping Name: Aerosols, Flammable

Hazard Class: 2.1

Identification No. UN1950

Packing Group: None

IMDG

Proper Shipping Name: Aerosols, Flammable

Hazard Class: 2.1

Identification No. UN1950

Packing Group: None

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: FEBRUARY 2019

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.