

1 Identification

GHS Product Identifier

Trade name: Max Pro Isopropyl Alcohol Precision Cleaner
 Product code: 3467

Recommended use of the chemical and restriction on use

Electronics cleaner

Supplier's details

Max Pro
 P.O. Box 9962
 Ft Lauderdale FL USA 33310

Tel.: 954-972-3338

Emergency phone number

CHEMTREC 24 Hour Emergency Response
 USA & Canada 800-424-9300

2 Hazard(s) identification

Classification of the substance or mixture

Physical Hazards

Flammable aerosols Category 1

Gases under pressure Liquefied gas

Health Hazards

Serious eye damage/eye irritation Category 2

Specific target organ toxicity,
 single exposure Category 3 narcotic effects

Aspiration hazard Category 1

Environmental hazards

Not classified.

OSHA defined hazards

Not classified.

GHS label elements

Danger



Extremely flammable aerosol

Contains gas under pressure; may explode if heated

May be fatal if swallowed and enters airways

Causes serious eye irritation

May cause drowsiness or dizziness

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

Do not spray on an open flame or other ignition source.

Do not pierce or burn, even after use.

Avoid breathing dust/fume/gas/mist/vapours/spray.

Wash hands thoroughly after handling.

Wear protective gloves/protective clothing/eye protection/face protection.

IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.

IF INHALED: Remove person to fresh air and keep comfortable for breathing.

IF INHALED: 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.

Do NOT induce vomiting.

IF eye irritation persists: Get medical advice/attention.

Store in a well-ventilated place.

Store locked up.

Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.

Dispose of contents/container to in accordance with local/regional/national regulations.

Other hazards which do not result in classification

PREVENTION

Do not apply while equipment is energized. Vapors will accumulate readily and may ignite. Use only with adequate ventilation; maintain ventilation during use and until all vapors are gone. Open doors and windows or use other means to ensure a fresh air supply during use and while product is drying. If you experience any symptoms listed on this label, increase ventilation or leave the area.

HNOC

Static accumulating flammable liquid can become electrostatically charged even in bonded and grounded equipment. Sparks may ignite liquid and vapor. May cause flash fire or explosion.

3 Composition/information on ingredients

Description	CAS Number	EINECS Number	%	Note
2-Propanol	67-63-0		60 - 70	Isopropyl Alcohol purity no less than 99.5%
1,1-Difluoroethane, liquefied, under pressure	75-37-6		30 - 40	

4 First-aid measures

Description of necessary first-aid measures

First-aid measures after 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.

- First-aid measures after skin contact: Rinse skin with water/shower. Get medical attention if irritation develops and persists.
- First-aid measures after eye contact: 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.
- First-aid measures after ingestion: Call a physician or poison control center immediately. Rinse mouth. Do not induce vomiting. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs.
- First-aid measures general: Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

Most important symptoms/effects, acute and delayed

May cause drowsiness and dizziness. Headache. Nausea, vomiting. Irritation of nose and throat. Aspiration may cause pulmonary edema and pneumonitis. Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision.

Indication of immediate medical attention and special treatment needed, if necessary

Provide general supportive measures and treat symptomatically. Keep victim under observation. Symptoms may be delayed.

5 Fire-fighting measures

Suitable extinguishing media

Alcohol resistant foam. Water fog. Carbon dioxide (CO₂). Dry chemical powder, carbon dioxide, sand or earth may be used for small fires only.

Unsuitable extinguishing media: None known.

Specific hazards arising from the chemical

Contents under pressure. Pressurized container may explode when exposed to heat or flame. This product is a poor conductor of electricity and can become electrostatically charged. If sufficient charge is accumulated, ignition of flammable mixtures can occur. Static electricity accumulation may be significantly increased by the presence of small quantities of water or other contaminants. Material will float and may ignite on surface of water. During fire, gases hazardous to health may be formed.

Special protective actions for fire-fighters

Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA.

In case of fire: Stop leak if safe to do so. Move containers from fire area if you can do so without risk. Containers should be cooled with water to prevent vapor pressure build up.

Extremely flammable aerosol. Contents under pressure. Pressurized container may explode when exposed to heat or flame.

6 Accidental release measures

Personal precautions, protective equipment and emergency procedures

Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Keep out of low areas. Remove all possible sources of ignition in the surrounding area. Many gases are heavier than air and will spread along ground and

collect in low or confined areas (sewers, basements, tanks). Wear appropriate protective equipment and clothing during clean-up. Avoid breathing mist or vapor. Avoid breathing gas. Emergency personnel need self-contained breathing equipment. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ventilate closed spaces before entering them. Use appropriate containment to avoid environmental contamination. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.

Environmental precautions

Avoid discharge into drains, water courses or onto the ground. Use appropriate containment to avoid environmental contamination.

Methods and materials for containment and cleaning up

Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Keep combustibles (wood, paper, oil, etc.) away from spilled material. Stop the flow of material, if this is without risk. Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination. For waste disposal, see section 13 of the SDS. Prevent entry into waterways, sewer, basements or confined areas.

7 Handling and storage

Precautions for safe handling

Minimize fire risks from flammable and combustible materials (including combustible dust and static accumulating liquids) or dangerous reactions with incompatible materials. Handling operations that can promote accumulation of static charges include but are not limited to: mixing, filtering, pumping at high flow rates, splash filling, creating mists or sprays, tank and container filling, tank cleaning, sampling, gauging, switch loading, vacuum truck operations. Pressurized container: Do not pierce or burn, even after use. Do not use if spray button is missing or defective. Do not spray on a naked flame or any other incandescent material. Do not smoke while using or until sprayed surface is thoroughly dry. Do not cut, weld, solder, drill, grind, or expose containers to heat, flame, sparks, or other sources of ignition. Use caution around energized equipment. The metal container will conduct electricity if it contacts a live source. This may result in injury to the user from electrical shock and/or flash fire. Avoid breathing mist or vapor. Avoid breathing gas. Avoid contact with eyes. Avoid prolonged exposure. Use only in well-ventilated areas. Wear appropriate personal protective equipment. Wash hands thoroughly after handling. Observe good industrial hygiene practices. For product usage instructions, please see the product label.

Conditions for safe storage, including any incompatibilities

Level 2 Aerosol.

Pressurized container. Protect from sunlight and do not expose to temperatures exceeding 50°C/122 °F. Do not puncture, incinerate or crush. Do not handle or store near an open flame, heat or other sources of ignition. This material can accumulate static charge which may cause spark and become an ignition source. Avoid spark promoters. These alone may be insufficient to remove static electricity. Store in a well-ventilated place. Store away from incompatible materials (see Section 10 of the SDS).

8 Exposure controls/personal protection

Control parameters

Occupation exposure limits

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value
Isopropyl Alcohol (CAS 67-63-0)	PEL	980 mg/m ³ 440 ppm

US. ACGIH Threshold Limit Values

Components	Type	Value
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Isopropyl Alcohol (CAS 67-63-0)	STEL	400 ppm
	TWA	200 ppm

US. NIOSH: Pocket Guide to Chemical Hazards

Components	Type	Value
Isopropyl Alcohol (CAS 67-63-0)	STEL	1225 mg/m ³
	TWA	550 ppm 980 mg/m ³ 400 ppm

US. AIHA Workplace Environmental Exposure Level (WEEL) Guides

Components	Type	Value
1,1-Difluoroethane (CAS 75-37-6)	TWA	2700 mg/m ³
		1000 ppm

Biological limit values

Components	Value	Determinant	Specimen	Sampling Time
Isopropyl Alcohol (CAS 67-63-0)	40 mg/l	Acetone	Urine	*

* - For sampling details, please see the source document.

Appropriate engineering controls

Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Provide eyewash station.

Individual protection measures

Eye/face protection: Wear safety glasses with side shields (or goggles).

Skin protection

Hand protection: Wear protective gloves such as: Neoprene. Polyvinyl alcohol (PVA).

Other: Wear suitable protective clothing.

Respiratory protection:

If engineering controls are not feasible or if exposure exceeds the applicable exposure limits, use a NIOSH-approved cartridge respirator with an organic vapor cartridge. Use a self-contained breathing apparatus in confined spaces and for emergencies. Air monitoring is needed to determine actual employee exposure levels.

Thermal hazards

Wear appropriate thermal protective clothing, when necessary.

General hygiene considerations

When using do not smoke. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

9 Physical and chemical properties

Physical and chemical properties

Physical state	Liquid.
Form	Aerosol.
Color	Clear. Colorless.
Odor	Alcoholic.
Odor threshold	Not available.
pH	Not available.
Melting point/freezing point	-127.3 °F (-88.5 °C) estimated
Initial boiling point and boiling range	179.6 °F (82 °C) estimated
Flash point	54 °F (12.2 °C) Tag Closed Cup
Evaporation rate	Very fast.
Flammability (solid, gas)	Not available.
Flammability limit - lower (%)	2 % estimated
Flammability limit - upper (%)	12 % estimated
Vapor pressure	2056.7 hPa estimated
Vapor density	2 (air = 1)
Relative density	0.82 estimated
Solubility (water)	Miscible.
Partition coefficient (n-octanol/water)	Not available.
Auto-ignition temperature	750.2 °F (399 °C) estimated
Decomposition temperature	Not available.
Viscosity (kinematic)	Not available.
Percent volatile	100 %

10 Stability and reactivity

Reactivity

The product is stable and non-reactive under normal conditions of use, storage and transport.

Chemical stability

Material is stable under normal conditions.

Possibility of hazardous reactions

No dangerous reaction known under conditions of normal use.

Conditions to avoid

Heat, flames and sparks. Contact with incompatible materials.

Incompatible materials

Acids. Aldehydes. Alkalis. Amines. Chlorinated hydrocarbons. Halogens. Strong oxidizing agents. Isocyanates. Chlorine.

Hazardous decomposition products

Carbon oxides.

11 Toxicological information

Toxicological (health) effects

Acute toxicity May be fatal if swallowed and enters airways. Narcotic effects.

Information on the likely routes of exposure

Ingestion	Droplets of the product aspirated into the lungs through ingestion or vomiting may cause a serious chemical pneumonia.
Inhalation	May cause drowsiness and dizziness. Headache. Nausea, vomiting. Prolonged inhalation may be harmful.
Skin contact	Prolonged skin contact may cause temporary irritation.
Eye contact	Causes serious eye irritation.

Symptoms related to the physical, chemical and toxicological characteristics

May cause drowsiness and dizziness. Headache. Nausea, vomiting. Irritation of nose and throat. Aspiration may cause pulmonary edema and pneumonitis. Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision.

Numerical measures of toxicity (such as acute toxicity estimates)

Product	Species	Test Results
Isopropyl Alcohol Precision Cleaner		
Acute		
<i>Dermal</i>		
LD50	Rabbit	18719.959 mg/kg estimated
<i>Inhalation</i>		
LC50	Rat	21548.1543 ppm, 4 hours estimated 52.9277 mg/l, 4 hours estimated
<i>Oral</i>		
LD50	Rat	6329.77 mg/kg estimated

* Estimates for product may be based on additional component data not shown.

Interactive effects

Skin corrosion/irritation	Prolonged skin contact may cause temporary irritation.
Serious eye damage/eye irritation	Causes serious eye irritation.
Respiratory sensitization	Not available.
Skin sensitization	This product is not expected to cause skin sensitization.
Germ cell mutagenicity	No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.
Carcinogenicity	This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.
Reproductive toxicity	This product is not expected to cause reproductive or developmental effects.
Specific target organ toxicity single exposure	May cause drowsiness and dizziness.
Specific target organ toxicity repeated exposure	Not classified.

Aspiration hazard	May be fatal if swallowed and enters airways. If aspirated into lungs during swallowing or vomiting, may cause chemical pneumonia, pulmonary injury or death.
Chronic effects	Prolonged inhalation may be harmful.

12 Ecological information

Toxicity

Ecotoxicity The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

Product	Species	Test Results
Isopropyl Alcohol Precision Cleaner		
Aquatic		
<i>Acute</i>		
Crustacea	EC50	Daphnia 11817.8154 mg/l, 48 hours estimated
Fish	LC50	Fish 10091.7188 mg/l, 96 hours estimated
Components	Species	Test Results
Isopropyl Alcohol (CAS 67-63-0)		
Aquatic		
<i>Acute</i>		
Crustacea	EC50	Water flea (Daphnia magna) 7550 - 13299 mg/l, 48 hours
Fish	LC50	Fathead minnow (Pimephales promelas) 3200 mg/l, 96 hours

Persistence and degradability

Readily biodegradable formula.

Bioaccumulative potential

No data available.

Partition coefficient n-octanol / water (log Kow)

1,1-Difluoroethane	0.75
Isopropyl alcohol	0.05

Mobility in soil

No data available.

Other adverse effects

No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

13 Disposal considerations

Disposal methods

Disposal of waste from residues / unused products If discarded, this product is considered a RCRA ignitable waste, D001. Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Contents under pressure. Do not puncture, incinerate or crush. Dispose in accordance with all applicable regulations.

Hazardous waste code D001: Waste Flammable material with a flash point <140 F

Contaminated packaging Empty containers should be taken to an approved waste handling site for recycling or disposal. Since emptied containers may retain product residue, follow label warnings even after container is emptied.

14 Transport information

UN Number

UN1950

UN Proper Shipping Name

Aerosols, flammable, Limited Quantity

Transport hazard class(es)

Class 2.1

Subsidiary risk -

Label(s) 2.1

Packing group, if applicable

Not applicable.

Special precautions for user

Read safety instructions, SDS and emergency procedures before handling.

Special provisions N82

Packaging exceptions 306

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Packaging non bulk None

Packaging bulk None

IATA

UN number UN1950

UN proper shipping name Aerosols, flammable, Limited Quantity

Transport hazard class(es)

Class 2.1

Subsidiary risk -

Packing group Not applicable.

Environmental hazards No.

ERG Code 10L

Special precautions for user Read safety instructions, SDS and emergency procedures before handling.

Other Information

Passenger and cargo aircraft	Allowed.
Cargo aircraft only	Allowed.

IMDG

UN number	UN1950
UN proper shipping name	AEROSOLS, LIMITED QUANTITY
Transport hazard class(es)	
Class	2
Subsidiary risk	-
Packing group	Not applicable.
Environmental hazards	
Marine pollutant	No.
EmS	Not available.
Special precautions for user	Read safety instructions, SDS and emergency procedures before handling.

15 Regulatory information

Safety, health and environmental regulations specific for the product in question

US federal regulations This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200. All components are on the U.S. EPA TSCA Inventory List.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)
Not regulated.

SARA 304 Emergency release notification
Not regulated.

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)
Not listed.

US EPCRA (SARA Title III) Section 313 - Toxic Chemical: Listed substance
Not listed.

CERCLA Hazardous Substance List (40 CFR 302.4)
Not listed.

CERCLA Hazardous Substances: Reportable quantity
Not listed.

Spills or releases resulting in the loss of any ingredient at or above its RQ require immediate notification to the National Response Center (800-424-8802) and to your Local Emergency Planning Committee.

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List
Not regulated.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)
1,1-Difluoroethane (CAS 75-37-6)

Safe Drinking Water Act (SDWA)
Not regulated.

Food and Drug Administration (FDA)
Not regulated.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Section 311/312 Immediate Hazard - Yes
Hazard categories Delayed Hazard - No
Fire Hazard - Yes
Pressure Hazard - Yes
Reactivity Hazard - No

SARA 302 Extremely hazardous substance No

US State Regulations

US. California Controlled Substances. CA Department of Justice (California Health and Safety Code Section 11100)
Not listed.

US. New Jersey Worker and Community Right-to-Know Act
1,1-Difluoroethane (CAS 75-37-6)
Isopropyl alcohol (CAS 67-63-0)

US. Massachusetts RTK - Substance List
1,1-Difluoroethane (CAS 75-37-6)
Isopropyl alcohol (CAS 67-63-0)

US. Pennsylvania Worker and Community Right-to-Know Law
Isopropyl alcohol (CAS 67-63-0)

US. Rhode Island RTK
1,1-Difluoroethane (CAS 75-37-6)

US. California Proposition 65 California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65):
This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins.

Country(s) or region	Inventory name	On Inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	Yes
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	Yes
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	Yes
Korea	Existing Chemicals List (ECL)	Yes
New Zealand	New Zealand Inventory	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	Yes
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

* A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s).

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

16 Other information

Other information

HMIS® ratings

Health: 1
Flammability: 4
Physical hazard: 0
Personal protection: B

NFPA ratings

Health: 1
Flammability: 4
Instability: 0

NFPA ratings



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