

P280
P303+P361+P353

P305+P351+P338

P337+P313
P403+P235
P501

Wear protective gloves/protective clothing/eye protection/face protection.
IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
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.
Store in a well-ventilated place. Keep cool.
Dispose of contents/container to an approved waste disposal plant

SECTION 3: Composition/information on ingredients

Substances

1. Ethanol

Concentration 62 -72% (weight)
CAS no. 64-17-5

2. Isopropanol

Concentration <10 % (weight)
CAS no. 67-63-0

SECTION 4: First-aid measures

Description of necessary first-aid measures

General advice	In case of accident or if you feel unwell, seek medical advice immediately (show the label or SDS where possible).
If inhaled	Remove person to fresh air and keep comfortable for breathing. Acute and delayed symptoms and effects: May cause respiratory irritation. Signs/symptoms may include cough, sneezing, nasal discharge, headache, hoarseness, and nose and throat pain.
In case of skin contact	If symptoms occur, wash with water. Call a poison center or doctor if irritation develops or persists. Acute and delayed symptoms and effects: In some people (e.g., those with skin sensitivity), may cause skin irritation. Signs/symptoms may include localized redness, swelling, and itching.
In case of eye contact	Rinse cautiously with water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical attention/advice. Acute and delayed symptoms and effects: Causes serious eye irritation. Signs/symptoms may include redness, swelling, pain, tearing, and blurred or hazy vision.
If swallowed	Call a poison center or doctor if you feel unwell. If vomiting occurs naturally, have victim lean forward to reduce the risk of aspiration. Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person.

Acute and delayed symptoms and effects: May cause gastrointestinal irritation. Signs/symptoms may include abdominal pain, stomach upset, nausea, vomiting and diarrhea.

Most important symptoms/effects, acute and delayed

The most important known symptoms and effects are described in the labelling (see section 2) and/or in section 11

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

No data available.

SECTION 5: Fire-fighting measures**Suitable extinguishing media**

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Specific hazards arising from the chemical

Carbon oxides.

Special protective actions for fire-fighters

Wear self-contained breathing apparatus for firefighting if necessary. Vapors may form explosive mixtures with air. Flammable liquid and vapor. Cool containers with flooding quantities of water until well after fire is out. Vapors are heavier than air and may travel to a source of ignition and flash back.

Further information

Use water spray to cool unopened containers.

SECTION 6: Accidental release measures**Personal precautions, protective equipment and emergency procedures**

Wear respiratory protection if necessary. Use personal protective equipment. Avoid breathing mist, vapors and spray. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapors accumulating to form explosive concentrations. Vapors can accumulate in low areas. For personal protection see section 8.

Environmental precautions

Do not let concentrated product enter drains. Prevent further leakage or spillage if safe to do so.

Methods and materials for containment and cleaning up

Non-sparking tools should be used. Soak up with inert absorbent material. Suppress (knock down) gases/vapors/mists with a water spray jet.

For large spills, provide diking or other appropriate containment to keep material from spreading. If diked material can be pumped, store recovered material in appropriate container.

Reference to other sections

For disposal see section 13.

SECTION 7: Handling and storage**Precautions for safe handling**

Do not swallow. Do not eat, drink or smoke when using this product. Do not get the product in your eyes. See Section 8 for information on Personal Protective Equipment. Avoid inhalation of vapor or mist. Use explosion-proof equipment. Keep away from sources of ignition - No smoking. Take measures to prevent the buildup of electrostatic charge. For

precautions see section 2.2

Conditions for safe storage, including any incompatibilities

Store in a well-ventilated place. Keep container tightly closed. Keep away from heat and sources of ignition. Keep from contact with oxidizing materials. Do not store in direct sunlight. Store in a tightly closed container. Flammables-area. Protect containers against damage. Keep container closed when not in use.

Specific end use(s)

Apart from the uses mentioned in section 1 no other specific uses are stipulated.

SECTION 8: Exposure controls/personal protection**Control parameters****CAS: 64-17-5**

Ethanol

ACGIH (USA): (ST) 1000 ppm TLV® inhalation; Cal/OSHA: 1000 ppm PEL inhalation; NIOSH: 1000 ppm REL inhalation; OSHA: 1000 ppm PEL inhalation; 1900 mg/m³ PEL inhalation

CAS: 67-63-0

Isopropanol

ACGIH (USA): 200 ppm, (ST) 400 ppm TLV® inhalation; Cal/OSHA: 400 ppm, (ST) 500 ppm PEL inhalation; NIOSH: 400 ppm, (ST) 500 ppm REL inhalation; OSHA: 400 ppm PEL inhalation; 980 mg/m³ PEL inhalation

Appropriate engineering controls

Use ventilation adequate to keep exposures (airborne levels of dust, fume, vapor, gas, etc.) below recommended exposure limits. Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

Individual protection measures, such as personal protective equipment (PPE)**Eye/face protection**

To protect your eyes/face (e.g., if responding to a large spill), wear safety glasses. Use equipment for eye protection that meets the standards referenced by OSHA regulations in 29 CFR 1910.133 for Personal Protective Equipment.

Skin protection

To protect your hands (e.g., if responding to a large spill), wear protective gloves (rubber, chemical resistant). Consult manufacturer specifications for further information. Gloves must be inspected prior to use. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Body protection

To protect your skin (e.g., if responding to a large spill), wear protective clothing. The clothing should be impervious, flame retardant and antistatic protective clothing. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection

Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multipurpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Thermal hazards

No data available.

Environmental exposure controls

Prevent further leakage or spillage if safe to do so. Do not let concentrated product enter drains.

SECTION 9: Physical and chemical properties**Information on basic physical and chemical properties**

Appearance/form (physical state, color, etc.)	Clear, colorless liquid
Odor	No data available.
Odor threshold	No data available.
pH	6.0. – 8.0
Melting point/freezing point	No data available.
Initial boiling point and boiling range	> 212.00 F
Flash point	< 100.00 F
Evaporation rate	No data available.
Flammability (solid, gas)	No data available.
Upper/lower flammability limits	No data available.
Upper/lower explosive limits	No data available.
Vapor pressure	No data available.
Vapor density	No data available.
Relative density	0.850 – 0.860 (Water = 1)
Solubility(ices)	No data available.
Partition coefficient: n-octanol/water	No data available.
Auto-ignition temperature	No data available.
Decomposition temperature	No data available.
Viscosity	3500 - 4500
Explosive properties	No data available.
Oxidizing properties	No data available.

SECTION 10: Stability and reactivity**Reactivity**

Stable under recommended storage conditions.

Chemical stability

Stable under normal storage conditions.

Possibility of hazardous reactions

No data available.

Conditions to avoid

Heat, flames and sparks. Incompatible products. Keep away from open flames, hot surfaces and sources of ignition.

Incompatible materials

Strong oxidizing agents, Strong reducing agents, Strong bases, Peroxides, Halogenated compounds, Alkali metals, Amines. Strong oxidizing agents, Strong acids, Amines, chlorine, aldehydes.

Hazardous decomposition products

No data available.

SECTION 11: Toxicological information**Information on toxicological effects****Acute toxicity**

Likely Routes of Exposure: Eye contact. Skin contact. Inhalation. Ingestion.

Ethanol

LD50 Oral - Rat - 10,470 mg/kg

LD50 Skin - Rabbit - 15,800 mg/kg

LD50 Inhalation - Rat - 30,000 mg/l - 4 h

Isopropanol

LD50 Oral - Rat - 5,045 mg/kg

LC50 Inhalation - Rat - 16000 ppm - 8 h

LD50 Skin - Rabbit - 12,800 mg/kg

Symptoms (including delayed and immediate effects):**Inhalation**

May cause respiratory irritation. Signs/symptoms may include cough, sneezing, nasal discharge, headache, hoarseness, and nose and throat pain.

Ingestion

May cause gastrointestinal irritation. Signs/symptoms may include abdominal pain, stomach upset, nausea, vomiting and diarrhea.

Skin corrosion/irritation

In some people (e.g., those with skin sensitivity), may cause skin irritation. Signs/symptoms may include localized redness, swelling, and itching.

Serious eye damage/irritation

Causes serious eye irritation. Signs/symptoms may include redness, swelling, pain, tearing, and blurred or hazy vision.

Respiratory or skin sensitization

No data available.

Germ cell mutagenicity

No data available.

Carcinogenicity

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by IARC.

ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

Reproductive toxicity

No data available.

STOT-single exposure

May cause drowsiness or dizziness.

STOT-repeated exposure

No data available.

Aspiration hazard

No data available.

SECTION 12: Ecological information**Toxicity**

CAS# 67-63-0: Isopropyl Alcohol: LC50, Fathead Minnow (*Pimephales promelas*), 10600000. UG/L, 24 H, Mortality. Effective concentration to 50% of test organisms., Water Flea (*Daphnia magna*), 159000.

UMOL/L, 24 H, Intoxication,.

LC50, Western Mosquitofish (*Gambusia affinis*), 1400000. UG/L, 72 H, Mortality.

LC50, Goldfish (*Carassius auratus*), 5000000. UG/L, 24 H, Mortality.

Effective concentration to 50% of test organisms., Green Algae Order (*Chlorococcales*), 1000. MG/L, 24 H, Physiology.

Persistence and degradability

No data available on product

Bioaccumulative potential

No data available on product

Mobility in soil

No data available.

Results of PBT and vPvB assessment

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

Other adverse effects

No data available.

SECTION 13: Disposal considerations**Disposal of the product**

Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber

Disposal of contaminated packaging

Dispose of as unused product.

SECTION 14: Transport information**DOT (US)**

UN Number: 1170

Class: 3

Packing Group: III

Proper Shipping Name: Ethanol solutions.

SECTION 15: Regulatory information**Safety, health and environmental regulations specific for the product in question****SARA 302 Components**

No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 Components

This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

SARA 311/312 Hazards

Fire, Acute Health Hazard

Massachusetts Right To Know Components

Chemical name: Ethanol

CAS number: 64-17-5

Common name: 2-Propanol

CAS number: 67-63-0

Pennsylvania Right To Know Components

Chemical name: Ethanol

CAS number: 64-17-5

Chemical name: 2-Propanol

CAS number: 67-63-0

New Jersey Right To Know Components

Common name: ETHYL ALCOHOL

CAS number: 64-17-5

Common name: 2-Propanol

CAS number: 67-63-0

California Prop. 65 Components

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

SECTION 16: Other information**Further information/disclaimer**

DISCLAIMER: The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigation to determine the suitability of information for their particular purposes. In no event shall California Prison Industry Authority be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, whatsoever arising, even if California Prison Industry Authority has been advised of the possibility of such damages.