

OpticALL

SECTION I - IDENTIFICATION

Product Name: **OpticALL** Spray (OP10S-6)
OpticALL Spray (OP10S-14)

Emergency Telephone No.:
 For **OpticALL** contact - (858) 858-486-8388
 For Isobutane/Propane contact - Diversified Chemical - 714- 778-1200
 For Isopropyl-99 contact - Los Angeles Poison Information: 1- 800-356-3129

Company:
 CAIG Laboratories, Inc.
 12200 Thatcher Court
 Poway, CA 92064

SECTION II - INGREDIENTS

- OpticALL =** Components -
- Isopropyl-99 (specific name), Isopropyl alcohol - **IPA**-volatile solvent (common name), oxygenated hydrocarbon mixture (chemical family), 67-63-0 (CAS No.), 400.00ppm (ACGIH, TWA), 500.00ppm (ACGIH, STEL), 400.00ppm (MSHA, TWA), 400.00ppm (OSHA, TWA), 500.00 ppm (OSHA, STEL), 400.00ppm (CAL OSHA, TWA), % for OP10S-6 = 37.0%
 - Isobutane/Propane* (specific name), Isobutane/Propane (common name), C₄H₁₀/C₃H₈ (formula), 75-28-5/74-98-6(CAS No.), Isobutane (800 ACGIH-TLV), Propane (1000 ACGIH-TLV), OP10S-6 = 5%.
 - OpticALL* (specific name), OpticALL (common name), Not Established (OSHA PEL and ACGIH TLV), (includes water, ammonia, etc.) % for OP10SS= 58.0%.

California Proposition 65: The California list of chemicals, "known to cause cancer or reproductive toxicity" is so extensive it requires more clarification, research and evaluation. Meanwhile, all chemicals distributed by, or manufactured by CAIG Laboratories, shall be assumed to be on the list or contain detectable amounts of chemical listed.

SECTION III - PHYSICAL/CHEMICAL CHARACTERISTICS

Boiling Point (of IPA): 82°C(180°F)
Vapor Pressure (mm Hg.)(of IPA): 37
Vapor Density (Air=1)(of IPA): 2.1
Specific Gravity (of IPA) (H₂O=1): @60°F = 0.786
Melting Point: N/A

Evaporation Rate IPA (Butyl Acetate=1): 1.7
Solubility in H2O: IPA(100%)
Appearance and Odor: Color, clear. Slight alcohol odor.

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

Flash Point: IPA solution 12°C(53°F) (TCC)
Flammable Limits % vol.(for IPA): Lower = 2.0, Upper = 12.0
NFPA (Health Hazard) for IPA = 1 (Slight), HAZARD (Flammability) for IPA = 3 (High), CLASS (Reactivity) for IPA = 0 (Least)
HMS (Health Hazard) for IPA = 2 (Moderate - chronic health effects), HAZARD (Flammability) for IPA = 3 (High), CLASS (Reactivity) for IPA = 0 (Least)

Extinguishing Media: Dry chemical, carbon dioxide, halon, polar or alcohol foam, or water spray is recommended. Water may be ineffective.

Unusual Fire & Explosion Hazards - for IPA: This material is flammable and may be ignited by heat, sparks flame or other sources of ignition (e.g. static electricity, pilot lights, mechanical/electrical equipment). Vapors may travel considerable distances to a source of ignition where they may ignite, flashback or explode. Vapor/Air explosion hazard indoors/outdoors or in sewers. Vapors are heavier than air and may accumulate in low areas. If container is not properly cooled, it may explode in the heat of a fire.

Special Fire Fighting Procedures: Wear appropriate protective equipment including respiratory protection as conditions warrant (see section VII & VIII). Move undamaged containers from fire area if it can be done without risk. Avoid spreading burning liquid with water used for cooling purposes.

SECTION V - REACTIVITY DATA

Stability: Material is stable; however, avoid open flames and high temperatures.
Cautions To Avoid: Avoid all possible sources of ignition.

Incompatibility (Materials to avoid): Anhydrides, Isocyanates, Acetaldehyde, Chlorine, Ethylene Oxide, Hydrogen Peroxide, Aluminum & Organometallic contaminants.

Hazardous Decomposition or Byproducts: Combustion may yield carbon monoxide and/or carbon dioxide. Do not breathe smoke or fumes. Wear appropriate protective equipment.

Hazardous Polymerization: Will not occur; however, avoid open flames and high temps.

SECTION VI - HEALTH HAZARD DATA

Principal Health Hazards:

Inhalation Isobutane/Propane- Vapor is heavier than air and can cause suffocation by reducing oxygen available for breathing. Breathing high concentrations of vapor may cause light-headedness, dizziness, unconsciousness or death.

Inhalation IPA : While IPA has a low degree of toxicity, breathing high concentrations of vapors or mists may cause irritation of the nose and throat and signs of nervous system depression (e.g., Headache, drowsiness, dizziness). Respiratory symptoms associated with pre-existing lung disorders (e.g., asthma-like conditions) may be aggravated by exposure to IPA.

Eye: IPA is an eye irritant. Direct contact with liquid or exposure to vapors or mists may cause stinging, tearing, redness and swelling.

Skin: IPA may cause mild skin irritation.

Oral: No specific intervention is indicated as the compound is not likely to be hazardous by ingestion. However, ingestion of excessive quantities may cause irritation of the digestive tract and signs of nervous system depression.

First Aid:

Inhalation IPA : If respiratory symptoms or other symptoms of exposure develop, move victim away from source of exposure and into fresh air. If symptoms persist, seek immediate medical attention. If victim is not breathing, immediately begin artificial respiration. If breathing difficulties develop, oxygen should be administered, seek medical attention.

Eye Contact: Move victim away from exposure and into fresh air. If irritation or redness develops, flush eyes with clean water and seek medical attention. For direct contact, hold eyelids apart and flush the affected eyes(s) with clean water for at least 15 minutes.

Skin Contact: Cleanse affected area(s) with mild soap and water. If irritation persists seek medical attention.

Ingestion: No first aid is normally required; However if swallowed, and symptoms develop, seek medical attention.

Note to Physicians: IPA (isopropanol is effectively removed by hemodialysis).

SECTION VII - PRECAUTIONS FOR SAFE HANDLING AND USE.

Steps to be Taken in Case Material is Released or Spilled: FLAMMABLE. Keep away from all sources of ignition and hot surfaces. Spilled material may be absorbed into any absorbent material. Wear appropriate protective equipment including respiratory protection as conditions warrant. Ventilate area till odor is gone. After IPA has been removed by ventilation, clean up oily residue with any standard soap or detergent solution.

Waste Disposal Method: Comply with federal, state and local laws and regulations.

Precautions to be Taken in Handling and Storing: Do not expose any aerosol can to sunlight or temperatures above 120°F to prevent possible bursting. All aerosol cautions apply - use in well ventilated areas. Use and store in cool, dry, well ventilated areas away from heat, hot surfaces and all sources of ignition. Protect containers from physical damage. Indoor storage should meet OSHA standards and appropriate codes.

Other Precautions: As with any chemical preparation - use only as directed and wash hands after use.

SECTION VIII - CONTROL MEASURES

Respiratory Protection: Not necessary unless used in an unventilated area or in high concentrations (see exposure limits, section IV).

Ventilation: Keep exposure below limits (section IV). Keep windows open. Local Exhaust - when used repeatedly in quantity. Electrical systems safe for such locations must be used.

Protective Gloves: Not necessary, but advised to prevent irritation.

Eye Protection: Suggested when using aerosols.

Other Protective Clothing or Equipment: Not necessary with adequate ventilation.

Work/Hygienic Practices: Avoid breathing vapors and contact with skin or eyes, use adequate ventilation.

SECTION IX - SHIPPING CLASSIFICATION

Consumer commodity: **ORM-D**

The information contained herein we believe to be accurate and is based on current technical data and tests, however, it should not be taken as definitive for all users. Users should thoroughly test products in their application, and independently conclude satisfactory results. We can assume no liability for results obtained or damages incurred through improper use of product or application of information.

