

# Material Data Safety Sheet Sterile 70% IPA & 30% WFI

# FOR ISOPROPANOL, ANHYDROUS

#### Section 1 – Chemical Product and Company Identification

Product Name Acta Medical Sterile 70% Isopropyl Alcohol Product use – Disinfectant/Decontaminant Product codes ACTAIPA70 Wei De Li Trading Co. Emergency # 24 Hr. CHEMTREC International- 1-703-527-3887

#### Section 2 – Composition / Information on Ingredients

Chemical name Isopropanol, anhydrous Synonyms 2-Propanol, 70% Isopropyl Alcohol 70%, IPA CAS no. IPA-67-63-0, Water – 7732-18-5 Concentration % 70 % and 30% water Uses Micro-biocide

## Section 3 – Hazards Identification



#### **GHS Pictograms –**

**GHS Class** – Flammable Liquid, Category 3. Eye Irritant, Category 2. Specific Target Organ Toxicity, Single Exposure, Category 3.

**Emergency overview** - Irritating to eyes. Slightly hazardous in case of skin contact. Vapors may cause drowsiness and dizziness.

#### **Potential Health effects;**

**Eye** - Produces irritation, characterized by a burning sensation, redness, tearing, inflammation, and possible corneal injury.

**Skin** - May cause skin sensitization, an allergic reaction, which becomes evident upon re-exposure to this material. Prolonged and/or repeated contact may cause de-fatting of the skin and dermatitis. May be absorbed through the skin. May cause irritation with pain and stinging, especially if the skin is abraded.

**Ingestion** - Causes gastrointestinal irritation with nausea, vomiting and diarrhea. May cause kidney damage. May cause central nervous system depression, characterized by excitement, followed by headache, dizziness, drowsiness, and nausea.

**Inhalation** - Inhalation of high concentrations may cause central nervous system effects characterized by nausea, headache, dizziness, unconsciousness and coma. May cause



narcotic effects in high concentration. Vapors may cause dizziness or suffocation. Causes upper respiratory tract irritation.

Chronic: Prolonged or repeated skin contact may cause de-fatting and dermatitis.

#### Section 4 – First Aid Measures

**Eyes** - Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid immediately.

**Skin** - Get medical aid. Flush skin with plenty of soap and water for at least 15 minutes while removing contaminated clothing and shoes.

**Ingestion** - Do NOT induce vomiting. If victim is conscious and alert, give 2-4 cupfuls of milk or water. Never give anything by mouth to an unconscious person. Get medical aid immediately **Inhalation**: Get medical aid immediately. Remove from exposure to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen.

**Notes to Physician** -Urine acetone test may be helpful in diagnosis. Treat symptomatically and supportively.

## Section 5 – Fire Fighting Measures

#### Fire related information.

NFPA Health: - 1 Flammability: - 3 Reactivity: - 0 Special:-0

**Fire fighting -** Use water in flooding quantities as fog. Use foam, dry chemical, or carbon dioxide. Cool all affected containers with flooding quantities of water. Apply water from as far a distance as possible. Use water spray to knock down vapors. Keep runoff water out of sewers and water sources.

#### Fire potential - FLAMMABLE.

**Hazards** - Vapors may form explosive mixtures with air. Vapors may travel to source of ignition and flash back. Most vapors are heavier than air. They will spread along ground and collect in low or confined areas (sewers, basements, tanks). Vapor explosion hazard indoors, outdoors or in sewers. May polymerize explosively when heated or involved in a fire.

Runoff to sewer may create fire or explosion hazard. Containers may explode when heated. Many liquids are lighter than water.

Combustion Products - Fire may produce irritating, corrosive and/or toxic gases.

# Section 6 – Accidental Release Measures

**General Information** - Use proper personal protective equipment as indicated in Section 8. **Spills/leaks** Absorb spill with inert material, (e. g. Dry sand or earth), then place into a chemical waste container. Clean up spills immediately using the appropriate protective equipment. Scoop up with a non-sparking tool, then place in a suitable container for disposal. Remove all sources of ignition.

## Section 7 – Handling and Storage

**Handling** - Wash thoroughly after handling. Ground and bond containers when transferring material. Use spark-proof tools and explosion proof equipment. Loosen closure cautiously before opening. Contents may develop pressure upon prolonged storage. Avoid breathing dust, vapor, mist, or gas. Avoid contact with skin and eyes. Empty containers retain product residue, (liquid and/or vapor), and can be dangerous.

Take precautionary measures against static discharges. Do not ingest or inhale. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose empty containers to heat, sparks or open flames.

**Storage** Keep away from heat, sparks and flame. Keep away from sources of ignition. Store in a cool, dry place. Do not store in direct sunlight. Store in a tightly closed container.



Flammables-area - After opening, purge container with nitrogen before reclosing.

Periodically test for peroxide formation on long term storage.

Addition of water on appropriate reducing materials will lessen peroxide formation. Store protected from moisture.

## Section 8 – Exposure Controls, Personal Protection

**Engineering Controls** - Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate general or local explosion-proof ventilation to keep airborne levels to acceptable levels.

**Airborne Exposure limits:** 

Time weighted average (TWA): 400 ppm Short-term Exposure Limit (STEL): 500 ppm

Personal Protective Equipment Eves Wear chemical goggles.

**Skin:** Wear appropriate protective gloves to prevent skin exposure.

**Clothing:** Wear appropriate protective clothing to prevent skin exposure.

**Respirators:** Follow the OSHA respirator regulations found in 29CFR 1910.134 or European standard EN 149. Always use a NIOSH or European standard EN 149 approved respirator when necessary.

# Section 9 – Physical and Chemical Properties

**Physical State:** Clear liquid **Appearance:** APHA: 10 max

**PH:** 7 (1%aq.sol)

**Viscosity:** 2.27 mPas 20 deg C **Freezing/Melting Point:** -89.5 deg C

Auto ignition Temperature: The lowest known

value is 399C

Flash Point: 12 deg C (53.60 deg F) Specific Gravity/Density: 0.785 Solubility in water: Miscible.

Odor alcohol-like-pleasant odor

Vapor pressure: 43 mm Hg@ 20deg C Boiling Point 81-83 deg C @ 760 mmHg

Molecular weight; 60.10

## Section 10 – Stability and Reactivity

**Chemical stability -** Stable at room temperature in closed containers under normal storage and handling conditions. Distillation may lead to the formation of peroxides. This material may be sensitive to peroxide formation

Conditions to avoid - light, ignition sources, exposure to moist air or water.

Incompatible materials, Oxidizing agents, acids, alkali metals, alkaline earth metals

Other Materials - Aluminum, halogens, acid anhydrides, oleum.

**Hazardous** - Carbon monoxide, carbon dioxide, peroxides.

# **Hazardous Polymerization** will not occur.

## Section 11 – Toxicological Information

Eye: rabbit, 100 mg Severe Eye: rabbit, 10 mg Moderate; Eye: rabbit, 100 mg/24H Moderate;

Skin: rabbit 500 mg Mild;

**Inhalation** rat: LC50 = 16000 ppm/8H; **Oral**, mouse: LD50 = 3600 mg/kg; Oral, rabbit: LD50 = 6410 mg/kg;



Oral, rat: LD50 = 5045 mg/kg; Skin, rabbit LD50 = 12800 mg/kg

**Carcinogenicity** - Isopropanol – IARC: Group 3 carcinogen See actual entry in RTECS for complete information.

## Section 12 – Ecological Information

Exotoxicity - Daphnia: LC50 = 4600 mg/1; 24 H;Fish: Fathead Minnow: 11.830 mg/1; 1 H;

Static Bioassay Fish: Goldfish: LC50 = 5 g/1; 24 H;, Acute aquatic effects: Fathead Minnow: LC50 = 1000 mg/L/96 Hr. Golden Orfe: LC50 = 8970 mg/L/48 Hr. goldfish:

LC50 = GT5000 mg/L/24 Hr.

**Other:** Biodegradable. This chemical is not likely to bio-concentrate.

# Section 13 – Disposal Considerations

Dispose of in a manner consistent with federal, state, and local regulations.

# Section 14 – Transport Information

	IATA	IMO	RID/ADR
Shipping Name	Isopropanol	Isopropanol	Isopropanol
Hazard class	3	3	3
UN number	1219	1219	1219

## Section 15 – Regulatory Information

This MSDS has been prepared according to the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all of the information required by the CPR.

# Section 16 – Additional Information

NFPA Ratings: Health: 3 Flammability: 1 Reactivity: 0 Special: -0

Shipping Information.

Dot(UN) Transportation Information

UN Number 1219 Response Guide 129 Hazard Class 3.2

MSDS updated 1/1/2018