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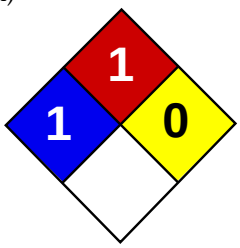


| | |
|---|---|
| Health | 1 |
| Fire | 1 |
| Reactivity | 0 |
| Personal Protection | A |

# Material Safety Data Sheet
## Vitamin A USP MSDS

## Section 1: Chemical Product and Company Identification

**Product Name:** Vitamin A USP

**Catalog Codes:** SLV1087

**CAS#:** 79-81-2

**RTECS:** VH6860000

**TSCA:** TSCA 8(b) inventory: Vitamin A Palmitate, Liquid in Oil

**CI#:** Not available.

**Synonym:** Vitamin A Palmitate, Liquid in Oil; Retinol Palmitate 1.7 m.I.U./g without stabilizers, all-trans Vitamin A Palmitate. 3,7-Dimethyl-9-(2,6,6-trimethyl-1-cyclohexene-1-yl)2,4,6,8-nonatetraene-1-yl-palmitate; Retinol Palmitate; Retinyl Palmitate

**Chemical Name:** Vitamin A Palmitate

**Chemical Formula:** C36-H60-O2

**Contact Information:**

**Sciencelab.com, Inc.**
14025 Smith Rd.
Houston, Texas 77396

US Sales: **1-800-901-7247**
International Sales: **1-281-441-4400**

Order Online: ScienceLab.com

**CHEMTREC (24HR Emergency Telephone), call:** 1-800-424-9300

**International CHEMTREC, call:** 1-703-527-3887

**For non-emergency assistance, call:** 1-281-441-4400

## Section 2: Composition and Information on Ingredients

**Composition:**

| Name | CAS # | % by Weight |
|---|---|---|
| Vitamin A Palmitate, Liquid in Oil | 79-81-2 | 100 |

**Toxicological Data on Ingredients:** Vitamin A Palmitate, Liquid in Oil: ORAL (LD50): Acute: 7910 mg/kg [Rat]. 6060 mg/kg [Mouse].

## Section 3: Hazards Identification

**Potential Acute Health Effects:** Slightly hazardous in case of skin contact (irritant, permeator), of eye contact (irritant), of ingestion, of inhalation.

**Potential Chronic Health Effects:**
CARCINOGENIC EFFECTS: Not available. MUTAGENIC EFFECTS: Mutagenic for mammalian somatic cells. TERATOGENIC EFFECTS: Classified POSSIBLE for human. DEVELOPMENTAL TOXICITY: Classified Reproductive system/toxin/female, Reproductive system/toxin/male, Development toxin [POSSIBLE]. The substance may be toxic to liver, gastrointestinal tract, skin, central nervous system (CNS). Repeated or prolonged exposure to the substance can produce target organs damage.

## Section 4: First Aid Measures

**Eye Contact:**
Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention if irritation occurs.

**Skin Contact:** Wash with soap and water. Cover the irritated skin with an emollient. Get medical attention if irritation develops.

**Serious Skin Contact:** Not available.

**Inhalation:**
If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

**Serious Inhalation:** Not available.

**Ingestion:**
Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention if symptoms appear.

**Serious Ingestion:** Not available.

## Section 5: Fire and Explosion Data

**Flammability of the Product:** May be combustible at high temperature.

**Auto-Ignition Temperature:** 280°C (536°F)

**Flash Points:** CLOSED CUP: 193°C (379.4°F).

**Flammable Limits:** Not available.

**Products of Combustion:** These products are carbon oxides (CO, CO2).

**Fire Hazards in Presence of Various Substances:**
Slightly flammable to flammable in presence of heat, of combustible materials. Non-flammable in presence of shocks.

**Explosion Hazards in Presence of Various Substances:**
Risks of explosion of the product in presence of mechanical impact: Not available. Risks of explosion of the product in presence of static discharge: Not available.

**Fire Fighting Media and Instructions:**
SMALL FIRE: Use DRY chemical powder. LARGE FIRE: Use water spray, fog or foam. Do not use water jet.

**Special Remarks on Fire Hazards:**
Spontaneous iginition may occur when exposed to air and in contact with other materials such as cloth, paper, wood, insulation.

**Special Remarks on Explosion Hazards:** Not available.

## Section 6: Accidental Release Measures

**Small Spill:** Absorb with an inert material and put the spilled material in an appropriate waste disposal.

**Large Spill:**
If the product is in its solid form: Use a shovel to put the material into a convenient waste disposal container. If the product is in its liquid form: Absorb with an inert material and put the spilled material in an appropriate waste disposal. Finish cleaning by spreading water on the contaminated surface and allow to evacuate through the sanitary system.

## Section 7: Handling and Storage

**Precautions:**
Keep locked up.. Keep away from heat. Keep away from sources of ignition. Empty containers pose a fire risk, evaporate the residue under a fume hood. Ground all equipment containing material. Do not ingest. Do not breathe gas/fumes/ vapor/spray. Wear suitable protective clothing. If ingested, seek medical advice immediately and show the container or the label. Keep away from incompatibles such as oxidizing agents, metals, acids, alkalis.

**Storage:**
Store away from light preferably in light resistant containers. Keep container tightly closed. Keep container in a cool, well-ventilated area. Store between 5 -15°C..

## Section 8: Exposure Controls/Personal Protection

**Engineering Controls:**
Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective threshold limit value. Ensure that eyewash stations and safety showers are proximal to the work-station location.

**Personal Protection:** Safety glasses. Lab coat.

**Personal Protection in Case of a Large Spill:**
Splash goggles. Full suit. Boots. Gloves. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.

**Exposure Limits:** Not available.

## Section 9: Physical and Chemical Properties

**Physical state and appearance:** Liquid. (Oily liquid.)

**Odor:** Characteristic. (Slight.)

**Taste:** bland, oily

**Molecular Weight:** 524.87 g/mole

**Color:** Golden Yellow.

**pH (1% soln/water):** Not applicable.

**Boiling Point:** Not available.

**Melting Point:** 28.5°C (83.3°F)

**Critical Temperature:** Not available.

**Specific Gravity:** 0.92 (Water = 1)

**Vapor Pressure:** Not available.

**Vapor Density:** Not available.

**Volatility:** Not available.

**Odor Threshold:** Not available.

**Water/Oil Dist. Coeff.:** Not available.

**Ionicity (in Water):** Not available.

**Dispersion Properties:** See solubility in water, diethyl ether.

**Solubility:**
Soluble in diethyl ether. Insoluble in cold water, hot water.

## Section 10: Stability and Reactivity Data

**Stability:** The product is stable.

**Instability Temperature:** Not available.

**Conditions of Instability:** Excess heat, light, air, incompatible materials

**Incompatibility with various substances:** Reactive with oxidizing agents, metals, acids, alkalis.

**Corrosivity:** Not available.

**Special Remarks on Reactivity:**
Protect from light and air to avoid gradual decompostion. Incompatible with copper, copper alloys, iron, iron salts, strong oxidizing agents, peroxides, strong inorganic acids, strong bases.

**Special Remarks on Corrosivity:** Not available.

**Polymerization:** Will not occur.

## Section 11: Toxicological Information

**Routes of Entry:** Absorbed through skin. Eye contact.

**Toxicity to Animals:** Acute oral toxicity (LD50): 6060 mg/kg [Mouse].

**Chronic Effects on Humans:**
MUTAGENIC EFFECTS: Mutagenic for mammalian somatic cells. TERATOGENIC EFFECTS: Classified POSSIBLE for human. DEVELOPMENTAL TOXICITY: Classified Reproductive system/toxin/female, Reproductive system/toxin/male, Development toxin [POSSIBLE]. May cause damage to the following organs: liver, gastrointestinal tract, skin, central nervous system (CNS).

**Other Toxic Effects on Humans:** Slightly hazardous in case of skin contact (irritant, permeator), of ingestion, of inhalation.

**Special Remarks on Toxicity to Animals:** Not available.

**Special Remarks on Chronic Effects on Humans:**
May cause adverse reproductive effects and birth defects (teratogenic/developmental toxin) based on animal data. May affect genetic material.

**Special Remarks on other Toxic Effects on Humans:**
Acute Potential Health Effects: Skin: May cause skin irritation and dermatitis, and chapped lips. Eyes: May cause eye irritation. Inhalation: May cause irritation of the respiratory tract. Ingestion: May cause irritation of the gastrointestinal tract. Symptoms of GI tract irritation may include nausea, vomiting, diarrhea, constipation, cramps and loss of appetite. May also afect behavior/ Central Nervous System (symptoms may include headache, dizziness, drowsiness, fatigue, lack of muscular coordination), liver (symptoms may include jaundice, and elevation of liver enzyme levels), and metabolism. Chronic Potential Health Effects: Syptoms of chronic exposure may be similar to those of acute overexposure. Chronic exposure may also cause adverse reproductive effects, and birth defects and may affect genetic material.

## Section 12: Ecological Information

**Ecotoxicity:** Not available.

**BOD5 and COD:** Not available.

**Products of Biodegradation:**
Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise.

**Toxicity of the Products of Biodegradation:** The product itself and its products of degradation are not toxic.

**Special Remarks on the Products of Biodegradation:** Not available.

## Section 13: Disposal Considerations

**Waste Disposal:**
Waste must be disposed of in accordance with federal, state and local environmental control regulations.

## Section 14: Transport Information

**DOT Classification:** Not a DOT controlled material (United States).

**Identification:** Not applicable.

**Special Provisions for Transport:** Not applicable.

## Section 15: Other Regulatory Information

**Federal and State Regulations:**
California prop. 65: This product contains the following ingredients for which the State of California has found to cause cancer, birth defects or other reproductive harm, which would require a warning under the statute: Vitamin A Palmitate, Liquid in Oil California prop. 65: This product contains the following ingredients for which the State of California has found to cause birth defects which would require a warning under the statute: Vitamin A Palmitate, Liquid in Oil TSCA 8(b) inventory: Vitamin A Palmitate, Liquid in Oil

**Other Regulations:**
OSHA: Hazardous by definition of Hazard Communication Standard (29 CFR 1910.1200). EINECS: This product is on the European Inventory of Existing Commercial Chemical Substances.

**Other Classifications:**

**WHMIS (Canada):** Not controlled under WHMIS (Canada).

**DSCL (EEC):**
R40- Possible risks of irreversible effects. R62- Possible risk of impaired fertility. R63- Possible risk of harm to the unborn child. S2- Keep out of the reach of children. S36/37- Wear suitable protective clothing and gloves.

**HMIS (U.S.A.):**

**Health Hazard:** 1

**Fire Hazard:** 1

**Reactivity:** 0

**Personal Protection:** a

**National Fire Protection Association (U.S.A.):**

**Health:** 1

**Flammability:** 1

**Reactivity:** 0

**Specific hazard:**

**Protective Equipment:**
Not applicable. Lab coat. Not applicable. Safety glasses.

## Section 16: Other Information

**References:** Not available.

**Other Special Considerations:** Not available.

**Created:** 10/10/2005 12:15 AM

**Last Updated:** 11/06/2008 12:00 PM

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