

# all-trans Retinoic Acid-d5:

## sc-217605

### Material Safety Data Sheet



The Power to Question

#### Section 1

Chemical Name All-Trans-Retinoic Acid d5

Synonyms (all-E)-3,7-Dimethyl-9-(2,6,6-trimethyl-1-cyclohexen-1-yl)-2,4,6,8-nonatetraenoic Acid-d5; Vitamin A Acid-d5; ATRA-d5; Aberel-d5; Avita-d5; Retin-A-d5; Retinova-d5; Tretinoin-d5;

Catalog Number: sc-217605

Supplier: Santa Cruz Biotechnology, Inc.  
2145 Delaware Avenue  
Santa Cruz, CA 95060  
800.457.3801 or 831.457.3800

Emergency ChemWatch  
Within the US & Canada: 877-715-9305  
Outside the US & Canada: +800 2436 2255  
(1-800-CHEMCALL) or call +613 9573 3112

#### Section 2 - Hazardous Ingredients/Identity Information

Harmful. Harmful if swallowed. Irritating to skin. Target organ: Eyes, Blood.

#### Section 3 - Physical/Chemical Characteristics

Boiling Point	N/A	Appearance and Odor	Yellow solid
Vapor Pressure	N/A	Specific Gravity(H <sub>2</sub> O=1)	N/A
Vapor Density	N/A	Melting Point	178-180°C
Solubility in Water	N/A	Evaporation Rate (Butyl Acetate=1)	N/A

#### Section 4 - Reactive Data

Stability	Store Dry in Freezer at -20°C for up to 1 year; in Solution at -20°C for up to 3 Months.	Incompatibility (Materials to Avoid)	Oxidizing agents
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Conditions to Avoid Oxidizing agents and light

Hazardous Decomposition or Byproducts	Toxic fumes of carbon monoxide and carbon dioxide	Hazardous Polymerization	will not occur
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#### Section 5 - Control Measures

Respiratory Protection	Niosh/Msha approved respirator	Ventilation	Use in fume hood
Protective Gloves	chemical resistant gloves	Eye Protection	safety goggles
Other Protective Clothing	lab coat, apron	Other Protection	Safety shower and eyewash

#### Section 6 - First Aid Measures

Inhalation	Remove to fresh air. If not breathing give artificial respiration. If breathing is difficult, give oxygen.
Skin	Immediately flush skin with copious amounts of water for at least 15 min while removing contaminated clothing and shoes.
Ingestion	If swallowed, wash out mouth with water provided person is conscious. Call a physician. Remove and wash contaminated clothing immediately.
Eyes	Immediately flush eyes with copious amounts of water for at least 15 min. Assure adequate flushing by separating the eyelids with fingers. Call a physician.

## Section 7 - Health Hazard Data

Health Hazards  
(Acute and Chronic)

**Skin contact:** causes skin irritation. **Skin absorption:** may be harmful if absorbed through skin. **Eye contact:** May cause eye irritation. **Inhalation:** may be irritating to mucous membranes and upper respiratory tract. May be harmful if inhaled. **Ingestion:** Harmful if swallowed.

**Target organs or systems:** Eyes, Blood, Liver, Spleen, Central nervous system.

**Signs and symptoms of exposure:** Congenital abnormalities may occur after exposure to high concentrations during pregnancy. Chronic exposure to high concentrations may cause hypervitaminosis A. Symptoms may include fatigue, irritability, anorexia, dry skin, gastrointestinal disturbances, and yellow pigmentation. Acute vitamin A intoxication may occur with exposure to high concentrations.

Chronic exposure; Teratogen, Mutagen

An isotopically Labeled analog of retinoic acid. Physiological metabolite of vitamin A. Effects gene expression via nuclear retinoic acid receptors (RAR); mediates cellular growth and differentiation.

A representative lot contains 11% d4, no d0 or d1 present.

Symptoms may include sedation, irritability, headache, and peeling of skin.

Medical Conditions  
Generally Aggravated by  
Exposure

The toxicological properties of this compound have not been thoroughly investigated. Exercise due care.

## Section 8 - Precautions for Safe Handling and Use

Steps to be Taken in  
Case Material is  
Released or Spilled

Wear respirator, chemical safety goggles, rubber boots and heavy rubber gloves. Sweep up, place in a bag and hold for waste disposal. Avoid raising dust.

Waste Disposal Method

Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber. Observe all federal, state and local environmental regulations.

Precautions to Be  
Taken in Handling  
and Storage

Keep tightly closed. Store in a cool dry place.

## Section 9 - Fire and Explosion Hazard Data

Extinguishing Media

Water spray. Carbon Dioxide, dry chemical powder or appropriate foam.

Special Fire Fighting  
Procedures

Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.

Unusual Fire and  
Explosion Hazards

Emits Toxic fumes under fire conditions.

## Section 10 - Transportation Information and regulatory information

DOT

Proper Shipping Name: None

Non-Hazardous for Transport: This substance is considered to be non-hazardous for transport.

IATA

Non-Hazardous for Air Transport: Non-hazardous for air transport.

**The above information is believed to be correct but does not purport to be complete and should be used only as a guide. The burden of safe use of this material rests entirely with the user.**