

## Section 1 - Product and Company Information

Product Name 15(S)-HYDROXY-(5Z,8Z,11Z,13E)- &  
Product Number H1142  
Brand SIGMA

Company Sigma-Aldrich Canada, Ltd  
Address 2149 Winston Park Drive  
Oakville ON L6H 6J8 CA

Technical Phone: 9058299500  
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## Section 2 - Composition/Information on Ingredient

Substance Name	CAS #	SARA 313
(15S,5Z,8Z,11Z,13E)-15-HYDROXYDECIC ACID ATETRAENOIC ACID SOL*	54845-95-3	No

Formula C20H32O3

## Section 3 - Hazards Identification

## EMERGENCY OVERVIEW

Flammable (USA) Highly Flammable (EU). Irritant.  
Irritating to eyes, respiratory system and skin.  
Target organ(s): Liver. Nerves.

For additional information on toxicity, please refer to Section 11.

## Section 4 - First Aid Measures

## ORAL EXPOSURE

If swallowed, wash out mouth with water provided person is  
conscious. Call a physician immediately.

## INHALATION EXPOSURE

If inhaled, remove to fresh air. If breathing becomes difficult,  
call a physician.

## DERMAL EXPOSURE

In case of skin contact, flush with copious amounts of water for  
at least 15 minutes. Remove contaminated clothing and shoes.  
Call a physician.

## EYES EXPOSURE

In case of contact with eyes, flush with copious amounts of  
water for at least 15 minutes. Assure adequate flushing by  
separating the eyelids with fingers. Call a physician.

## Section 5 - Fire Fighting Measures

## EXPLOSION HAZARDS

Vapor may travel considerable distance to source of ignition and  
flash back.

## FLASH POINT

57.2 °F 14 °C Method: closed cup

## AUTOIGNITION TEMP

N/A

## FLAMMABILITY

N/A

## EXTINGUISHING MEDIA

Suitable: For small (incipient) fires, use media such as  
"alcohol" foam, dry chemical, or carbon dioxide. For large  
fires, apply water from as far as possible. Use very large  
quantities (flooding) of water applied as a mist or spray; solid  
streams of water may be ineffective. Cool all affected  
containers with flooding quantities of water.

## FIREFIGHTING

Protective Equipment: Wear self-contained breathing apparatus  
and protective clothing to prevent contact with skin and eyes.  
Specific Hazard(s): Flammable liquid. Vapor may travel  
considerable distance to source of ignition and flash back.  
Specific Method(s) of Fire Fighting: Use water spray to cool  
fire-exposed containers.

## EXPOSURE HAZARD(S)

Material: Irritant.

## Section 6 - Accidental Release Measures

## PROCEDURE TO BE FOLLOWED IN CASE OF LEAK OR SPILL

Evacuate area. Shut off all sources of ignition.

## PROCEDURE(S) OF PERSONAL PRECAUTION(S)

Wear self-contained breathing apparatus, rubber boots, and heavy  
rubber gloves.

## METHODS FOR CLEANING UP

Cover with dry-lime, sand, or soda ash. Place in covered  
containers using non-sparking tools and transport outdoors.  
Ventilate area and wash spill site after material pickup is  
complete.

## Section 7 - Handling and Storage

## HANDLING

User Exposure: Do not breathe vapor. Do not get in eyes, on  
skin, on clothing. Avoid prolonged or repeated exposure.

## STORAGE

Suitable: Keep tightly closed. Keep away from heat, sparks, and  
open flame. Store in a cool dry place.  
Store at -20°C

## Section 8 - Exposure Controls / PPE

## ENGINEERING CONTROLS

Use only in a chemical fume hood. Safety shower and eye bath.

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## PERSONAL PROTECTIVE EQUIPMENT

Other: Wear appropriate government approved respirator,  
chemical-resistant gloves, safety goggles, other protective  
clothing.

## GENERAL HYGIENE MEASURES

Wash thoroughly after handling. Wash contaminated clothing before  
reuse.

## Section 9 - Physical/Chemical Properties

Appearance	Physical State: Liquid	
Property	Value	At Temperature or Pressure
Molecular Weight	320.5 AMU	
pH	N/A	
BP/BP Range	N/A	
MP/MP Range	N/A	
Freezing Point	N/A	
Vapor Pressure	N/A	
Vapor Density	N/A	
Saturated Vapor Conc.	N/A	
SG/Density	0.8 g/cm3	
Bulk Density	N/A	
Odor Threshold	N/A	
volatile	N/A	
VOC Content	N/A	
Water Content	N/A	
Solvent Content	N/A	
Evaporation Rate	N/A	
Viscosity	N/A	
Surface Tension	N/A	
Partition Coefficient	N/A	
Decomposition Temp.	N/A	
Flash Point	57.2 °F 14 °C	Method: closed cup
Explosion Limits	N/A	
Flammability	N/A	
Autoignition Temp	N/A	
Refractive Index	N/A	
Optical Rotation	N/A	
Miscellaneous Data	N/A	
Solubility	N/A	

N/A - not available

## Section 10 - Stability and Reactivity

## STABILITY

Stable: Stable.  
Conditions of Instability: Moisture.  
Conditions to Avoid: Moisture.  
Materials to Avoid: Oxidizing agents, Peroxides, Acids, Acid  
chlorides, Acid anhydrides, Alkali metals, Ammonia.

## HAZARDOUS DECOMPOSITION PRODUCTS

Hazardous Decomposition Products: Carbon monoxide, Carbon dioxide.

## HAZARDOUS POLYMERIZATION

Hazardous Polymerization: Will not occur

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## Section 11 - Toxicological Information

## ROUTE OF EXPOSURE

Skin Contact: Causes skin irritation.  
Multiple Routes: Vapor or mist is irritating to the eyes, mucous  
membranes, and upper respiratory tract. May be harmful by  
inhalation, ingestion, or skin absorption.

## TARGET ORGAN(S) OR SYSTEM(S)

Liver. Nerves. Damage to the heart.

## SIGNS AND SYMPTOMS OF EXPOSURE

Damage to the heart. Narcotic effect. Nausea, headache, and  
vomiting. Exposure can cause: Can cause CNS depression.

## Section 12 - Ecological Information

No data available.

## Section 13 - Disposal Considerations

## APPROPRIATE METHOD OF DISPOSAL OF SUBSTANCE OR PREPARATION

Burn in a chemical incinerator equipped with an afterburner and  
scrubber but exert extra care in igniting as this material is  
highly flammable. Observe all federal, state, and local  
environmental regulations.

## Section 14 - Transport Information

## DOT

Proper Shipping Name: Ethanol [or] Ethyl alcohol [or]  
Ethanol solutions [or] Ethyl alcohol solutions

UN#: 1170

Class: 3

Packing Group: Packing Group II

Hazard Label: Flammable liquid

PIH: Not PIH

## IATA

Proper Shipping Name: Ethanol solution

IATA UN Number: 1170

Hazard Class: 3

Packing Group: II

## Section 15 - Regulatory Information

## EU ADDITIONAL CLASSIFICATION

Symbol of Danger: F-Xi

Indication of Danger: Highly Flammable. Irritant.

R: 11-36/37/38

Risk Statements: Highly flammable. Irritating to eyes,  
respiratory system and skin.

S: 7-16-26-36

Safety Statements: Keep container tightly closed. Keep away from  
sources of ignition - no smoking. In case of contact with eyes,  
rinse immediately with plenty of water and seek medical advice.  
Wear suitable protective clothing.

## US CLASSIFICATION AND LABEL TEXT

Indication of Danger: Flammable (USA) Highly Flammable (EU).

Irritant.

Risk Statements: Irritating to eyes, respiratory system and skin.

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Safety Statements: Keep container tightly closed. Keep away from  
sources of ignition - no smoking. In case of contact with eyes,  
rinse immediately with plenty of water and seek medical advice.  
Wear suitable protective clothing.

US Statements: Target organ(s): Liver. Nerves.

## UNITED STATES REGULATORY INFORMATION

SARA LISTED: No

## CANADA REGULATORY INFORMATION

WHMIS Classification: This product has been classified in  
accordance with the hazard criteria of the CPR, and the MSDS  
contains all the information required by the CPR.

DSL: No

NDSL: No

## Section 16 - Other Information

## DISCLAIMER

For R&D use only. Not for drug, household or other uses.

## WARRANTY

The above information is believed to be correct but does not  
purport to be all inclusive and shall be used only as a guide. The  
information in this document is based on the present state of our  
knowledge and is applicable to the product with regard to  
appropriate safety precautions. It does not represent any  
guarantee of the properties of the product. Sigma-Aldrich Inc.,  
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