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SAFETY DATA SHEET

Issue Date: Jun 22, 1999 Revision Date: Jun 09, 2006 SDS #: BRIP3040-95 Printed: Dec 08, 2010 12:02:16

Product #: P3040-95 z-9-DODECENYL ACETATE

#### SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Bedoukian Research, Inc. Emergency Phone Numbers:

21 Finance Drive 1-800-424-9300 Chemtrec (North America)
Danbury, CT 06810-4133 1-703-527-3887 Chemtrec (International)

UNITED STATES

Phone: 1-203-830-4000 Email: customerservice@bedoukian.com Fax: 1-203-830-4010 Website: http://www.bedoukian.com

Product Code: P3040-95

Product Name: z-9-DODECENYL ACETATE

Uses: pheromone

#### SECTION 2. HAZARDS IDENTIFICATION

#### HMIS HAZARD CLASSIFICATIONS

HEALTH = 1 FLAMMABILITY = 1 REACTIVITY = 0 PROTECTION = B

LABEL PRECAUTIONARY STATEMENTS

U.S. HAZARD LABELING

May be irritating to skin and eyes.

EU 67/548/EEC (DSD) DETERMINATION

Based on toxicological studies in the published literature, there are no risk and safety phrases to assign for this product.

#### SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

CAS #: 16974-11-1 MF: C14H26O2 EC NO: 241-054-7 Minimum Purity: 95.0%

ADDITIONAL INFORMATION EPA Registration No. 52991-10

SYNONYM(S)

9-Dodecen-1-ol, acetate, (9Z)-

BEDOUKIAN 9-DODECENYL ACETATE TECHNICAL PHEROMONE

GBM pheromone component

Grapeberry moth pheromone component

WPSB pheromone

 $\hbox{\tt Western pine shootborer pheromone}$ 

Z9-12Ac

# SECTION 4. FIRST-AID MEASURES

INHALATION EXPOSURE: Remove to fresh air. Give oxygen and call a physician. EYE CONTACT: Flush with water for 15 min. Seek medical help if necessary. SKIN CONTACT: Wash area well with water. Seek medical help if necessary. INGESTION: Administer water and call a physician or poison control center immediately. Do not induce vomiting.

# SECTION 5. FIRE FIGHTING MEASURES

EXTINGUISHING MEDIA
CO2, FOAM, DRY CHEMICAL
SPECIAL FIRE FIGHTING PROCEDURES

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Use standard fire fighting procedures.
 UNUSUAL FIRE AND EXPLOSION HAZARDS:
   None.
SECTION 6. ACCIDENTAL RELEASE MEASURES
 STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED
    Standard absorbents can be used.
 WASTE DISPOSAL METHOD: Incineration or sanitary landfill in
   accordance with local, state, and federal regulations.
SECTION 7. HANDLING AND STORAGE
 HANDLING
   Observe all warnings and precautions listed for the product.
    Use in accordance with good manufacturing and industrial
   hygiene practices. Use product in a properly ventilated work
   area. Do not eat, drink or smoke while handling product.
  STORAGE
    Packaging: Glass, Plastic, Aluminum or Steel
   Store tightly sealed under inert gas in a cool, well-ventilated area.
 FIRE PROTECTION
   Keep away from heat, sparks, and open flame.
SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION
   VENTILATION: Mechanical (general)
   RESPIRATORY: Usually not required
    SKIN: Rubber gloves
   EYES: Splash-proof safety glasses
   OTHER PROTECTIVE EQUIPMENT: Safety shower, eye wash
SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES
    PHYSICAL STATE: Liquid
   APPEARANCE: colorless liquid
   ODOR DESCRIPTION: mild, fruity
   BOILING POINT: 95C @ 1 mm Hg
   VAPOR PRESSURE : Not found
   VAPOR DENSITY (Air = 1): >1
    SPECIFIC GRAVITY @ 25C (water = 1): 0.8750:0.8800
    SOLUBILITY IN WATER: Insoluble in water.
   FLASH POINT (CC): 230 F
                               110 C
   LOGP : 5.560
SECTION 10. STABILITY AND REACTIVITY
  INCOMPATIBILITIES
   CONDITIONS TO AVOID: Presents no special reactivity hazard.
   MATERIALS TO AVOID: Strong oxidizing agents
 HAZARDOUS COMBUSTION PRODUCTS
   CO, CO2, water
SECTION 11. TOXICOLOGICAL INFORMATION
 ACUTE EFFECTS
   Most likely route of entry is through the skin.
   Full strength may be irritating to skin and eyes.
 RTECS NUMBERS
   RTECS: (Z-9-Dodecen-1-ol, acetate) JR5270000.
  TOXICITY DATA
   LD50 Oral (rat) > 5 g/kg.
 THRESHOLD LIMIT VALUE (TLV): Not established
 OSHA PERMISSABLE EXPOSURE LIMIT (PEL): Not established
 LISTED AS CARCINOGEN BY NTP, IARC, OR OSHA?: NO
SECTION 12. ECOLOGICAL INFORMATION
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#### GENERAL

Prevent contamination of soil, ground- and surface water.

#### SECTION 13. DISPOSAL CONSIDERATION

WASTE DISPOSAL METHOD: Incineration or sanitary landfill in accordance with local, state, and federal regulations.

#### SECTION 14. TRANSPORT INFORMATION

Class Pack Group Sub. Risk UN No.

Road(U.S.-DOT): not regulated.
Air (IATA): not regulated.
Sea (IMDG): not regulated.

#### SECTION 15. REGULATORY INFORMATION

REVIEWS, STANDARDS, AND REGULATIONS

This chemical is listed on the following inventories:
TSCA NDSL ECL EINECS(241-054-7) ENCS
LISTED AS CARCINOGEN BY NTP, IARC, OR OSHA?: NO

#### SECTION 16. OTHER INFORMATION

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#### MATERIAL SAFETY DATA SHEET

Date Printed: 05/04/2011 Date Updated: 12/16/2009

Version 1.5

# Section 1 - Product and Company Information

Product Name DODECYL ACETATE, 97%

Product Number D221953
Brand ALDRICH

Company Sigma-Aldrich

Address 3050 Spruce Street

SAINT LOUIS MO 63103 US

Technical Phone: 800-325-5832 Fax: 800-325-5052 Emergency Phone: 314-776-6555

# Section 2 - Composition/Information on Ingredient

Substance Name CAS # SARA 313 DODECYL ACETATE, 97% 112-66-3 No

Formula C14H28O2

Synonyms Acetate C-12 \* Dodecanol acetate \* 1-Dodecanol

acetate \* Dodecan-1-yl acetate \* Dodecyl acetate
\* n-Dodecyl acetate \* Dodecyl alcohol acetate \*

Lauryl acetate

RTECS Number: AH3525000

# Section 3 - Hazards Identification

# EMERGENCY OVERVIEW

Caution: Avoid contact and inhalation.

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.

# INHALATION EXPOSURE

If inhaled, remove to fresh air. If not breathing give artificial respiration. If breathing is difficult, give oxygen.

# DERMAL EXPOSURE

In case of contact, immediately wash skin with soap and copious amounts of water.

# EYE EXPOSURE

In case of contact, immediately flush eyes with copious amounts of water for at least 15 minutes.

# Section 5 - Fire Fighting Measures

FLASH POINT

235 °F 113 °C Method: closed cup

#### AUTOIGNITION TEMP

N/A

#### FLAMMABILITY

N/A

#### EXTINGUISHING MEDIA

Suitable: Water spray. Carbon dioxide, dry chemical powder, or appropriate foam.

#### FIREFIGHTING

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

# Section 6 - Accidental Release Measures

# PROCEDURE(S) OF PERSONAL PRECAUTION(S)

Wear respirator, chemical safety goggles, rubber boots, and heavy rubber gloves.

#### METHODS FOR CLEANING UP

Absorb on sand or vermiculite and place in closed containers for disposal. Ventilate area and wash spill site after material pickup is complete.

# Section 7 - Handling and Storage

#### HANDLING

User Exposure: Avoid inhalation. Do not get in eyes, on skin, on clothing.

#### **STORAGE**

Suitable: Keep tightly closed. Store in a cool dry place.

# Section 8 - Exposure Controls / PPE

# ENGINEERING CONTROLS

Safety shower and eye bath. Mechanical exhaust required.

#### PERSONAL PROTECTIVE EQUIPMENT

Respiratory: Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU). Respiratory protection is not required. Where protection is desired, use multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges.

Hand: Rubber gloves.

Eye: Chemical safety goggles.

#### GENERAL HYGIENE MEASURES

Wash contaminated clothing before reuse. Wash thoroughly after handling.

# Section 9 - Physical/Chemical Properties

Molecular Weight pH	228.38 AMU N/A	
BP/BP Range	150 °C	15 mmHg
MP/MP Range	N/A	
Freezing Point	N/A	

Vapor Pressure N/AVapor Density N/ASaturated Vapor Conc. N/A SG/Density  $0.865 \, \text{g/cm}3$ Bulk Density N/AOdor Threshold N/AVolatile% N/A VOC Content N/AWater Content N/ASolvent Content N/AEvaporation Rate N/AViscosity N/A Surface Tension N/A Partition Coefficient N/A Decomposition Temp. N/AFlash Point Explosion Limits N/AFlammability N/A

235 °F 113 °C Method: closed cup

Explosion Limits N/A
Flammability N/A
Autoignition Temp N/A
Refractive Index 1.432
Optical Rotation N/A
Miscellaneous Data N/A
Solubility N/A

#### N/A = not available

# Section 10 - Stability and Reactivity

#### STABILITY

Materials to Avoid: Strong oxidizing agents, Acids, Bases.

#### HAZARDOUS DECOMPOSITION PRODUCTS

Hazardous Decomposition Products: Carbon monoxide, Carbon dioxide.

# Section 11 - Toxicological Information

# ROUTE OF EXPOSURE

Multiple Routes: May cause irritation. May be harmful by inhalation, ingestion, or skin absorption.

#### SIGNS AND SYMPTOMS OF EXPOSURE

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

# IRRITATION DATA

Skin Rabbit 500 mg 24H

Remarks: Mild irritation effect

# Section 12 - Ecological Information

No data available.

# Section 13 - Disposal Considerations

# APPROPRIATE METHOD OF DISPOSAL OF SUBSTANCE OR PREPARATION 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

# Section 14 - Transport Information

#### DOT

Proper Shipping Name: None

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

#### TATA

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

# Section 15 - Regulatory Information

# US CLASSIFICATION AND LABEL TEXT

US Statements: Caution: Avoid contact and inhalation.

#### UNITED STATES REGULATORY INFORMATION

SARA LISTED: No

TSCA INVENTORY ITEM: Yes

# 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: Yes NDSL: No

# Section 16 - Other Information

#### DISCLAIMER

For R&D or manufacturing use. Not for prescription compound or other uses.

# SIGMA-ALDRICH

# **Material Safety Data Sheet**

Version 3.0 Revision Date 04/09/2008 Print Date 05/04/2011

# 1. PRODUCT AND COMPANY IDENTIFICATION

Product name : Stearyl acetate

Product Number : S5003 Brand : Sigma

Company : Sigma-Aldrich

3050 Spruce Street SAINT LOUIS MO 63103

USA

Telephone : +1 800-325-5832 Fax : +1 800-325-5052 Emergency Phone # : (314) 776-6555

# 2. COMPOSITION/INFORMATION ON INGREDIENTS

Synonyms : Acetic acid stearyl ester

CAS-No.	EC-No.	Index-No.	Concentration		
Octadecyl acetate					
822-23-1	212-493-1	-	-		

# 3. HAZARDS IDENTIFICATION

# **Emergency Overview**

# **OSHA Hazards**

No known OSHA hazards

# **HMIS Classification**

Health Hazard: 0 Flammability: 0 Physical hazards: 0

**NFPA Rating** 

Health Hazard: 0 Fire: 0 Reactivity Hazard: 0

# **Potential Health Effects**

Inhalation May be harmful if inhaled. May cause respiratory tract irritation.Skin May be harmful if absorbed through skin. May cause skin irritation.

**Eyes** May cause eye irritation. Ingestion May be harmful if swallowed.

#### 4. FIRST AID MEASURES

#### If inhaled

If breathed in, move person into fresh air. If not breathing give artificial respiration

#### In case of skin contact

Wash off with soap and plenty of water.

#### In case of eye contact

Flush eyes with water as a precaution.

#### If swallowed

Never give anything by mouth to an unconscious person. Rinse mouth with water.

#### 5. FIRE-FIGHTING MEASURES

# Flammable properties

Flash point no data available Ignition temperature no data available

# Suitable extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

# Special protective equipment for fire-fighters

Wear self contained breathing apparatus for fire fighting if necessary.

# 6. ACCIDENTAL RELEASE MEASURES

#### Personal precautions

Avoid dust formation.

# **Environmental precautions**

Do not let product enter drains.

# Methods for cleaning up

Sweep up and shovel. Keep in suitable, closed containers for disposal.

# 7. HANDLING AND STORAGE

#### Handling

Provide appropriate exhaust ventilation at places where dust is formed. Normal measures for preventive fire protection.

#### Storage

Keep container tightly closed in a dry and well-ventilated place.

Recommended storage temperature: 2 - 8 °C

# 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Contains no substances with occupational exposure limit values.

#### Personal protective equipment

#### Respiratory protection

Respiratory protection is not required. Where protection from nuisance levels of dusts are desired, use type N95 (US) or type P1 (EN 143) dust masks. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

# **Hand protection**

For prolonged or repeated contact use protective gloves.

#### Eye protection

Safety glasses

# Hygiene measures

# General industrial hygiene practice.

#### 9. PHYSICAL AND CHEMICAL PROPERTIES

**Appearance** 

**Form** solid

Safety data

Нα no data available **Melting point** no data available **Boiling point** no data available Flash point no data available Ignition no data available

temperature

Lower explosion

**Upper explosion** 

limit

no data available

no data available

limit

no data available Water solubility

# 10. STABILITY AND REACTIVITY

Storage stability

Stable under recommended storage conditions.

Materials to avoid

Strong oxidizing agents

Hazardous decomposition products

Hazardous decomposition products formed under fire conditions. - Carbon oxides

# 11. TOXICOLOGICAL INFORMATION

**Acute toxicity** 

no data available

Irritation and corrosion

no data available

Sensitisation

no data available

Chronic exposure

IARC: No component of this product present at levels greater than or equal to 0.1% is

identified as probable, possible or confirmed human carcinogen by IARC.

ACGIH: No component of this product present at levels greater than or equal to 0.1% is

identified as a carcinogen or potential carcinogen by ACGIH.

NTP: No component of this product present at levels greater than or equal to 0.1% is

identified as a known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is

identified as a carcinogen or potential carcinogen by OSHA.

#### **Potential Health Effects**

Inhalation May be harmful if inhaled. May cause respiratory tract irritation.

Skin May be harmful if absorbed through skin. May cause skin irritation.

Eyes May cause eye irritation.
Ingestion May be harmful if swallowed.

# 12. ECOLOGICAL INFORMATION

Elimination information (persistence and degradability)

no data available

**Ecotoxicity effects** 

no data available

Further information on ecology

no data available

# 13. DISPOSAL CONSIDERATIONS

**Product** 

Observe all federal, state, and local environmental regulations.

Contaminated packaging

Dispose of as unused product.

# 14. TRANSPORT INFORMATION

DOT (US)

Not dangerous goods

**IMDG** 

Not dangerous goods

**IATA** 

Not dangerous goods

# 15. REGULATORY INFORMATION

**OSHA Hazards** 

No known OSHA hazards

**TSCA Status** 

On TSCA Inventory

**DSL Status** 

All components of this product are on the Canadian DSL list.

**SARA 302 Components** 

SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

**SARA 313 Components** 

SARA 313: This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

SARA 311/312 Hazards

No SARA Hazards

Massachusetts Right To Know Components

No Components Listed

**Pennsylvania Right To Know Components** 

CAS-No. Octadecyl acetate 822-23-1

**Revision Date** 

**New Jersey Right To Know Components** 

CAS-No. Octadecyl acetate

822-23-1

**Revision Date** 

California Prop. 65 Components

This product does not contain any chemicals known to State of California to cause cancer, birth, or any other reproductive defects.

# 16. OTHER INFORMATION

#### **Further information**

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