# SAFETY DATA SHEET

Version 5.4 Revision Date 02/16/2017 Print Date 01/21/2019

### 1. PRODUCT AND COMPANY IDENTIFICATION

Product name : Myrcene

Product Number : M100005 Brand : Aldrich

Product Use : For laboratory research purposes.

Supplier : Sigma-Aldrich Canada Co. Manufactur : Sigma-Aldrich Corporation

2149 Winston Park Drive er 3050 Spruce St.

OAKVILLE ON L6H 6J8 St. Louis, Missouri 63103

**USA** 

CANADA

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Emergency Phone # (For

**Preparation Information** 

both supplier and manufacturer)

nanufacturar)

Product Safety - Americas Region

Sigma-Aldrich Corporation

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1-800-521-8956

## 2. HAZARDS IDENTIFICATION

#### **Emergency Overview**

### **WHMIS Classification**

B3 Combustible Liquid
D2B Toxic Material Causing Other Toxic Effects Combustible Liquid
Moderate skin irritant
Moderate eye irritant

## **GHS Classification**

Flammable liquids (Category 3)
Skin corrosion/irritation (Category 2)
Serious eye damage/eye irritation (Category 2A)
Aspiration hazard (Category 1)

# GHS Label elements, including precautionary statements

Signal word Danger

Hazard statement(s)

Pictogram

H226 Flammable liquid and vapour.

H304 May be fatal if swallowed and enters airways.

H315 Causes skin irritation.

H319 Causes serious eye irritation.

Precautionary statement(s)

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No

smoking.

P233 Keep container tightly closed.

P240 Ground and bond container and receiving equipment.

P241 Use explosion-proof electrical/ ventilating/ lighting/ equipment.

P242 Use non-sparking tools.

P243 Take action to prevent static discharges.

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P264 Wash skin thoroughly after handling.

P280 Wear protective gloves/ eye protection/ face protection.

P301 + P310 IF SWALLOWED: Immediately call a POISON CENTER/doctor.

P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with

water.

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if

present and easy to do. Continue rinsing.

P331 Do NOT induce vomiting.

P332 + P313 If skin irritation occurs: Get medical advice/ attention.
P337 + P313 If eye irritation persists: Get medical advice/ attention.

P370 + P378 In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish.

P403 + P235 Store in a well-ventilated place. Keep cool.

P405 Store locked up.

P501 Dispose of contents/ container to an approved waste disposal plant.

**HMIS Classification** 

Health hazard: 2 Flammability: 2 Physical hazards: 0

#### **Potential Health Effects**

InhalationSkinMay be harmful if inhaled. Causes respiratory tract irritation.May be harmful if absorbed through skin. Causes skin irritation.

**Eyes** Causes eye irritation.

Ingestion May be harmful if swallowed. Aspiration hazard if swallowed - can enter lungs and

cause damage.

#### 3. COMPOSITION/INFORMATION ON INGREDIENTS

Synonyms: 7-Methyl-3-methylene-1,6-octadiene

**β-Myrcene** 

Formula : C<sub>10</sub>H<sub>16</sub> Molecular weight : 136.23 g/mol

CAS-No.	EC-No.	Index-No.	Concentration
7-Methyl-3-methyleneocta-1,6-diene			
123-35-3	204-622-5	-	<=100%

## 4. FIRST AID MEASURES

#### **General advice**

Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

#### lf inhaled

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

#### In case of skin contact

Wash off with soap and plenty of water. Consult a physician.

## In case of eye contact

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

#### If swallowed

Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

# 5. FIREFIGHTING MEASURES

## Suitable extinguishing media

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

### Special protective equipment for firefighters

Wear self-contained breathing apparatus for firefighting if necessary.

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### **Hazardous combustion products**

## Explosion data - sensitivity to mechanical impact

No data available

#### Explosion data - sensitivity to static discharge

No data available

#### Further information

Use water spray to cool unopened containers.

#### 6. ACCIDENTAL RELEASE MEASURES

#### Personal precautions

Use personal protective equipment. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas.

## **Environmental precautions**

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

# Methods and materials for containment and cleaning up

Contain spillage, and then collect with an electrically protected vacuum cleaner or by wet-brushing and place in container for disposal according to local regulations (see section 13).

#### 7. HANDLING AND STORAGE

## Precautions for safe handling

Avoid contact with skin and eyes. Avoid inhalation of vapour or mist.

Keep away from sources of ignition - No smoking. Take measures to prevent the build up of electrostatic charge.

## Conditions for safe storage

Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

Recommended storage temperature -20 °C

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

# Personal protective equipment

### Respiratory protection

Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

## Hand protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Full contact

Material: Nitrile rubber

Minimum layer thickness: 0.4 mm Break through time: 480 min

Material tested:Camatril® (KCL 730 / Aldrich Z677442, Size M)

Splash contact

Material: Nitrile rubber

Minimum layer thickness: 0.4 mm Break through time: 480 min

Material tested: Camatril® (KCL 730 / Aldrich Z677442, Size M)

data source: KCL GmbH, D-36124 Eichenzell, phone +49 (0)6659 87300, e-mail sales@kcl.de, test method: EN374

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If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the CE approved gloves. This recommendation is advisory only and must be evaluated by an industrial hygienist and safety officer familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.

## Eye protection

Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

## Skin and body protection

Complete suit protecting against chemicals, Flame retardant antistatic protective clothing., The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

# **Hygiene measures**

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

# Specific engineering controls

Use mechanical exhaust or laboratory fumehood to avoid exposure.

### 9. PHYSICAL AND CHEMICAL PROPERTIES

## **Appearance**

Form liquid

Colour No data available

Safety data

No data available pΗ

Meltina Melting point/range: < -80 °C (< -112 °F) at 1,013 hPa (760 mmHg) - OECD Test

point/freezing point Guideline 102

**Boiling** point 167 °C (333 °F) - lit.

44 °C (111 °F) - closed cup Flash point

Ignition temperature No data available Auto-ignition 255 °C (491 °F)

temperature

No data available Lower explosion limit Upper explosion limit No data available

9 hPa (7 mmHg) at 20 °C (68 °F) Vapour pressure Density 0.791 g/cm3 at 25 °C (77 °F)

0.00109 g/l at 20 °C (68 °F) - OECD Test Guideline 105 Water solubility log Pow: 5.285 at 25 °C (77 °F)

Partition coefficient:

n-octanol/water Relative vapour

4.7

density - (Air = 1.0)Odour No data available Odour Threshold No data available Evaporation rate No data available

# 10. STABILITY AND REACTIVITY

### Chemical stability

Stable under recommended storage conditions.

#### Possibility of hazardous reactions

No data available

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#### Conditions to avoid

Heat, flames and sparks.

#### Materials to avoid

Strong oxidizing agents

## **Hazardous decomposition products**

Hazardous decomposition products formed under fire conditions. - Carbon oxides Other decomposition products - No data available

#### 11. TOXICOLOGICAL INFORMATION

## **Acute toxicity**

#### Oral LD50

LD50 Oral - Rat - male and female - > 11,390 mg/kg

# Inhalation LC50

Dermal LD50

LD50 Dermal - Rabbit - > 5,000 mg/kg

## Other information on acute toxicity

No data available

## Skin corrosion/irritation

Skin - Rabbit - Skin irritation - 24 h

#### Serious eye damage/eye irritation

Eyes - Rabbit - Irritating to eyes. - OECD Test Guideline 405

### Respiratory or skin sensitisation

in vivo assay - Mouse - Does not cause skin sensitisation. - OECD Test Guideline 429

## Germ cell mutagenicity

Genotoxicity in vitro - Ames test - S. typhimurium - with and without metabolic activation - negative

Genotoxicity in vivo - Mouse - male and female - Oral - negative

#### Carcinogenicity

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.

## Reproductive toxicity

Reproductive toxicity - Rat - Oral

Effects on Fertility: Pre-implantation mortality (e.g., reduction in number of implants per female; total number of implants per corpora lutea). Effects on Embryo or Fetus: Fetotoxicity (except death, e.g., stunted fetus). Specific Developmental Abnormalities: Musculoskeletal system.

Reproductive toxicity - Rat - Oral

Effects on Newborn: Weaning or lactation index (e.g., # alive at weaning per # alive at day 4).

No data available

# Teratogenicity

No data available

#### Specific target organ toxicity - single exposure (Globally Harmonized System)

No data available

# Specific target organ toxicity - repeated exposure (Globally Harmonized System)

No data available

### **Aspiration hazard**

No data available

#### Potential health effects

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**Inhalation** May be harmful if inhaled. Causes respiratory tract irritation.

Ingestion May be harmful if swallowed. Aspiration hazard if swallowed - can enter lungs and cause

damage.

**Skin** May be harmful if absorbed through skin. Causes skin irritation.

**Eyes** Causes eye irritation.

# Signs and Symptoms of Exposure

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

## Synergistic effects

No data available

## **Additional Information**

Repeated dose toxicity - Rat - male and female - Oral - Lowest observed adverse effect level - 250 mg/kg

RTECS: RG5365000

## 12. ECOLOGICAL INFORMATION

## **Toxicity**

No data available

# Persistence and degradability

Biodegradability aerobic

Result: 76 % - Readily biodegradable. Method: OECD Test Guideline 301D

# Bioaccumulative potential

No data available

## Mobility in soil

No data available

# PBT and vPvB assessment

No data available

#### Other adverse effects

No data available

#### 13. DISPOSAL CONSIDERATIONS

#### **Product**

Burn in a chemical incinerator equipped with an afterburner and scrubber but exert extra care in igniting as this material is highly flammable. Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material.

## Contaminated packaging

Dispose of as unused product.

# 14. TRANSPORT INFORMATION

DOT (US)

UN number: 2319 Class: 3 Packing group: III

Proper shipping name: Terpene hydrocarbons, n.o.s.

Reportable Quantity (RQ): Marine pollutant: No

Poison Inhalation Hazard: No

**IMDG** 

UN number: 2319 Class: 3 Packing group: III EMS-No: F-E, S-D

Proper shipping name: TERPENE HYDROCARBONS, N.O.S.

Marine pollutant: No

**IATA** 

UN number: 2319 Class: 3 Packing group: III

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Proper shipping name: Terpene hydrocarbons, n.o.s.

#### 15. REGULATORY INFORMATION

## WHMIS Classification

**B**3 Combustible Liquid Combustible Liquid D<sub>2</sub>B Toxic Material Causing Other Toxic Effects Moderate skin irritant

Moderate eye irritant

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations.

#### 16. OTHER INFORMATION

#### **Further information**

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