# **Material Safety Data Sheet**

Version 4.1 Revision Date 10/31/2012 Print Date 10/08/2013

### 1. PRODUCT AND COMPANY IDENTIFICATION

Product name : O-Tricyclo[5.2.1.0<sup>2,6</sup>]dec-9-yl dithiocarbonate potassium salt

Product Number : T8543 Brand : Sigma

Supplier : Sigma-Aldrich

3050 Spruce Street

SAINT LOUIS MO 63103

USA

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

both supplier and manufacturer)

Preparation Information : Sigma-Aldrich Corporation

Product Safety - Americas Region

1-800-521-8956

### 2. HAZARDS IDENTIFICATION

### **Emergency Overview**

### **OSHA Hazards**

Harmful by ingestion.

### **GHS Classification**

Acute toxicity, Oral (Category 4)

### GHS Label elements, including precautionary statements

Pictogram

**(!)** 

Signal word Warning

Hazard statement(s)

H302 Harmful if swallowed.

Precautionary none

statement(s)

**HMIS Classification** 

Health hazard: 1
Flammability: 0
Physical hazards: 0

**NFPA Rating** 

Health hazard: 1 Fire: 0 Reactivity Hazard: 0

### **Potential Health Effects**

InhalationMay be harmful if inhaled. May cause respiratory tract irritation.SkinHarmful if absorbed through skin. May cause skin irritation.

**Eyes** May cause eye irritation. **Ingestion** Harmful if swallowed.

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

Synonyms : D609

Formula : C<sub>11</sub>H<sub>15</sub>KOS<sub>2</sub> Molecular Weight : 266.46 g/mol

Component		Concentration
Potassium o-(octahydro-4,7-methano-1H-inden-5-yl) dithiocarbonate		
CAS-No.	83373-60-8	-
EC-No.	280-379-9	

### 4. FIRST AID MEASURES

#### General advice

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

### If 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

Flush eyes with water as a precaution.

#### If swallowed

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 fire fighting if necessary.

### **Hazardous combustion products**

Hazardous decomposition products formed under fire conditions. - Carbon oxides, Sulphur oxides, Potassium oxides

### 6. ACCIDENTAL RELEASE MEASURES

### Personal precautions

Use personal protective equipment. Avoid dust formation. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Avoid breathing dust.

### **Environmental precautions**

Do not let product enter drains.

### Methods and materials for containment and cleaning up

Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

#### 7. HANDLING AND STORAGE

### Precautions for safe handling

Avoid contact with skin and eyes. Avoid formation of dust and aerosols.

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

#### Conditions for safe storage

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

### 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Contains no substances with occupational exposure limit values.

# Personal protective equipment

# **Respiratory protection**

For nuisance exposures use type P95 (US) or type P1 (EU EN 143) particle respirator. For higher level protection use type OV/AG/P99 (US) or type ABEK-P2 (EU EN 143) respirator cartridges. 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.

# Eye protection

Safety glasses with side-shields conforming to EN166 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, 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.

# 9. PHYSICAL AND CHEMICAL PROPERTIES

# **Appearance**

Form solid

Colour off-white, yellow

### Safety data

pH no data available

Melting no data available

point/freezing point

Boiling point no data available
Flash point no data available
Ignition temperature no data available
Autoignition no data available

temperature

Lower explosion limit no data available

Upper explosion limit no data available
Vapour pressure no data available
Density no data available

Water solubility no data available

Partition coefficient: n-octanol/water

no data available

Relative vapour

no data available

density

Odour no data available
Odour Threshold no data available
Evaporation rate no data available

Sigma - T8543 Page 3 of 6

### 10. STABILITY AND REACTIVITY

### **Chemical stability**

Stable under recommended storage conditions.

### Possibility of hazardous reactions

no data available

#### Conditions to avoid

Avoid moisture.

### Materials to avoid

Strong oxidizing agents

### Hazardous decomposition products

Hazardous decomposition products formed under fire conditions. - Carbon oxides, Sulphur oxides, Potassium oxides Other decomposition products - no data available

#### 11. TOXICOLOGICAL INFORMATION

### **Acute toxicity**

#### Oral LD50

LD50 Oral - mouse - 1,500 mg/kg

#### Inhalation LC50

no data available

#### **Dermal LD50**

no data available

# Other information on acute toxicity

no data available

### Skin corrosion/irritation

no data available

### Serious eye damage/eye irritation

no data available

### Respiratory or skin sensitization

no data available

### Germ cell mutagenicity

no data available

### 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.

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.

### Reproductive toxicity

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

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

**Ingestion** Harmful if swallowed.

**Skin** Harmful if absorbed through skin. May cause skin irritation.

**Eyes** May cause 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**

RTECS: Not available

# 12. ECOLOGICAL INFORMATION

### **Toxicity**

no data available

### Persistence and degradability

no data available

### 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

Offer surplus and non-recyclable solutions to a licensed disposal company.

### 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**

Harmful by ingestion.

### **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

Acute Health Hazard

### **Massachusetts Right To Know Components**

No components are subject to the Massachusetts Right to Know Act.

### Pennsylvania Right To Know Components

CAS-No. Revision Date

Potassium o-(octahydro-4,7-methano-1H-inden-5-yl) dithiocarbonate 83373-60-8

**New Jersey Right To Know Components** 

Potassium o-(octahydro-4,7-methano-1H-inden-5-yl) dithiocarbonate

CAS-No. Revision Date
83373-60-8

Polassium o-(octanyuro-4,7-methano-111-muen-5-yi) ultiliocarbonate

# California Prop. 65 Components

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

### 16. OTHER INFORMATION

### **Further information**

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Sigma - T8543 Page 6 of 6