

# Potassium osmate(VI) dihydrate: sc-250764



The Power to Question

## MATERIAL SAFETY DATA SHEET

### 1 Identification of substance:

**Product Name:** sc-250764  
**Catalog Number:** sc-250764  
**Supplier:** Santa Cruz Biotechnology, Inc.  
2145 Delaware Avenue  
Santa Cruz, California 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

### 2 Hazard(s) identification

**Classification of the substance or mixture**  
**Classification according to Regulation (EC) No 1272/2008**



GHS06 Skull and crossbones

Acute Tox. 3 H301 Toxic if swallowed.  
Acute Tox. 3 H331 Toxic if inhaled.



GHS07

Skin Irrit. 2 H315 Causes skin irritation.  
Eye Irrit. 2A H319 Causes serious eye irritation.  
STOT SE 3 H335 May cause respiratory irritation.

**Classification according to Directive 67/548/EEC or Directive 1999/45/EC**



T; Toxic

R23/25: Toxic by inhalation and if swallowed.



Xi; Irritant

R36/37/38: Irritating to eyes, respiratory system and skin.  
**Information concerning particular hazards for human and environment:** Not applicable  
**Hazards not otherwise classified** No information known.

#### Label elements

**Labelling according to Regulation (EC) No 1272/2008**

The substance is classified and labeled according to the CLP regulation.

#### Hazard pictograms



GHS06

**Signal word** Danger

#### Hazard statements

H301+H331 Toxic if swallowed or if inhaled.  
H315 Causes skin irritation.  
H319 Causes serious eye irritation.  
H335 May cause respiratory irritation.

#### Precautionary statements

P261 Avoid breathing dust/fume/gas/mist/vapours/spray.  
P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/ doctor/...  
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P302+P352 IF ON SKIN: Wash with plenty of water/...  
P405 Store locked up.  
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

#### WHMIS classification

D1A - Very toxic material causing immediate and serious toxic effects  
D2B - Toxic material causing other toxic effects



#### Classification system

##### HMIS ratings (scale 0-4)

(Hazardous Materials Identification System)

HEALTH	2	Health (acute effects) = 2
FIRE	0	Flammability = 0
REACTIVITY	1	Physical Hazard = 1

#### Other hazards

##### Results of PBT and vPvB assessment

PBT: Not applicable.

vPvB: Not applicable.

### 3 Composition/information on ingredients

#### Chemical characterization: Substances

##### CAS# Description:

10022-66-9 Potassium osmium(VI) oxide dihydrate

##### Identification number(s):

EC number: 243-247-1

### 4 First-aid measures

#### Description of first aid measures

##### General information

Immediately remove any clothing soiled by the product.  
Remove breathing apparatus only after contaminated clothing has been completely removed.  
In case of irregular breathing or respiratory arrest provide artificial respiration.

##### After inhalation

Supply fresh air. If required, provide artificial respiration. Keep patient warm.  
Seek immediate medical advice.

##### After skin contact

Immediately wash with water and soap and rinse thoroughly.  
Seek immediate medical advice.

##### After eye contact

Rinse opened eye for several minutes under running water. Then consult a doctor.

**After swallowing** Do not induce vomiting; immediately call for medical help.

##### Information for doctor

##### Most important symptoms and effects, both acute and delayed

No further relevant information available.

##### Indication of any immediate medical attention and special treatment needed

No further relevant information available.

### 5 Fire-fighting measures

#### Extinguishing media

##### Suitable extinguishing agents

Product is not flammable. Use fire fighting measures that suit the surrounding fire.

##### Special hazards arising from the substance or mixture

If this product is involved in a fire, the following can be released:

Metal oxide fume

Potassium oxide

#### **Advice for firefighters**

##### **Protective equipment:**

Wear self-contained respirator.

Wear fully protective impervious suit.

## **6 Accidental release measures**

#### **Personal precautions, protective equipment and emergency procedures**

Wear protective equipment. Keep unprotected persons away.

Ensure adequate ventilation

##### **Environmental precautions:**

Do not allow product to reach sewage system or any water course.

Do not allow to penetrate the ground/soil.

##### **Methods and material for containment and cleaning up:**

Dispose contaminated material as waste according to item 13.

Ensure adequate ventilation.

**Prevention of secondary hazards:** No special measures required.

##### **Reference to other sections**

See Section 7 for information on safe handling

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

## **7 Handling and storage**

#### **Handling**

##### **Precautions for safe handling**

Handle under dry protective gas.

Keep container tightly sealed.

Store in cool, dry place in tightly closed containers.

Ensure good ventilation at the workplace.

Open and handle container with care.

**Information about protection against explosions and fires:** The product is not flammable

##### **Conditions for safe storage, including any incompatibilities**

**Storage** Store at room temperature.

**Requirements to be met by storerooms and receptacles:** No special requirements.

##### **Information about storage in one common storage facility:**

Store away from water/moisture.

Store away from oxidizing agents.

##### **Further information about storage conditions:**

Store under dry inert gas.

This product is hygroscopic.

Keep container tightly sealed.

Store in cool, dry conditions in well sealed containers.

Protect from humidity and water.

**Specific end use(s)** No further relevant information available.

## **8 Exposure controls/personal protection**

#### **Additional information about design of technical systems:**

Properly operating chemical fume hood designed for hazardous chemicals and having an average face velocity of at least 100 feet per minute.

#### **Control parameters**

##### **Components with limit values that require monitoring at the workplace:**

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

**Additional information:** No data

#### **Exposure controls**

##### **Personal protective equipment**

##### **General protective and hygienic measures**

The usual precautionary measures for handling chemicals should be followed.

Keep away from foodstuffs, beverages and feed.

Remove all soiled and contaminated clothing immediately.

Wash hands before breaks and at the end of work.

Store protective clothing separately.

Avoid contact with the eyes and skin.

Maintain an ergonomically appropriate working environment.

##### **Breathing equipment:**

Use self-contained respiratory protective device in emergency situations.

##### **Protection of hands:**

Impervious gloves

Check protective gloves prior to each use for their proper condition.  
The selection of suitable gloves not only depends on the material, but also on quality.  
Quality will vary from manufacturer to manufacturer.

**Eye protection:** Safety glasses

**Body protection:** Protective work clothing.

## 9 Physical and chemical properties

<b>Information on basic physical and chemical properties</b>	
<b>General Information</b>	
<b>Appearance:</b>	
<b>Form:</b>	Powder
<b>Formula:</b>	K <sub>2</sub> O <sub>s</sub> O <sub>4</sub> ·2H <sub>2</sub> O
<b>Weight:</b>	368.45
<b>pH-value:</b>	Not applicable.
<b>Change in condition</b>	
<b>Melting point/Melting range:</b>	Not determined
<b>Boiling point/Boiling range:</b>	Not determined
<b>Sublimation temperature / start:</b>	Not determined
<b>Flammability (solid, gaseous)</b>	Not determined.
<b>Ignition temperature:</b>	Not determined
<b>Decomposition temperature:</b>	Not determined
<b>Auto igniting:</b>	Not determined.
<b>Danger of explosion:</b>	
<b>Explosion limits:</b>	
<b>Lower:</b>	Not determined
<b>Upper:</b>	Not determined
<b>Vapor pressure:</b>	Not applicable.
<b>Density:</b>	Not determined
<b>Relative density</b>	Not determined.
<b>Vapor density</b>	Not applicable.
<b>Evaporation rate</b>	Not applicable.
<b>Solubility in / Miscibility with</b>	
<b>Water:</b>	Soluble
<b>Partition coefficient (n-octanol/water):</b>	Not determined.
<b>Viscosity:</b>	
<b>dynamic:</b>	Not applicable.
<b>kinematic:</b>	Not applicable.
<b>Other information</b>	No further relevant information available.

## 10 Stability and reactivity

**Reactivity** No information known.

**Chemical stability** Stable under recommended storage conditions.

**Thermal decomposition / conditions to be avoided:**

Decomposition will not occur if used and stored according to specifications.

**Possibility of hazardous reactions** Reacts with strong oxidizing agents

**Incompatible materials:**

Water/moisture

Oxidizing agents

**Hazardous decomposition products:**

Metal oxide fume

Potassium oxide

## 11 Toxicological information

**Information on toxicological effects**

**Acute toxicity:**

Fatal if inhaled.

Fatal if swallowed.

**LD/LC50 values that are relevant for classification:** No data

**Skin irritation or corrosion:** Causes skin irritation.

**Eye irritation or corrosion:** Causes serious eye irritation.

**Sensitization:** No sensitizing effects known.

**Germ cell mutagenicity:** No effects known.

**Carcinogenicity:**

No classification data on carcinogenic properties of this material is available from the EPA, IARC, NTP, OSHA or ACGIH.

**Reproductive toxicity:** No effects known.

**Specific target organ system toxicity - repeated exposure:** No effects known.

**Specific target organ system toxicity - single exposure:** May cause respiratory irritation.

**Aspiration hazard:** No effects known.

**Additional toxicological information:**

To the best of our knowledge the acute and chronic toxicity of this substance is not fully known.

**12 Ecological information****Toxicity**

**Aquatic toxicity:** No further relevant information available.

**Persistence and degradability** No further relevant information available.

**Behavior in environmental systems:**

**Bioaccumulative potential** No further relevant information available.

**Mobility in soil** No further relevant information available.

**Additional ecological information:****General notes:**

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

Avoid transfer into the environment.

**Results of PBT and vPvB assessment**

**PBT:** Not applicable.

**vPvB:** Not applicable.

**Other adverse effects** No further relevant information available.

**13 Disposal considerations****Waste treatment methods**



**Recommendation** Consult state, local or national regulations to ensure proper disposal.


**Uncleaned packagings:**

**Recommendation:** Disposal must be made according to official regulations.

**Recommended cleansing agent:** Water, if necessary with cleansing agents.

**14 Transport information**

<b>UN-Number</b> DOT, ADR, IMDG, IATA	UN3288
<b>UN proper shipping name</b> DOT ADR IMDG, IATA	Toxic solid, inorganic, n.o.s. (Potassium osmium(VI) oxide dihydrate) 3288 Toxic solid, inorganic, n.o.s. (Potassium osmium(VI) oxide dihydrate) TOXIC SOLID, INORGANIC, N.O.S. (Potassium osmium(VI) oxide dihydrate)
<b>Transport hazard class(es)</b> DOT	
	
<b>Class</b> <b>Label</b> ADR	6.1 Toxic substances. 6.1
	
<b>Class</b>	6.1 (T5) Toxic substances

Label IMDG, IATA	6.1
	
Class Label	6.1 Toxic substances. 6.1
Packing group DOT, ADR, IMDG, IATA	III
Environmental hazards:	Not applicable.
Special precautions for user Danger code (Kemler):	Warning: Toxic substances 60
Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code	Not applicable.
Transport/Additional information: DOT Marine Pollutant (DOT):	No
UN "Model Regulation":	UN3288, Toxic solid, inorganic, n.o.s. (Potassium osmium(VI) oxide dihydrate), 6.1, III

## 15 Regulatory information

**Safety, health and environmental regulations/legislation specific for the substance or mixture**

### National regulations

All components of this product are listed in the U.S. Environmental Protection Agency Toxic Substances Control Act Chemical substance Inventory.

All components of this product are listed on the Canadian Non-Domestic Substances List (NDSL).

SARA Section 313 (specific toxic chemical listings) Substance is not listed.

### California Proposition 65

Prop 65 - Chemicals known to cause cancer Substance is not listed.

Prop 65 - Developmental toxicity Substance is not listed.

Prop 65 - Developmental toxicity, female Substance is not listed.

Prop 65 - Developmental toxicity, male Substance is not listed.

Information about limitation of use: For use only by technically qualified individuals.

### Other regulations, limitations and prohibitive regulations

Substances of very high concern (SVHC) according to REACH, Article 57

Substance is not listed.

REACH - Pre-registered substances Substance is not listed.

Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

## 16 Other information:

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.