



The Power to Question

# SAFETY DATA SHEET

Santa Cruz Biotechnology, Inc.

Revision date 20-Nov-2019

Version 1.3

## Section 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

### 1.1. Product Identifier

Product Name	Molybdenum dichloride dioxide
Product Code	SC-257803
CAS No	13637-68-8
Synonyms	Molybdenum(VI) dichloride dioxide
Pure substance/mixture	Substance
Contains Molybdenum dichloride dioxide	

### 1.2. Relevant identified uses of the substance or mixture and uses advised against

For research use only. Not intended for diagnostic or therapeutic use.

### 1.3. Details of the supplier of the safety data sheet

Santa Cruz Biotechnology, Inc.  
10410 Finnell Street  
Dallas, TX 75220  
831.457.3800  
800.457.3801  
scbt@scbt.com

Santa Cruz Biotechnology, Inc.  
Bergheimer Str. 89-2  
69115 Heidelberg, Germany  
+49.6221.4503 0  
+1.800.457.3801  
europe@scbt.com

### 1.4. Emergency telephone number

Chemtrec  
1.800.424.9300 (Within USA)  
+1.703.527.3887 (Outside USA)

## Section 2: HAZARDS IDENTIFICATION

### 2.1. Classification of the substance or mixture

Regulation (EC) No 1272/2008

Skin corrosion/irritation  
Serious eye damage/eye irritation

Category 1 Sub-category B - (H314)  
Category 1 - (H318)

### 2.2. Label Elements

Contains Molybdenum dichloride dioxide  
Signal word

Danger

Symbols/Pictograms



Hazard statements

H314 - Causes severe skin burns and eye damage

Precautionary Statements - EU (§28, 1272/2008)

P260 - Do not breathe dusts or mists  
P264 - Wash face, hands and any exposed skin thoroughly after handling  
P280 - Wear protective gloves/protective clothing/eye protection/face protection  
P301 + P330 + P331 - IF SWALLOWED: rinse mouth. Do NOT induce vomiting  
P303 + P361 + P353 - IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with



water/shower  
 P304 + P340 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing  
 P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing  
 P310 - Immediately call a POISON CENTER or doctor  
 P321 - Specific treatment (see Emergency Phone Number on this label)  
 P363 - Wash contaminated clothing before reuse  
 P405 - Store locked up  
 P501 - Dispose of contents/ container to an approved waste disposal plant  
 P280 - Wear protective gloves  
 P302 + P352 - IF ON SKIN: Wash with plenty of soap and water  
 P332 + P313 - If skin irritation occurs: Get medical advice/attention  
 P362 - Take off contaminated clothing and wash before reuse  
 P280 - Wear eye protection/ face protection

**2.3. Other Hazards**

General Hazards Not applicable

**Section 3: COMPOSITION/INFORMATION ON INGREDIENTS**

Molecular Weight 198.84  
 Formula MoO<sub>2</sub>Cl<sub>2</sub>

**3.1 Substances**

Chemical name	EC No	CAS No.	Weight-%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Molybdenum dichloride dioxide	-	13637-68-8	100	Skin Corr. 1B (H314) Eye Dam. 1 (H318)

Full text of H- and EUH-phrases: see section 16

**Section 4: FIRST AID MEASURES**

**4.1. Description of first aid measures**

General advice Consult a physician if necessary.  
 Inhalation Remove to fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration.  
 Skin Contact Wash skin with soap and water.  
 Eye contact Wash with plenty of water.  
 Ingestion Never give anything by mouth to an unconscious person. Clean mouth with water.

**4.2. Most important symptoms and effects, both acute and delayed**

Symptoms No information available.

**4.3. Indication of any immediate medical attention and special treatment needed**

Note to physicians Treat symptomatically.

**Section 5: FIRE FIGHTING MEASURES**

**5.1. Extinguishing media**



Suitable Extinguishing Media Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

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

Specific hazards arising from the chemical No information available  
 Hazardous combustion products No information available.

### 5.3. Advice for firefighters

Special protective equipment for fire-fighters As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

## Section 6: ACCIDENTAL RELEASE MEASURES

### 6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions Ensure adequate ventilation, especially in confined areas.  
 For emergency responders Use personal protection recommended in Section 8.

### 6.2. Environmental precautions

Environmental precautions See Section 12 for additional Ecological Information.

### 6.3. Methods and material for containment and cleaning up

Methods for containment Prevent further leakage or spillage if safe to do so.  
 Methods for cleaning up Use personal protective equipment as required. Cover powder spill with plastic sheet or tarp to minimize spreading and keep powder dry. Take up mechanically, placing in appropriate containers for disposal. Avoid creating dust. Clean contaminated surface thoroughly.

### 6.4. Reference to other sections

See Section 12: ECOLOGICAL INFORMATION.

## Section 7: HANDLING AND STORAGE

### 7.1. Precautions for safe handling

Advice on safe handling Handle in accordance with good industrial hygiene and safety practice.  
 General Hygiene Considerations Handle in accordance with good industrial hygiene and safety practice.

### 7.2. Conditions for safe storage, including any incompatibilities

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

### 7.3. Specific end use(s)

Risk Management Methods (RMM) The information required is contained in this Material Safety Data Sheet.

## Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

### 8.1. Control parameters

Exposure Limits This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

Chemical name	Austria	Switzerland	Poland	Norway	Ireland
Molybdenum dichloride dioxide 13637-68-8			STEL: 10 mg/m <sup>3</sup> TWA: 4 mg/m <sup>3</sup>		TWA: 0.5 mg/m <sup>3</sup> STEL: 1.5 mg/m <sup>3</sup>

Derived No Effect Level (DNEL) No information available  
 Predicted No Effect Concentration (PNEC) No information available.

### 8.2. Exposure controls

Engineering Controls Showers  
 Eyewash stations  
 Ventilation systems



Eye/face protection	Wear safety glasses with side shields (or goggles).
Skin and Body Protection	Wear protective gloves and protective clothing.
Respiratory protection	If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.
Environmental exposure controls	No information available.

## Section 9: PHYSICAL AND CHEMICAL PROPERTIES

Physical State	Solid
Appearance	powder or flakes
Odor	No information available

<u>Property</u>	<u>Values</u>
pH	No information available
Melting point/freezing point	184 °C
Boiling point	No information available
Flash point	No information available
Liquid Density	3.31 g/cm <sup>3</sup>
Evaporation rate	No information available
Upper flammability limits	No information available
Lower flammability limit	No information available
Vapor pressure	No information available
Vapor density	No information available

Specific gravity	No information available
Water solubility	No information available
Solubility in other solvents	No information available
Partition coefficient	No information available
Autoignition temperature	No information available
Decomposition temperature	No information available
Kinematic viscosity	No information available
Explosive properties	No information available
Oxidizing properties	No information available

## Section 10: STABILITY AND REACTIVITY

### 10.1. Reactivity

Reactivity	Not applicable
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### 10.2. Chemical stability

Stability	Stable under recommended storage conditions.
Sensitivity to Mechanical Impact	No information available.
Sensitivity to Static Discharge	No information available.

### 10.3. Possibility of hazardous reactions

Hazardous polymerization	No information available.
Possibility of Hazardous Reactions	None under normal processing.

### 10.4. Conditions to avoid

Conditions to avoid	Extremes of temperature and direct sunlight.
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### 10.5. Incompatible materials

Incompatible materials	Strong oxidizing agents.
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### 10.6. Hazardous decomposition products

Hazardous Decomposition Products	None known based on information supplied.
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## Section 11: TOXICOLOGICAL INFORMATION

### 11.1. Information on toxicological effects

#### Acute toxicity

Product Information	Product does not present an acute toxicity hazard based on known or supplied information.
Unknown acute toxicity	100% of the mixture consists of ingredient(s) of unknown toxicity.

## Section 12: ECOLOGICAL INFORMATION

### 12.1. Toxicity

Ecotoxicity	May cause long lasting harmful effects to aquatic life.
Unknown aquatic toxicity	100% of the mixture consists of components(s) of unknown hazards to the aquatic environment.

### 12.2. Persistence and degradability

Persistence and degradability	No information available.
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### 12.3. Bioaccumulative potential

Bioaccumulation	No information available.
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### 12.4. Mobility in soil

Mobility	No information available.
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### 12.5. Results of PBT and vPvB assessment

PBT and vPvB assessment	No information available.
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### 12.6. Other adverse effects

Other adverse effects	No information available
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## Section 13: DISPOSAL CONSIDERATIONS

### 13.1. Waste treatment methods

Waste from residues/unused products	Disposal should be in accordance with applicable regional, national and local laws and regulations.
Contaminated packaging	Do not reuse container.

## Section 14: TRANSPORT INFORMATION

	<u>RID / ADR</u>	<u>IMDG</u>	<u>ICAO (air) / IATA</u>
14.1 UN/ID no	UN3260	UN3260	UN3260
14.2 Proper shipping name	Corrosive solid, acidic, inorganic, n.o.s.	Corrosive solid, acidic, inorganic, n.o.s.	Corrosive solid, acidic, inorganic, n.o.s.
14.3 Hazard Class	8	8	8
Subsidiary hazard class / Labels	-	-	-
14.4 Packing Group	II	II	II
14.5 14.5 Environmental Hazard	-	-	-

**14.6 14.6 Special Provisions**

274  
Classification code C2  
Tunnel restriction code  
(E)

274  
EmS-No F-A, S-B

A3, A803  
ERG Code 8L

**Section 15: REGULATORY INFORMATION****15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture****National Regulations****European Union**

Take note of Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work

**International Inventories**

**All of the components in the product are on the following Inventory lists**

No information available

*X - Listed*

*TSCA - United States Toxic Substances Control Act Section 8(b) Inventory*

*DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List*

*EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances*

*ENCS - Japan Existing and New Chemical Substances*

*IECSC - China Inventory of Existing Chemical Substances*

*KECL - Korean Existing and Evaluated Chemical Substances*

*PICCS - Philippines Inventory of Chemicals and Chemical Substances*

**15.2. Chemical safety assessment**

Chemical Safety Report No information available

**Section 16: OTHER INFORMATION**

Full text of H-Statements referred to under sections 2 and 3

H314 - Causes severe skin burns and eye damage

H318 - Causes serious eye damage

Revision note

No information available.

**This material safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006**

**Disclaimer**

The information provided in this Material Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

**End of Safety Data Sheet**