



The Power to Question

# SAFETY DATA SHEET

Santa Cruz Biotechnology, Inc.

Revision date 03-May-2021

Version 1.3

## 1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

### Product identifier

Product Name Profenofos  
Product Code SC-250778

### Recommended use of the chemical and restrictions on use

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

### 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

### Emergency telephone number

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

## 2. HAZARDS IDENTIFICATION

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200).

### Classification

Acute toxicity - Oral Category 4  
Acute toxicity - Dermal Category 4  
Acute toxicity - Inhalation (Dusts/Mists) Category 4  
Skin sensitization Category 1

### Label elements

Signal word Warning  
Hazard statements Harmful if swallowed  
Harmful in contact with skin  
Harmful if inhaled  
May cause an allergic skin reaction  
Very toxic to aquatic life with long lasting effects

Symbols/Pictograms



Precautionary Statements - Prevention  
Precautionary Statements - Response

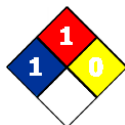
Wash hands thoroughly after handling  
IF exposed or concerned: Get medical advice/attention

### Hazards not otherwise classified (HNOC)

Hazards not otherwise classified (HNOC) Not applicable

### Other Information

**NFPA** Health hazards 1  
Flammability 1  
Stability 0  
Physical and chemical properties -



**HMIS** Health hazards 1  
Flammability 1  
Physical hazards 0  
Personal protection -



### 3. COMPOSITION/INFORMATION ON INGREDIENTS

CAS No 41198-08-7  
 Molecular Weight 373.63  
 Formula C<sub>11</sub>H<sub>15</sub>BrClO<sub>3</sub>PS

Chemical name	CAS No.	Weight-%	Oral LD50	Dermal LD50	Inhalation LC50
Profenofos	41198-08-7	>98	= 510 mg/kg ( Rat ) = 358 mg/kg ( Rat )	> 4000 mg/kg ( Rat ) = 1610 mg/kg ( Rat ) = 192 mg/kg ( Rabbit )	= 3 g/m <sup>3</sup> ( Rat ) 4 h

### 4. FIRST AID MEASURES

#### First Aid Measures

**General advice** If symptoms persist, call a physician. Do not breathe dust/fume/gas/mist/vapors/spray. Do not get in eyes, on skin, or on clothing.

**Eye contact** Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Keep eye wide open while rinsing. If symptoms persist, call a physician.

**Skin Contact** Consult a physician if necessary. Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes.

**Inhalation** Remove to fresh air Call a physician If breathing is irregular or stopped, administer artificial respiration Avoid direct contact with skin. Use barrier to give mouth-to-mouth resuscitation

**Ingestion** Rinse mouth. Drink plenty of water. If symptoms persist, call a physician. Do NOT induce vomiting.

**Self-protection of the first aider** Use personal protective equipment as required.

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

**Symptoms** No information available.

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

**Note to physicians** Treat symptomatically.

### 5. FIRE-FIGHTING MEASURES

#### Suitable Extinguishing Media

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

**Unsuitable Extinguishing Media** No information available.

#### Specific hazards arising from the chemical

**Specific hazards arising from the chemical** Thermal decomposition can lead to release of toxic/corrosive gases and vapors.

**Hazardous combustion products** Hydrogen sulfide. Carbon oxides. Phosgene.

#### Explosion data

**Sensitivity to Mechanical Impact** No information available.

**Sensitivity to Static Discharge** No information available.

#### Protective equipment and precautions for firefighters

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

### 6. ACCIDENTAL RELEASE MEASURES



### Personal precautions, protective equipment and emergency procedures

Personal precautions Use personal protective equipment as required.

### Environmental precautions

Environmental precautions Prevent entry into waterways, sewers, basements or confined areas. Do not flush into surface water or sanitary sewer system. See Section 12 for additional Ecological Information. Prevent product from entering drains. Should not be released into the environment.

### 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 Pick up and transfer to properly labeled containers. Cover liquid spill with sand, earth or other non-combustible absorbent material. Cover powder spill with plastic sheet or tarp to minimize spreading.

## 7. HANDLING AND STORAGE

### Precautions for safe handling

Advice on safe handling Use personal protective equipment as required. Avoid contact with skin, eyes or clothing. Wash contaminated clothing before reuse. Do not breathe dust/fume/gas/mist/vapors/spray. Do not eat, drink or smoke when using this product. Thermal decomposition can lead to release of toxic/corrosive gases and vapors.

### Conditions for safe storage, including any incompatibilities

Storage Conditions Keep container tightly closed in a dry and well-ventilated place. Keep out of the reach of children. Store at 4 °C.  
 Incompatible materials None known based on information supplied.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Control parameters

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

### Appropriate engineering controls

Engineering Controls Showers  
 Eyewash stations  
 Ventilation systems

### Individual protection measures, such as personal protective equipment

Eye/face protection Tight sealing safety 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.  
 General Hygiene Considerations When using do not eat, drink or smoke. Wash contaminated clothing before reuse.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State liquid  
 Appearance No information available



Odor No information available

<u>Property</u>	<u>Values</u>
pH	No information available
Melting point/freezing point	-76 °C
Boiling point	49.4 °C
Flash point	124 °C CC (closed cup)
Liquid Density	1.46 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

## 10. STABILITY AND REACTIVITY

Reactivity	Not applicable
Chemical stability	Stable under recommended storage conditions.
Possibility of Hazardous Reactions	None under normal processing.
Hazardous polymerization	No information available.
Conditions to avoid	Extremes of temperature and direct sunlight.
Incompatible materials	Strong oxidizing agents.
Hazardous Decomposition Products	Hydrogen sulfide. Carbon oxides. Phosgene.

## 11. TOXICOLOGICAL INFORMATION

### Information on likely routes of exposure

Inhalation	No data available.
Eye contact	No data available.
Skin Contact	No data available.
Ingestion	No data available.

### Information on toxicological effects

Symptoms No information available.

### Delayed and immediate effects as well as chronic effects from short and long-term exposure

Chronic Toxicity No information available.  
 Carcinogenicity The table below indicates whether each agency has listed any ingredient as a carcinogen.

Chemical name	ACGIH	IARC	NTP	OSHA
Profenofos 41198-08-7	-	Group 2A	-	X

*IARC (International Agency for Research on Cancer) Group 2A - Probably Carcinogenic to Humans*

*OSHA (Occupational Safety and Health Administration of the US Department of Labor) X - Present*

### Numerical measures of toxicity - Product Information

Unknown acute toxicity No information available

The following values are calculated based on chapter 3.1 of the GHS document



ATEmix (oral)	500 mg/kg
ATEmix (dermal)	1100 mg/kg
ATEmix (inhalation-dust/mist)	1.5 mg/l
ATEmix (inhalation-vapor)	3 mg/l

## 12. ECOLOGICAL INFORMATION

Ecotoxicity	Very toxic to aquatic life with long lasting effects
Persistence and degradability	No information available.
Bioaccumulation	No information available.
Mobility	No information available.

## 13. DISPOSAL CONSIDERATIONS

Disposal of wastes	Disposal should be in accordance with applicable regional, national and local laws and regulations. Should not be released into the environment.
Contaminated packaging	Do not reuse container.
Other Information	Waste codes should be assigned by the user based on the application for which the product was used.
California Hazardous Waste Status	This product contains one or more substances that are listed with the State of California as a hazardous waste.

Chemical name	California Hazardous Waste Status
Profenofos 41198-08-7	Toxic

## 14. TRANSPORT INFORMATION

### DOT

UN/ID no	UN3077
Hazard Class	9
Packing Group	III
Proper shipping name	Environmentally hazardous substance, solid, n.o.s.
Description	UN3077, Environmentally hazardous substance, solid, n.o.s. (Profenofos), 9, III, Marine pollutant
Emergency Response Guide Number	171

### IMDG

UN/ID no	UN3077
Hazard Class	9
Packing Group	III
Proper shipping name	Environmentally hazardous substance, solid, n.o.s.
Description	UN3077, Environmentally hazardous substance, solid, n.o.s. (Profenofos), 9, III, Marine pollutant
Special Provisions	274, 335, 966, 967, 969
EmS-No	F-A, S-F

### IATA

UN/ID no	UN3077
Hazard Class	9
Packing Group	III
Proper shipping name	Environmentally hazardous substance, solid, n.o.s.



Description UN3077, Environmentally hazardous substance, solid, n.o.s. (Profenofos), 9, III  
 ERG Code 9L

## 15. REGULATORY INFORMATION

### International Inventories

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

Europe (EINECS/ELINCS/NLP) Australia (AICS) South Korea (KECL):

Chemical name	TSCA	DSL	NDSL	EINECS	ELINCS	ENCS	IECSC	KECL	PICCS	AICS
Profenofos	-	-	-	X	-	-	-	X	-	X

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

### US Federal Regulations

#### **SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

#### **SARA 311/312 Hazard Categories**

Acute health hazard	Yes
Chronic Health Hazard	No
Fire hazard	No
Sudden release of pressure hazard	No
Reactive hazard	No

#### **CWA (Clean Water Act)**

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

### US State Regulations

#### **California Proposition 65**

This product does not contain any Proposition 65 chemicals.

#### **U.S. State Right-to-Know Regulations**

Chemical name	New Jersey	Massachusetts	Pennsylvania
Profenofos 41198-08-7	X	X	Not Listed

## 16. OTHER INFORMATION

Revision note

No information available

### **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**