



The Power to Question

SAFETY DATA SHEET

Santa Cruz Biotechnology, Inc.

Revision date 02-Sep-2020

Version 1.2

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

1.1. Product Identifier

Product Name	Sodium Orthovanadate
Product Code	SC-3540
EC No	237-287-9
CAS No	13721-39-6
Synonyms	Sodium Orthovanadate is also known as Vanadate.
Pure substance/mixture	Substance
Contains Sodium Orthovanadate	

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

Acute toxicity - Oral	Category 4 - (H302)
Acute toxicity - Dermal	Category 4 - (H312)
Acute toxicity - Inhalation (Dusts/Mists)	Category 4 - (H332)
Chronic aquatic toxicity	Category 3 - (H412)

2.2. Label Elements

Contains Sodium Orthovanadate
 Signal word

Warning

Symbols/Pictograms



Hazard statements

H412 - Harmful to aquatic life with long lasting effects
 H302 - Harmful if swallowed
 H312 - Harmful in contact with skin
 H332 - Harmful if inhaled

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

P264 - Wash face, hands and any exposed skin thoroughly after handling
 P270 - Do not eat, drink or smoke when using this product



P301 + P312 - IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell
 P330 - Rinse mouth
 P501 - Dispose of contents/ container to an approved waste disposal plant
 P280 - Wear protective gloves and protective clothing
 P302 + P352 - IF ON SKIN: Wash with plenty of soap and water
 P312 - Call a POISON CENTER or doctor if you feel unwell
 P322 - Specific measures (see Emergency Phone Number on this label)
 P363 - Wash contaminated clothing before reuse
 P261 - Avoid breathing dust/fume/gas/mist/vapors/spray
 P271 - Use only outdoors or in a well-ventilated area
 P304 + P340 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
 P273 - Avoid release to the environment

2.3. Other Hazards

Other hazards Harmful to aquatic life
 General Hazards Not applicable

Section 3: COMPOSITION/INFORMATION ON INGREDIENTS

Molecular Weight 183.91
 Formula Na₃O₄V

3.1 Substances

Chemical name	EC No	CAS No.	Weight-%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Sodium Orthovanadate	Present	13721-39-6	100	Acute Tox. 4 (H302) Acute Tox. 4 (H312) Acute Tox. 4 (H332) Aquatic Acute 3 (H402) Aquatic Chronic 3 (H412)

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

Section 4: FIRST AID MEASURES

4.1. Description of first aid measures

General advice Immediate medical attention is required. If symptoms persist, call a physician.
 Inhalation Immediate medical attention is required. Remove to fresh air. If not breathing, give artificial respiration. Avoid direct contact with skin. Use barrier to give mouth-to-mouth resuscitation. Artificial respiration and/or oxygen may be necessary. Call a physician. Move to fresh air in case of accidental inhalation of vapors. If symptoms persist, call a physician.
 Skin Contact Immediate medical attention is required. Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Wash contaminated clothing before reuse. Wash off immediately with plenty of water. If skin irritation persists, call a physician.
 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. Call a physician immediately. If symptoms persist, call a physician.
 Ingestion Do NOT induce vomiting. Call a physician or poison control center immediately. Never give anything by mouth to an unconscious person. Drink plenty of water. Clean mouth with water and drink afterwards plenty of water. Call a physician.
 Self-protection of the first aider Use personal protective equipment as required. Avoid contact with skin, eyes or clothing.

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

Symptoms No information available.



labeled containers.

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	European Union	United Kingdom	France	Spain	Germany
Sodium Orthovanadate 13721-39-6					TWA: 0.005 mg/m ³ TWA: 0.03 mg/m ³

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 Tight sealing safety goggles. Face protection shield.

Skin and Body Protection Gloves made of plastic or rubber. Suitable protective clothing. Suitable protective clothing. Apron.

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 No information available
Odor May be unpleasant

<u>Property</u>	<u>Values</u>
pH	No information available
Melting point/freezing point	850 °C
Boiling point	3380 °C
Flash point	No information available
Liquid Density	No information available
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

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.

10.5. Incompatible materials

Incompatible materials Strong oxidizing agents.

10.6. Hazardous decomposition products

Hazardous Decomposition Products None known based on information supplied.

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 0% of the mixture consists of ingredient(s) of unknown toxicity.

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

ATEmix (oral) 330.00 mg/kg
 ATEmix (dermal) 1,100.00 mg/kg
 ATEmix (inhalation-dust/mist) 1.50 mg/l

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Sodium Orthovanadate	= 330 mg/kg (Rat)		

Section 12: ECOLOGICAL INFORMATION**12.1. Toxicity**

Ecotoxicity May cause long lasting harmful effects to aquatic life.
 Unknown aquatic toxicity 0% 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.

12.3. Bioaccumulative potential

Bioaccumulation No information available.

12.4. Mobility in soil

Mobility No information available.

12.5. Results of PBT and vPvB assessment



PBT and vPvB assessment No information available.

12.6. Other adverse effects

Other adverse effects No information available

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.

Other Information Waste codes should be assigned by the user based on the application for which the product was used.

Section 14: TRANSPORT INFORMATION

	<u>RID / ADR</u>	<u>IMDG</u>	<u>ICAO (air) / IATA</u>
	Not regulated	Not regulated	Not regulated
14.1 UN/ID no	-	-	-
14.2 Proper shipping name	-	-	-
14.3 Hazard Class	-	-	-
Subsidiary hazard class / Labels	-	-	-
14.4 Packing Group	-	-	-
14.5 14.5 Environmental Hazard	-	-	-
14.6 14.6 Special Provisions	-	-	-

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

TSCA (United States): Canada (DSL/NDSL) Europe (EINECS/ELINCS/NLP) Australia (AICS) South Korea (KECL): China (IECSC)
ENCS (Japan):

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

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

H302 - Harmful if swallowed
H312 - Harmful in contact with skin
H332 - Harmful if inhaled
H402 - Harmful to aquatic life
H412 - Harmful to aquatic life with long lasting effects
No information available.

Revision note

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