

SAFETY DATA SHEET

Santa Cruz Biotechnology, Inc. Revision date 23-Oct-2015 Version 1

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

Product identifier

Product Name Product Code Phenylacetaldehyde SC-250699

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 Skin corrosion/irritation Serious eye damage/eye irritation Specific target organ toxicity (single exposure) Flammable liquids

Label elements

Signal word Hazard statements

Symbols/Pictograms

Precautionary Statements - Prevention

Category 4 Category 2 Category 2A Category 3 Category 4

Warning Harmful if swallowed Causes skin irritation Causes serious eye irritation May cause respiratory irritation Combustible liquid



Wash face, hands and any exposed skin thoroughly after handling Do not eat, drink or smoke when using this product Wear protective gloves/protective clothing/eye protection/face protection Avoid breathing dust/fume/gas/mist/vapors/spray Use only outdoors or in a well-ventilated area Keep away from heat/sparks/open flames/hot surfaces. — No smoking Keep cool

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Precautionary Statements - Response	IF exposed or concerned: Get medical advice/attention
	IF IN EYES: Rinse cautiously with water for several minutes.
	Remove contact lenses, if present and easy to do. Continue rinsing
	If eye irritation persists: Get medical advice/attention
	IF ON SKIN: Wash with plenty of soap and water
	If skin irritation occurs: Get medical advice/attention
	Take off contaminated clothing and wash before reuse
	IF INHALED: Remove victim to fresh air and keep at rest in a
	position comfortable for breathing
	Call a POISON CENTER or doctor/physician if you feel unwell
	IF SWALLOWED: Call a POISON CENTER or doctor/physician
	you feel unwell
	Rinse mouth
	In case of fire: Use CO2, dry chemical, or foam for extinction
Precautionary Statements - Storage	Store in a well-ventilated place. Keep container tightly closed
	Store locked up
Precautionary Statements - Disposal	Dispose of contents/container to an approved waste disposal
	plant

Hazards not otherwise classified (HNOC) Hazards not otherwise classified (HNOC)

Other Information

NFPA	Health hazards	2	HMIS	Health hazards	2
	Flammability	2		Flammability	2
	Stability	0		Physical hazards	0
	Physical and chemical properties	-		Personal protection	-

Not applicable

3. COMPOSITION/INFORMATION ON INGREDIENTS

CAS No	122-78-1
Molecular Weight	120.15
Formula	C8H8O

Chemical Name	CAS No	Weight %	Oral LD50	Dermal LD50	Inhalation LC50
Phenylacetaldehyde	122-78-1	>98	= 1550 mg/kg (Rat)	> 5 g/kg (Rabbit)	-

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
Eye contact	not get in eyes, on skin, or on clothing. 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
Skin Contact	persist, call a physician. Consult a physician if necessary. 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. Wash
Inhalation	off immediately with soap and plenty of water. Immediate medical attention is not required. Remove to fresh air If breathing is irregular or stopped, administer artificial respiration Avoid direct contact with skin. Use barrier to give mouth-to-mouth resuscitation Call a physician Artificial respiration and/or oxygen may be necessary Immediate medical attention is not required Move to fresh air in case of accidental inhalation of vapors If symptoms persist, call a physician



Ingestion	Do NOT induce vomiting. Drink plenty of water. If symptoms persist, call a physician. Rinse mouth. Clean mouth with water and drink afterwards plenty of water. Never give anything by mouth to an unconscious person. Call a physician.
Self-protection of the first aider	Use personal protective equipment as required.
Most important symptoms an	d effects, both acute and delayed

Symptoms No information available.

Indication of any immediate medical attention and special treatment needed

Note to physicians May cause sensitization of susceptible persons. 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	None.
Specific hazards arising from the	e chemical
Specific hazards arising from the	In the event of fire and/or explosion do not breathe fumes. May cause sensitization by
chemical	inhalation and skin contact. Thermal decomposition can lead to release of irritating and toxic gases and vapors.
Hazardous combustion products	Carbon oxides.
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 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, protectiv Personal precautions	e equipment and emergency procedures Avoid contact with skin, eyes or clothing. Use personal protective equipment as required. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak.
Environmental precautions Environmental precautions	Prevent entry into waterways, sewers, basements or confined areas. Do not flush into surface water or sanitary sewer system. Prevent further leakage or spillage if safe to do so. Prevent product from entering drains. See Section 12 for additional Ecological Information.
Methods and material for contain Methods for containment Methods for cleaning up	inment and cleaning up Prevent further leakage or spillage if safe to do so. Cover liquid spill with sand, earth or other non-combustible absorbent material. Cover powder spill with plastic sheet or tarp to minimize spreading. Pick up and transfer to properly labeled containers. Soak up with inert absorbent material. Dam up.

7. HANDLING AND STORAGE

Precautions for safe handling



Advice on safe handling	Avoid contact with skin, eyes or clothing. Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Use personal protective equipment as required. Do not breathe dust/fume/gas/mist/vapors/spray. Use with local exhaust ventilation.
Conditions for safe storag	e, including any incompatibilities
Storage Conditions	Keep container tightly closed in a dry and well-ventilated place. Keep out of the reach of children. Keep containers tightly closed in a cool, well-ventilated place. Keep in properly labeled containers. Protect from moisture. 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 contro	ls
Engineering Controls	Showers
	Eyewash stations
	Ventilation systems
Individual protection measures,	such as personal protective equipment
Eye/face protection	Tight sealing safety goggles. Face protection shield.
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. Regular cleaning of equipment, work area and clothing is recommended.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State	liquid
Appearance	No information a
Odor	Pleasant

Property

pН Melting point/freezing point Boiling point Flash point Density Evaporation rate Upper flammability limits Lower flammability limit Vapor pressure Vapor density Specific gravity Water solubility Solubility in other solvents Partition coefficient Autoignition temperature Decomposition temperature Kinematic viscosity

available

Values

No information available -10 °C 195 °C 87 °C CC (closed cup) 1.03 g/mL No information available No information available No information available 0.4 1 1.03 No information available No information available 1.78 No information available No information available No information available



Explosive properties Oxidizing properties No information available No information available

10. STABILITY AND REACTIVITY

Reactivity
Chemical stability
Possibility of Hazardous Reactions
Hazardous polymerization
Conditions to avoid
Incompatible materials
Hazardous Decomposition Products

Not applicable Stable under recommended storage conditions. None under normal processing. No information available. Exposure to air or moisture over prolonged periods. Strong oxidizing agents. Carbon oxides.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure Inhalation No data available. Eve contact No data available. Skin Contact No data available. Ingestion No data available. Information on toxicological effects No information available. Symptoms Delayed and immediate effects as well as chronic effects from short and long-term exposure Chronic Toxicity Repeated contact may cause allergic reactions in very susceptible persons. Avoid repeated exposure. 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) 1550 mg/kg ATEmix (dermal) 5000 mg/kg

12. ECOLOGICAL INFORMATION

May cause long lasting harmful effects to aquatic life

100% of the mixture consists of components(s) of unknown hazards to the aquatic environment.

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.
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.



DOT	Not regulated
IMDG	Not regulated
ΙΑΤΑ	Not regulated

15. REGULATORY INFORMATION

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): Philippines (PICCS)

Chemical Name	TSCA	DSL	NDSL	EINECS	ELINCS	ENCS	IECSC	KECL	PICCS	AICS
Phenylacetaldehyde	Х	Х	-	Х	-	Х	Х	Х	Х	Х

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	Yes
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

This product does not contain any substances regulated by state right-to-know regulations

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