SAFETY DATA SHEET

Santa Cruz Biotechnology, Inc.
Revision date 24-May-2022
Version 1

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

1.1. Product Identifier

Product Name	Sodium trichloroacetate
Product Code	SC-251060
EC No	211-479-2
CAS No	650-51-1
Synonyms	Trichloroacetic acid sodium salt
Pure substance/mixture	Substance
Contains Sodium trichloroacetate	

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 5 - (H303)
Acute toxicity - Dermal	Category 5 - (H313)
Carcinogenicity	Category 2 - (H351)
Specific target organ toxicity (single exposure)	Category 3 - (H335)
Acute aquatic toxicity	Category 1 - (H400)
Chronic aquatic toxicity	Category 1 - (H410)

2.2. Label Elements

Contains Sodium trichloroacetate

Signal word: Warning

Symbols/Pictograms

Hazard statements:
H335 - May cause respiratory irritation
H351 - Suspected of causing cancer
H410 - Very toxic to aquatic life with long lasting effects

Precautionary Statements - EU (§28, 1272/2008):
P312 - Call a POISON CENTER or doctor if you feel unwell
P201 - Obtain special instructions before use

P202 - Do not handle until all safety precautions have been read and understood
P281 - Use personal protective equipment as required
P308 + P313 - IF exposed or concerned: Get medical advice/attention
P405 - Store locked up
P501 - Dispose of contents/ container to an approved waste disposal plant
P261 - Avoid breathing dust/fume/gas/mist/vapors/spray
P271 - Use only outdoors or in a well-ventilated area
P304 + P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing
P312 - Call a POISON CENTER or doctor if you feel unwell
P403 + P233 - Store in a well-ventilated place. Keep container tightly closed
P273 - Avoid release to the environment
P391 - Collect spillage

2.3. Other Hazards

General Hazards — Not applicable

Section 3: COMPOSITION/INFORMATION ON INGREDIENTS

Molecular Weight — 185.37
Formula — $C_2Cl_3NaO_2$

3.1 Substances

Chemical name	EC No	CAS No.	Weight-%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Sodium trichloroacetate	Present	650-51-1	100	Carc. 2 (H351) STOT SE 3 (H335) Aquatic Acute 1 (H400) Aquatic Chronic 1 (H410)

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	Thermal decomposition can lead to release of toxic/corrosive gases and vapors
Hazardous combustion products	Carbon oxides. Phosgene.

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	Thermal decomposition can lead to release of toxic/corrosive gases and vapors.
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	European Union	United Kingdom	France	Spain	Germany
Sodium trichloroacetate 650-51-1					TWA: 2 mg/m³ Ceiling / Peak: 2 mg/m³ Skin

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	No information available
Odor	No information available

Property	**Values**
pH	No information available
Melting point/freezing point	300 °C
Boiling point	No information available
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	Carbon oxides. Phosgene.

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) — 3,320.00 mg/kg

ATEmix (dermal) — 2,002.00 mg/kg

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Sodium trichloroacetate	= 3320 mg/kg (Rat)	> 2000 mg/kg (Rat)	> 365 g/m³ (Rat) 4 h

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.

Chemical name	Algae/aquatic plants	Fish	Crustacea
Sodium trichloroacetate		1000: 96 h Salmo gairdneri mg/L LC50 static	10000: 24 h Daphnia magna mg/L EC50

12.2. Persistence and degradability

Persistence and degradability — No information available.

12.3. Bioaccumulative potential

Bioaccumulation — No information available.

Chemical name	Partition coefficient
Sodium trichloroacetate	0.002

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.

Section 14: TRANSPORT INFORMATION

	RID / ADR	IMDG	ICAO (air) / IATA
14.1 UN/ID no	UN3077	UN3077	UN3077
14.2 Proper shipping name	Environmentally hazardous substance, solid, n.o.s.	Environmentally hazardous substance, solid, n.o.s.	Environmentally hazardous substance, solid, n.o.s.
14.3 Hazard Class	9	9	9
Subsidiary hazard class / Labels	-	-	-
14.4 Packing Group	III	III	III
14.5 14.5 Environmental Hazard	Yes	-	Yes
14.6 14.6 Special Provisions	274, 335, 375, 601 Classification code M7	274, 335, 966, 967, 969 EmS-No F-A, S-F	A158, A179, A97, A197 ERG Code 9L

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 trichloroacetate	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
H335 - May cause respiratory irritation
H351 - Suspected of causing cancer
H400 - Very toxic to aquatic life
H410 - Very toxic to aquatic life with long lasting effects

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