



The Power to Question

# SAFETY DATA SHEET

Santa Cruz Biotechnology, Inc.

Revision date 05-May-2020

Version 1

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

### 1.1. Product Identifier

Product Name	1,2,3,4-Tetramethylbenzene
Product Code	SC-273552
EC No	207-673-1
CAS No	488-23-3
Pure substance/mixture	Substance
Contains 1,2,3,4-Tetramethylbenzene	

### 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	Category 2 - (H315)
Serious eye damage/eye irritation	Category 2 - (H319)
Specific target organ toxicity (single exposure)	Category 3 - (H335)
Flammable liquids	Category 4 - (H227)

### 2.2. Label Elements

Contains 1,2,3,4-Tetramethylbenzene

Signal word

Warning

Symbols/Pictograms



Hazard statements

H315 - Causes skin irritation  
H319 - Causes serious eye irritation  
H335 - May cause respiratory irritation  
H227 - Combustible liquid

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

P264 - Wash face, hands and any exposed skin thoroughly after handling  
P280 - Wear protective gloves  
P302 + P352 - IF ON SKIN: Wash with plenty of soap and water



P321 - Specific treatment (see Emergency Phone Number on this label)  
 P332 + P313 - If skin irritation occurs: Get medical advice/attention  
 P362 - Take off contaminated clothing and wash before reuse  
 P280 - Wear protective gloves/protective clothing/eye protection/face protection  
 P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing  
 P337 + P313 - If eye irritation persists: Get medical advice/attention  
 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  
 P405 - Store locked up  
 P501 - Dispose of contents/ container to an approved waste disposal plant

### 2.3. Other Hazards

Other hazards

Combustible liquid

General Hazards

Not applicable

## Section 3: COMPOSITION/INFORMATION ON INGREDIENTS

Molecular Weight 134.22  
 Formula C<sub>10</sub>H<sub>14</sub>

### 3.1 Substances

Chemical name	EC No	CAS No.	Weight-%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
1,2,3,4-Tetramethylbenzene	Present	488-23-3	100	Flam. Liq. 4 (H227) Skin Irrit. 2 (H315) Eye Irrit. 2 (H319) STOT SE 3 (H335)

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 Carbon oxides.

### 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 Pick up and transfer to properly labeled containers.

### 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	European Union	United Kingdom	France	Spain	Germany
1,2,3,4-Tetramethylbenzene 488-23-3			TWA: 150 mg/m <sup>3</sup> TWA: 1000 mg/m <sup>3</sup> STEL: 1500 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	liquid
Appearance	No information available
Odor	No information available

<u>Property</u>	<u>Values</u>
pH	No information available
Melting point/freezing point	No information available
Boiling point	204 °C
Flash point	68.3 °C
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
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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 Carbon oxides.

## 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) 6,408.00 mg/kg

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
1,2,3,4-Tetramethylbenzene	= 6408 mg/kg ( Rat )		

## 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.

### 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.

## Section 14: TRANSPORT INFORMATION

### 14.1 UN/ID no

RID / ADR  
Not regulated

IMDG  
Not regulated

ICAO (air) / IATA  
Not regulated



<b>14.2 Proper shipping name</b>	-	-	-
<b>14.3 Hazard Class</b>	-	-	-
<b>Subsidiary hazard class / Labels</b>	-	-	-
<b>14.4 Packing Group</b>	-	-	-
<b>14.5 14.5 Environmental Hazard</b>	-	This product contains a chemical which is listed as a marine pollutant according to IMDG/IMO	-
<b>14.6 14.6 Special Provisions</b>	-	-	-

**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) South Korea (KECL): ENCS (Japan): Philippines (PICCS)

Chemical name	TSCA	DSL	NDSL	EINECS	ELINCS	ENCS	IECSC	KECL	PICCS	AICS
1,2,3,4-Tetramethylbenzene	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	H227 - Combustible liquid H315 - Causes skin irritation H319 - Causes serious eye irritation H335 - May cause respiratory irritation
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**