



The Power to Question

SAFETY DATA SHEET

Santa Cruz Biotechnology, Inc.

Revision date 03-Dec-2015

Version 1.1

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

Product identifier

Product Name Toluene-a, a, a-d3
Product Code SC-229471

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 - Inhalation (Dusts/Mists)
Serious eye damage/eye irritation
Reproductive toxicity
Specific target organ toxicity (single exposure)
Aspiration toxicity
Flammable liquids

Category 4
Category 2A
Category 2
Category 2
Category 1
Category 2

Label elements

Signal word
Hazard statements

Danger
Harmful if inhaled
Causes serious eye irritation
Suspected of damaging fertility or the unborn child
May cause damage to organs
May be fatal if swallowed and enters airways
Highly flammable liquid and vapor

Symbols/Pictograms





Precautionary Statements - Prevention

Obtain special instructions before use
 Do not handle until all safety precautions have been read and understood
 Use personal protective equipment as required
 Use only outdoors or in a well-ventilated area
 Wash face, hands and any exposed skin thoroughly after handling
 Do not breathe dust/fume/gas/mist/vapors/spray
 Do not eat, drink or smoke when using this product
 Keep away from heat/sparks/open flames/hot surfaces. — No smoking
 Keep container tightly closed
 Ground/bond container and receiving equipment
 Use only non-sparking tools

Precautionary Statements - Response

Take precautionary measures against static discharge
 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 (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower
 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
 IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician
 Do NOT induce vomiting
 In case of fire: Use CO2, dry chemical, or foam for extinction
 Store locked up Store in a well-ventilated place. Keep cool
 Dispose of contents/container to an approved waste disposal plant

Precautionary Statements - Storage
 Precautionary Statements - Disposal

Hazards not otherwise classified (HNOC)

Hazards not otherwise classified (HNOC)

Not applicable

Other Information

Other hazards

Toxic to aquatic life with long lasting effects.

| | | |
|-------------|----------------------------------|---|
| NFPA | Health hazards | 2 |
| | Flammability | 3 |
| | Stability | 0 |
| | Physical and chemical properties | - |



| | | |
|-------------|---------------------|---|
| HMIS | Health hazards | 2 |
| | Flammability | 3 |
| | Physical hazards | 0 |
| | Personal protection | - |

3. COMPOSITION/INFORMATION ON INGREDIENTS

CAS No 1124-18-1
 Molecular Weight 95.16
 Formula C₇H₈D₃

| Chemical Name | CAS No | Weight % | Oral LD50 | Dermal LD50 | Inhalation LC50 |
|--------------------|-----------|----------|-----------|-------------|-----------------|
| Toluene-a, a, a-d3 | 1124-18-1 | >98 | - | - | - |

4. FIRST AID MEASURES

First Aid Measures



| | |
|------------------------------------|---|
| General advice | Immediate medical attention is required. In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible). |
| Eye contact | Wash with plenty of water. |
| Skin Contact | Wash off immediately with plenty of water. |
| Inhalation | Remove to fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. |
| Ingestion | Never give anything by mouth to an unconscious person. Clean mouth with water. |
| Self-protection of the first aider | Remove all sources of ignition. |

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 None.

Specific hazards arising from the chemical

Specific hazards arising from the chemical No information available.

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 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 Remove all sources of ignition. Evacuate personnel to safe areas. Ensure adequate ventilation, especially in confined areas.

Environmental precautions

Environmental precautions 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 containment and cleaning up

Methods for containment Prevent further leakage or spillage if safe to do so.

Methods for cleaning up Dam up. Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Pick up and transfer to properly labeled containers.

7. HANDLING AND STORAGE

Precautions for safe handling



Advice on safe handling Ensure adequate ventilation, especially in confined areas. Keep away from heat, sparks, flame and other sources of ignition (i.e., pilot lights, electric motors and static electricity). Take precautionary measures against static discharges. Use spark-proof tools and explosion-proof equipment. All equipment used when handling the product must be grounded.

Conditions for safe storage, including any incompatibilities

Storage Conditions Keep tightly closed in a dry and cool place. Keep in properly labeled containers. Protect from moisture. Desiccate at room temperature.

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 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.

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 available

Odor No information available

| Property | Values |
|------------------------------|--------------------------|
| pH | No information available |
| Melting point/freezing point | No information available |
| Boiling point | 110 °C |
| Flash point | 4 °C |
| Density | 0.90 g/mL |
| Evaporation rate | No information available |
| Upper flammability limits | 7% |
| Lower flammability limit | 1.2% |
| Vapor pressure | 21.8 |
| 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 | 535.0 °C |
| 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 | Heat, flames and sparks. Exposure to air or moisture over prolonged periods. |
| Incompatible materials | Strong oxidizing agents. |
| Hazardous Decomposition Products | Carbon oxides. |

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. |
|------------------|---------------------------|

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 (inhalation-dust/mist) | 1.5 mg/l |

12. ECOLOGICAL INFORMATION

| | |
|-------------|---|
| Ecotoxicity | Toxic to aquatic life with long lasting effects |
|-------------|---|

0% 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. |



14. TRANSPORT INFORMATION

DOT

| | |
|---------------------------------|------------------------|
| UN/ID no | UN1294 |
| Hazard Class | 3 |
| Packing Group | II |
| Proper shipping name | Toluene |
| Description | UN1294, Toluene, 3, II |
| Emergency Response Guide Number | 130 |

IMDG

| | |
|----------------------|------------------------------------|
| UN/ID no | UN1294 |
| Hazard Class | 3 |
| Packing Group | II |
| Proper shipping name | Toluene |
| Description | UN1294, Toluene, 3, II, (4°C c.c.) |
| EmS-No | F-E, S-D |

IATA

| | |
|----------------------|------------------------|
| UN/ID no | UN1294 |
| Hazard Class | 3 |
| Packing Group | II |
| Proper shipping name | Toluene |
| Description | UN1294, Toluene, 3, II |

15. REGULATORY INFORMATION

International Inventories

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

No information available

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 | No |
| 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