



The Power to Question

SAFETY DATA SHEET

Santa Cruz Biotechnology, Inc.

Revision date 18-Apr-2018

Version 1.1

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name 2,3-Dimethyl-2,3-dinitrobutane

Product Code SC-230843

Recommended use For research use only. Not intended for diagnostic or therapeutic use.

<p>Company Santa Cruz Biotechnology, Inc. 10410 Finnell Street Dallas, TX 75220 831.457.3800 800.457.3801 scbt@scbt.com</p>	<p>Emergency telephone number Chemtrec 1.800.424.9300 (Within USA) +1.703.527.3887 (Outside USA)</p>
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2. HAZARDS IDENTIFICATION

Emergency Overview The product contains no substances which at their given concentration, are considered to be hazardous to health

OSHA Regulatory Status This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200)

Potential health effects	
Eyes	May cause irritation.
Skin	May be harmful in contact with skin.
Inhalation	May be harmful if inhaled.
Ingestion	May be harmful if swallowed.
Chronic Toxicity	No known effect.

Hazards not otherwise classified (HNOC)
Hazards not otherwise classified (HNOC) Not applicable

Environmental Hazard See Section 12: ECOLOGICAL INFORMATION.

<p>NFPA</p> <table border="0"> <tr><td>Health hazards</td><td>3</td></tr> <tr><td>Flammability</td><td>0</td></tr> <tr><td>Stability</td><td>0</td></tr> <tr><td>Physical and chemical properties</td><td>-</td></tr> </table>	Health hazards	3	Flammability	0	Stability	0	Physical and chemical properties	-		<p>HMIS</p> <table border="0"> <tr><td>Health hazards</td><td>4</td></tr> <tr><td>Flammability</td><td>0</td></tr> <tr><td>Physical hazards</td><td>0</td></tr> <tr><td>Personal protection</td><td>-</td></tr> </table>	Health hazards	4	Flammability	0	Physical hazards	0	Personal protection	-
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Health hazards	4																	
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Physical hazards	0																	
Personal protection	-																	

3. COMPOSITION/INFORMATION ON INGREDIENTS

Product Name	2,3-Dimethyl-2,3-dinitrobutane
Molecular Weight	176.17
Formula	C ₆ H ₁₂ N ₂ O ₄

4. FIRST AID MEASURES

General advice	Consult a physician if necessary. Remove to fresh air.
Eye contact	Wash with plenty of water.
Skin Contact	Wash off immediately with soap and 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.
Note to physicians	Treat symptomatically.
Self-protection of the first aider	Avoid contact with skin, eyes or clothing.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Suitable Extinguishing Media Dry chemical, CO₂, water spray or alcohol-resistant foam.

Specific hazards arising from the chemical

Flammable properties	Not determined.
Flash point °C	No information available
Hazardous combustion products	Carbon oxides. Nitrogen oxides (NO _x).

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	Ensure adequate ventilation, especially in confined areas.
Environmental precautions	See Section 12 for additional Ecological Information.
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.

7. HANDLING AND STORAGE

Advice on safe handling	Handle in accordance with good industrial hygiene and safety practice.
Storage Conditions	Keep containers tightly closed in a dry, cool and well-ventilated place.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure controls

Engineering Controls	Showers Eyewash stations Ventilation systems
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Personal protective equipment (PPE)

Eye/face protection	Wear safety glasses with side shields (or goggles).
Skin and Body Protection	Wear protective gloves and protective clothing.

Respiratory protection	Ensure adequate ventilation, especially in confined areas.
General Hygiene Considerations	Handle in accordance with good industrial hygiene and safety practice.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State	Solid
Appearance	powder
Odor	No information available

<u>Property</u>	<u>Values</u>
pH	No information available
Melting point/freezing point	214 °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	214 °C
Kinematic viscosity	No information available
Explosive properties	No information available
Oxidizing properties	No information available

10. STABILITY AND REACTIVITY

Reactivity	Not applicable
Stability	Stable under recommended storage conditions.
Incompatible materials	Incompatible with oxidizing agents.
Conditions to avoid	Heat, flames and sparks. Extremes of temperature and direct sunlight.
Hazardous Decomposition Products	Carbon oxides. Nitrogen oxides (NOx).
Hazardous polymerization	Hazardous polymerization does not occur

11. TOXICOLOGICAL INFORMATION

Acute toxicity	
Product Information	Product does not present an acute toxicity hazard based on known or supplied information.
Chronic Toxicity	
Target Organ Effects	None known.

12. ECOLOGICAL INFORMATION

Ecotoxicity	
Ecotoxicity	The environmental impact of this product has not been fully investigated.
Persistence and degradability	No information available.
Bioaccumulation	No information available.

13. DISPOSAL CONSIDERATIONS

Disposal considerations	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	UN2811
Hazard Class	6.1
Packing Group	II
Proper shipping name	Toxic solids, organic, n.o.s.
Description	UN2811, Toxic solids, organic, n.o.s., 6.1, II
Emergency Response Guide Number	154

IATA

UN/ID no	UN2811
Hazard Class	6.1
Packing Group	II
Proper shipping name	Toxic solid, organic, n.o.s.
Description	UN2811, Toxic solid, organic, n.o.s., 6.1, II
ERG Code	6L
Special Provisions	A3, A5

IMDG

UN/ID no	UN2811
Hazard Class	6.1
Packing Group	II
Proper shipping name	Toxic solid, organic, n.o.s.
Description	UN2811, Toxic solid, organic, n.o.s., 6.1, II
EmS-No	F-A, S-A

15. REGULATORY INFORMATION

International Inventories

All of the components in the product are on the following Inventory lists TSCA (United States): Canada (DSL/NDL) Europe (EINECS/ELINCS/NLP)

X - Listed

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
 DSL/NDL - 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
 IECS - 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	No
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

Mexico Regulatory Information**Canada Regulatory Information**

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR

WHMIS Hazard Class Non-controlled

16. OTHER INFORMATION

Revision date 18-Apr-2018
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