



The Power to Question

# SAFETY DATA SHEET

Santa Cruz Biotechnology, Inc.

Revision date 24-Apr-2019

Version 1.1

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

### Product identifier

Product Name 2-Methylbutyronitrile  
Product Code SC-230551

### 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  
Acute toxicity - Dermal  
Acute toxicity - Inhalation (Dusts/Mists)  
Aspiration toxicity  
Flammable liquids

Category 2  
Category 3  
Category 3  
Category 1  
Category 3

### Label elements

Signal word  
Hazard statements

Danger  
Fatal if swallowed  
May be fatal if swallowed and enters airways

Toxic in contact with skin  
Toxic if inhaled  
Flammable liquid and vapor

Symbols/Pictograms



Precautionary Statements - Prevention

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 container tightly closed  
Ground/bond container and receiving equipment  
Use only non-sparking tools  
Take precautionary measures against static discharge  
Keep cool



Precautionary Statements - Response

IF exposed or concerned: Get medical advice/attention  
 Call a POISON CENTER or doctor/physician if you feel unwell  
 Wash contaminated clothing before reuse  
 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  
 Call a POISON CENTER or doctor/physician  
 IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician  
 Rinse mouth  
 Do NOT induce vomiting

Precautionary Statements - Storage

In case of fire: Use CO<sub>2</sub>, dry chemical, or foam for extinction  
 Store locked up Store in a well-ventilated place. Keep container tightly closed

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

**Hazards not otherwise classified (HNOC)**

Hazards not otherwise classified (HNOC)

Not applicable

**Other Information**

Other hazards

Harmful to aquatic life with long lasting effects. Harmful to aquatic life.

**NFPA**

Health hazards	3
Flammability	3
Stability	0
Physical and chemical properties	-



**HMIS**

Health hazards	4
Flammability	3
Physical hazards	0
Personal protection	-

**3. COMPOSITION/INFORMATION ON INGREDIENTS**

CAS No	18936-17-9
Molecular Weight	83.13
Formula	C <sub>5</sub> H <sub>9</sub> N

Chemical name	CAS No.	Weight-%	Oral LD50	Dermal LD50	Inhalation LC50
2-Methylbutyronitrile	18936-17-9	>98	-	-	-

**4. FIRST AID MEASURES**

**First Aid Measures**

General advice	Consult a physician if necessary. Remove to fresh air.
Eye contact	Wash with plenty of water.
Skin Contact	Wash skin with soap and 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.

**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

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### Suitable Extinguishing Media

Suitable Extinguishing Media Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable Extinguishing Media No information available.

### Specific hazards arising from the chemical

Specific hazards arising from the chemical flammable.

Hazardous combustion products Carbon oxides. Hydrogen cyanide. Nitrogen oxides (NOx).

### 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

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### Personal precautions, protective equipment and emergency procedures

Personal precautions Remove all sources of ignition. Use personal protective equipment as required.

### Environmental precautions

Environmental precautions See Section 12 for additional Ecological Information. Do not flush into surface water or sanitary sewer system.

### 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 Soak up with inert absorbent material.

## 7. HANDLING AND STORAGE

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### Precautions for safe handling

Advice on safe handling Handle in accordance with good industrial hygiene and safety practice.

### Conditions for safe storage, including any incompatibilities

Storage Conditions Keep away from heat, sparks, flame and other sources of ignition (i.e., pilot lights, electric motors and static electricity). Store at room temperature.

Incompatible materials None known based on information supplied.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

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### Control parameters

Exposure Guidelines .

Other Information Vacated limits revoked by the Court of Appeals decision in AFL-CIO v. OSHA, 965 F.2d 962 (11th Cir., 1992).



Chemical name	ACGIH TLV	OSHA PEL	NIOSH IDLH
2-Methylbutyronitrile 18936-17-9	-	TWA: 5 mg/m <sup>3</sup> CN (vacated) TWA: 5 mg/m <sup>3</sup> S* as CN	IDLH: 25 mg/m <sup>3</sup> CN

NIOSH IDLH Immediately Dangerous to Life or Health

### 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        Handle in accordance with good industrial hygiene and safety practice.

## 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	125 °C
Flash point	25 °C
Liquid Density	0.786 g/cm <sup>3</sup>
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

## 10. STABILITY AND REACTIVITY

Reactivity                                      Not applicable

Chemical stability                            Stable under recommended storage conditions.

Possibility of Hazardous Reactions      Contact with acids may liberate toxic gas.

Hazardous polymerization                No information available.

Conditions to avoid                           Extremes of temperature and direct sunlight.

Incompatible materials                      Strong oxidizing agents.

Hazardous Decomposition Products      Carbon oxides. Hydrogen cyanide. Nitrogen oxides (NO<sub>x</sub>).



## 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.
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### Delayed and immediate effects as well as chronic effects from short and long-term exposure

Chronic Toxicity	No information available.
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### 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)	5 mg/kg
ATEmix (dermal)	300 mg/kg
ATEmix (inhalation-dust/mist)	0.5 mg/l

## 12. ECOLOGICAL INFORMATION

Ecotoxicity	Harmful to aquatic life with long lasting effects
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0% of the mixture consists of component(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.
US EPA Waste Number	D001

## 14. TRANSPORT INFORMATION

### DOT

UN/ID no	UN2929
Hazard Class	6.1
Subsidiary class	3
Packing Group	II
Proper shipping name	Toxic liquids, flammable, organic, n.o.s.
Description	UN2929, Toxic liquids, flammable, organic, n.o.s., 6.1 (3), II, Marine pollutant
Marine pollutant	This product contains a chemical which is listed as a marine pollutant according to DOT



Emergency Response Guide Number 131

**IMDG**

UN/ID no UN2929  
 Hazard Class 6.1  
 Subsidiary hazard class 3  
 Packing Group II  
 Proper shipping name Toxic liquid, flammable, organic, n.o.s.  
 Description UN2929, Toxic liquid, flammable, organic, n.o.s., 6.1 (3), II, (25°C c.c.)  
 Special Provisions 274  
 EmS-No F-E, S-D

**IATA**

UN/ID no UN2929  
 Hazard Class 6.1  
 Subsidiary hazard class 3  
 Packing Group II  
 Proper shipping name Toxic liquid, flammable, organic, n.o.s.  
 Description UN2929, Toxic liquid, flammable, organic, n.o.s., 6.1 (3), II  
 ERG Code 6F

**15. REGULATORY INFORMATION****International Inventories**

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

Europe (EINECS/ELINCS/NLP)

Chemical name	TSCA	DSL	NDSL	EINECS	ELINCS	ENCS	IECSC	KECL	PICCS	AICS
2-Methylbutyronitrile	-	-	-	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

**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 contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

Chemical name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
2-Methylbutyronitrile 18936-17-9		X	X	

**US State Regulations**

**California Proposition 65**

This product does not contain any Proposition 65 chemicals.

**U.S. State Right-to-Know Regulations**

Chemical name	New Jersey	Massachusetts	Pennsylvania
2-Methylbutyronitrile 18936-17-9	X	Not Listed	X

**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**