



# Dysprosium(III) perchlorate solution: sc-227972

## MATERIAL SAFETY DATA SHEET

The Power to Question

### SECTION 1 - PRODUCT AND COMPANY INFORMATION

Product Name: Dysprosium(III) perchlorate solution  
 Catalog Number: sc-227972  
 Supplier: Santa Cruz Biotechnology, Inc.  
 2145 Delaware Ave.  
 Santa Cruz, California 95060  
 800.457.3801 or 831.457.3800  
 Emergency: ChemWatch  
 Within the US & Canada: 877-715-9305  
 Outside the US & Canada: +800 2436 2255  
 (1-800-CHEMCALL) or call +613 9573 3112

### SECTION 2 - COMPOSITION/INFORMATION ON INGREDIENT

<u>Substance Name</u>	<u>CAS #</u>	<u>SARA 313</u>
Dysprosium(III) perchlorate solution	14017-53-9	No
Formula: Dy(ClO <sub>4</sub> ) <sub>3</sub>		
Molecular Weight: 460.85		

### SECTION 3 - HAZARDS IDENTIFICATION

#### EMERGENCY OVERVIEW

Oxidizing. Corrosive.  
 Contact with combustible material may cause fire. Causes burns.

For additional information on toxicity, please refer to Section 11.

### SECTION 4 - FIRST AID MEASURES

#### ORAL EXPOSURE

If swallowed, wash out mouth with water provided person is conscious. Call a physician immediately. If swallowed, wash out mouth with water provided person is conscious. Call a physician.

#### INHALATION EXPOSURE

If inhaled, remove to fresh air. If not breathing give artificial respiration. If breathing is difficult, give oxygen.

#### EYE EXPOSURE

Assure adequate flushing of the eyes by separating the eyelids with fingers.

### SECTION 5 - FIRE FIGHTING MEASURES

#### CONDITIONS OF FLAMMABILITY

May accelerate combustion.

#### FLASH POINT

N/A

#### AUTOIGNITION TEMP

N/A

#### FLAMMABILITY

N/A

#### EXTINGUISHING MEDIA

Suitable: Water spray.

#### FIRE FIGHTING

Protective Equipment: Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.

Specific Hazard(s): Emits toxic fumes under fire conditions. May accelerate combustion. Contact with other material may cause fire.

### SECTION 6 - ACCIDENTAL RELEASE MEASURES

#### PROCEDURE TO BE FOLLOWED IN CASE OF LEAK OR SPILL

Evacuate area.

#### PROCEDURE(S) OF PERSONAL PRECAUTION(S)

Wear self-contained breathing apparatus, rubber boots, and heavy rubber gloves.

#### METHODS FOR CLEANING UP

Cover with dry lime or soda ash, pick up, keep in a closed container, and hold for waste disposal. Ventilate area and wash spill site after material pickup is complete.

### SECTION 7 - HANDLING AND STORAGE

#### HANDLING

User Exposure: Do not breathe vapor. Do not get in eyes, on skin, on clothing. Avoid prolonged or repeated exposure.

#### STORAGE

Suitable: Keep tightly closed. Store in a cool dry place.  
 Unsuitable: Do not store near, nor allow contact with, clothing and other combustible material.  
 Store at room temperature.

### SECTION 8 - EXPOSURE CONTROLS / PPE

#### ENGINEERING CONTROLS

Use only in a chemical fume hood. Safety shower and eye bath.

#### PERSONAL PROTECTIVE EQUIPMENT

Other: Wear appropriate government approved respirator, chemical-resistant gloves, safety goggles, other protective clothing. Faceshield (8-inch minimum).

#### GENERAL HYGIENE MEASURES

Wash contaminated clothing before reuse. Discard contaminated shoes. Wash thoroughly after handling.

### SECTION 9 - PHYSICAL/CHEMICAL PROPERTIES

Form ..... liquid  
 pH ..... N/A  
 BP/BP Range ..... N/A  
 MP/MP Range ..... N/A  
 Freezing Point ..... N/A  
 Vapor Pressure ..... 6.204 mmHg at 20 °C  
 Vapor Density ..... N/A  
 Saturated Vapor Conc. .... N/A  
 SG/Density ..... 1.476 g/cm<sup>3</sup>  
 Bulk Density ..... N/A  
 Odor Threshold ..... N/A  
 Volatile% ..... N/A  
 VOC Content ..... N/A  
 Water Content ..... N/A  
 Solvent Content ..... N/A  
 Evaporation Rate ..... N/A  
 Viscosity ..... N/A  
 Surface Tension ..... N/A  
 Partition Coefficient ..... N/A  
 Decomposition Temp. .... N/A  
 Flash Point ..... N/A  
 Explosion Limits ..... N/A  
 Flammability ..... N/A  
 Autoignition Temp ..... N/A  
 Refractive Index ..... N/A  
 Optical Rotation ..... N/A

continued...

Miscellaneous Data . . . . . N/A  
Solubility . . . . . N/A  
N/A = not available

**SECTION 10 - STABILITY AND REACTIVITY**

STABILITY

Stable: Stable.  
Materials to Avoid: Organic materials, Finely powdered metals, Strong reducing agents.

HAZARDOUS DECOMPOSITION PRODUCTS

Hazardous Decomposition Products: Chlorine.

**SECTION 11 - TOXICOLOGICAL INFORMATION**

ROUTE OF EXPOSURE

Multiple Routes: Harmful if swallowed, inhaled, or absorbed through skin.

SIGNS AND SYMPTOMS OF EXPOSURE

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated. Symptoms of exposure may include burning sensation, coughing, wheezing, laryngitis, shortness of breath, headache, nausea, and vomiting. Inhalation may result in spasm, inflammation and edema of the larynx and bronchi, chemical pneumonitis, and pulmonary edema. Material is extremely destructive to tissue of the mucous membranes and upper respiratory tract, eyes, and skin. Rare earth compounds may cause delayed blood clotting leading to hemorrhages. Inhalation of rare earths may cause sensitivity to heat, itching, and increased awareness of odor and taste.

**SECTION 12 - ECOLOGICAL INFORMATION**

No data available.

**SECTION 13 - DISPOSAL CONSIDERATIONS**

APPROPRIATE METHOD OF DISPOSAL OF SUBSTANCE OR PREPARATION

Contact a licensed professional waste disposal service to dispose of this material. Observe all federal, state, and local environmental regulations.

**SECTION 14 - TRANSPORT INFORMATION**

DOT

Proper Shipping Name: Oxidizing liquid, corrosive, n.o.s.  
UN#: 3098  
Class: 5.1  
Packing Group: Packing Group II  
Hazard Label: Oxidizer  
Hazard Label: Corrosive  
PIH: Not PIH

IATA

Proper Shipping Name: Oxidizing liquid, corrosive, n.o.s.  
IATA UN Number: 3098  
Hazard Class: 5.1  
Packing Group: II

**SECTION 15 - REGULATORY INFORMATION**

EU ADDITIONAL CLASSIFICATION

Symbol of Danger: O-C  
Indication of Danger: Oxidizing. Corrosive.  
R: 8-34  
Risk Statements: Contact with combustible material may cause fire. Causes burns.  
S: 17-26-27-36/37/39-45  
Safety Statements: Keep away from combustible material. In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Take off immediately all contaminated clothing. Wear suitable protective clothing, gloves, and eye/face protection. In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

US CLASSIFICATION AND LABEL TEXT

Indication of Danger: Oxidizing. Corrosive.  
Risk Statements: Contact with combustible material may cause fire. Causes burns.

Safety Statements: Keep away from combustible material. In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Take off immediately all contaminated clothing. Wear suitable protective clothing, gloves, and eye/face protection.

UNITED STATES REGULATORY INFORMATION

SARA LISTED: No

CANADA REGULATORY INFORMATION

WHMIS Classification: This product has been classified in accordance with the hazard criteria of the CPR, and the MSDS contains all the information required by the CPR.  
DSL: No  
NDSL: No

**SECTION 16 - OTHER INFORMATION**

*The above information is believed to be correct but does not purport to be complete and should be used only as a guide. The burden of safe use of this material rests entirely with the user.*

10/17/2011