



# Phosphomolybdic acid solution: sc-203346

## MATERIAL SAFETY DATA SHEET

The Power to Question

### SECTION 1 - PRODUCT AND COMPANY INFORMATION

Product Name: Phosphomolybdic acid solution  
 Catalog Number: sc-203346  
 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>
PHOSPHOMOLYBDIC ACID ETHANOL SOLUTION	None	No

<u>Ingredient Name</u>	<u>CAS#</u>	<u>%</u>	<u>SARA 313</u>
ETHYL ALCOHOL, NON-DENATURED, 200 PROOF	64-17-5	≥80	No
PHOSPHOMOLYBDIC ACID	51429-74-4	≤20	No

Formula  $H_3[PMo_3O_{10}]_4$   
 Molecular Weight 1825.25

### SECTION 3 - HAZARDS IDENTIFICATION

#### EMERGENCY OVERVIEW

Flammable (USA) Highly Flammable (EU). Corrosive.  
 Causes burns.  
 Target organ(s): Liver. Nerves.

#### HMIS RATING

HEALTH: 3  
 FLAMMABILITY: 3  
 REACTIVITY: 1

#### NFPA RATING

HEALTH: 3  
 FLAMMABILITY: 3  
 REACTIVITY: 1

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. Do not induce vomiting.

#### INHALATION EXPOSURE

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

#### DERMAL EXPOSURE

In case of skin contact, flush with copious amounts of water for at least 15 minutes. Remove contaminated clothing and shoes. Call a physician.

#### EYE EXPOSURE

In case of contact with eyes, flush with copious amounts of water for at least 15 minutes. Assure adequate flushing by separating the eyelids with fingers. Call a physician.

### SECTION 5 - FIRE FIGHTING MEASURES

#### FLAMMABLE HAZARDS

Flammable Hazards: Yes

#### EXPLOSION HAZARDS

Vapor may travel considerable distance to source of ignition and flash back. Container explosion may occur under fire conditions.

#### FLASH POINT

55 °F 12.8 °C Method: closed cup

#### AUTOIGNITION TEMP

N/A

#### FLAMMABILITY

N/A

#### EXTINGUISHING MEDIA

Suitable: Carbon dioxide, dry chemical powder, or appropriate foam.

#### FIREFIGHTING

Protective Equipment: Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.  
 Specific Hazard(s): Flammable liquid. Vapor may travel considerable distance to source of ignition and flash back.  
 Emits toxic fumes under fire conditions.  
 Specific Method(s) of Fire Fighting: Use water spray to cool fire-exposed containers.

### SECTION 6 - ACCIDENTAL RELEASE MEASURES

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

Evacuate area. Shut off all sources of ignition. Use nonsparking tools.

#### 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. Keep away from heat, sparks, and open flame. Store in a cool dry place. Store at room temperature.

#### SPECIAL REQUIREMENTS

Moisture sensitive.

*continued...*

**SECTION 8 - EXPOSURE CONTROLS / PPE****ENGINEERING CONTROLS**

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

**PERSONAL PROTECTIVE EQUIPMENT**

Respiratory: Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU). Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator.

Hand: Compatible chemical-resistant gloves.

Eye: Chemical safety goggles.

Other: Faceshield (8-inch minimum).

**GENERAL HYGIENE MEASURES**

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

**SECTION 9 - PHYSICAL/CHEMICAL PROPERTIES**

Physical State:	Liquid	
Property	Value	At Temp or Pressure
pH	N/A	
BP/BP Range	N/A	
MP/MP Range	N/A	
Freezing Point	N/A	
Vapor Pressure	N/A	
Vapor Density	N/A	
Saturated Vapor Conc.	N/A	
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	12.8° C	Method: closed cup
Explosion Limits	N/A	
Flammability	N/A	
Autoignition Temp	N/A	
Refractive Index	N/A	
Optical Rotation	N/A	
Miscellaneous Data	N/A	
Solubility	N/A	
	N/A = not available	

**SECTION 10 - STABILITY AND REACTIVITY****STABILITY**

Stable: Stable.

Conditions of Instability: Moisture sensitive.

Materials to Avoid: Oxidizing agents, peroxides, alkali metals, ammonia.

**HAZARDOUS DECOMPOSITION PRODUCTS**

Hazardous Decomposition Products: Carbon monoxide, Carbon dioxide, Phosphorous oxides, Molybdenum oxides.

**HAZARDOUS POLYMERIZATION**

Hazardous Polymerization: Will not occur

**SECTION 11 - TOXICOLOGICAL INFORMATION****ROUTE OF EXPOSURE**

Skin Contact: Causes burns.

Skin Absorption: May be harmful if absorbed through the skin.

Eye Contact: Causes burns.

Inhalation: May be harmful if inhaled. Material is extremely destructive to the tissue of the mucous membranes and upper respiratory tract.

Ingestion: May be harmful if swallowed.

**TARGET ORGAN(S) OR SYSTEM(S)**

Liver. Nerves. Heart.

**SIGNS AND SYMPTOMS OF EXPOSURE**

Material is extremely destructive to tissue of the mucous membranes and upper respiratory tract, eyes, and skin. Inhalation may result in spasm, inflammation and edema of the larynx and bronchi, chemical pneumonitis, and pulmonary edema. Symptoms of exposure may include burning sensation, coughing, wheezing, laryngitis, shortness of breath, headache, nausea, and vomiting.

**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. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber. Observe all federal, state, and local environmental regulations.

**SECTION 14 - TRANSPORT INFORMATION****DOT**

Proper Shipping Name: Flammable liquids, corrosive, n.o.s.

UN#: 2924

Class: 3

Packing Group: Packing Group II

Hazard Label: Flammable liquid

Hazard Label: Corrosive

PIH: Not PIH

**IATA**

Proper Shipping Name: Flammable liquid, corrosive, n.o.s.

IATA UN Number: 2924

Hazard Class: 3

Packing Group: II

**SECTION 15 - REGULATORY INFORMATION****EU ADDITIONAL CLASSIFICATION**

Symbol of Danger: F-C

Indication of Danger: Highly Flammable. Corrosive.

R: 11-34

Risk Statements: Highly flammable. Causes burns.

S: 26-36/37/39-45

Safety Statements: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. 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).

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#### US CLASSIFICATION AND LABEL TEXT

Indication of Danger: Flammable (USA) Highly Flammable (EU).  
Corrosive.

Risk Statements: Causes burns.

Safety Statements: Keep away from sources of ignition - no smoking. In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Wear suitable protective clothing. In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

US Statements: Target organ(s): Liver. Nerves.

#### 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.*

10/1/2010