

## Safety Data Sheet

**PHORBOL 12-MYRISTATE 13-ACETATE****EFFECTIVE DATE: 2017-01-17**

### 1 Product and Company Identification

- 1.1 Product Name:** Phorbol 12-myristate 13-acetate
- 1.2 Product Identifier:** 12-O-Tetradecanoylphorbol-13-acetate
- 1.3 Catalog Number:** 74042, 74044
- 1.4 Product Use:** Laboratory Chemical
- 1.5 Manufacturer/Supplier:** STEMCELL Technologies  
Suite 500-1618 Station Street  
Vancouver, British Columbia V6A 1B6 Canada
- 1.6 In Case of Emergency Call:** 1-800-667-0322

### 2 Hazards Identification

#### 2.1 Classification of the substance or mixture

Skin Corrosion/Irritation, Category 2

#### 2.2 Label elements

##### Pictogram

**Signal word** Warning

##### Hazard statement(s)

H315 Causes skin irritation.

##### Precautionary statement(s)

P264 Wash {hands} thoroughly after handling.

P280 Wear {protective gloves/protective clothing/eye protection/face protection}.

P302+P352 IF ON SKIN Wash with plenty of soap and water.

P332+P313 If skin irritation occurs Get medical advice/attention.

P362 Take off contaminated clothing and wash it before reuse.

#### 2.3 Other hazards

 No data available

### 3 Composition / Information on Ingredients

#### 3.1 Substances

**Synonyms** 12-O-Tetradecanoylphorbol-13-acetate; PMA; TPA**Molecular formula** C<sub>36</sub>H<sub>56</sub>O<sub>8</sub>**Molecular weight** 616.80

**Safety Data Sheet****PHORBOL 12-MYRISTATE 13-ACETATE****EFFECTIVE DATE: 2017-01-17**

Hazardous Components (Chemical Name)	CAS #	Concentration	EC #
12-O-Tetradecanoylphorbol-13-acetate	16561-29-8	100%	N/A

**4 First Aid Measures****4.1 Description of first aid measures****4.1.1 If inhaled**

Remove to fresh air. If not breathing, give artificial respiration or give oxygen by trained personnel. Get immediate medical attention.

**4.1.2 In case of skin contact**

Immediately wash skin with soap and plenty of water for at least 15 minutes. Remove contaminated clothing. Get medical attention if symptoms occur. Wash clothing before reuse.

**4.1.3 In case of eye contact**

Hold eyelids apart and flush eyes with plenty of water for at least 15 minutes. Have eyes examined and tested by medical personnel.

**4.1.4 If swallowed**

Wash out mouth with water provided person is conscious. Never give anything by mouth to an unconscious person. Get medical attention. Do NOT induce vomiting unless directed to do so by medical personnel.

**4.2 Most important symptoms and effects, both acute and delayed**

The toxicological properties of this product have not been fully evaluated.

**4.3 Indication of any immediate medical attention and special treatment needed**

No data available

**5 Fire Fighting Measures****5.1 Extinguishing Media****5.1.1 Suitable Extinguishing Media**

Use alcohol-resistant foam, carbon dioxide, water, or dry chemical spray.

Use water spray to cool fire-exposed containers.

**5.1.2 Unsuitable Extinguishing Media**

A solid water stream may be inefficient.

**5.2 Special hazards arising from the substance or mixture****5.2.1 Flammable Properties and Hazards**

No data available

**5.2.2 Flash Pt**

No data available

**5.2.3 Autoignition Pt**

No data available

**5.2.4 Explosive Limits**

LEL: No data available

UEL: No data available

## Safety Data Sheet

**PHORBOL 12-MYRISTATE 13-ACETATE**
**EFFECTIVE DATE: 2017-01-17**

### 5.2.5 Hazardous Combustion Products

No data available

### 5.3 Fire Fighting Instructions

As in any fire, wear self-contained breathing apparatus pressure-demand (NIOSH approved or equivalent), and full protective gear to prevent contact with skin and eyes.

## 6 Accidental Release Measures

### 6.1 Personal precautions, protective equipment and emergency procedures

Avoid raising and breathing dust, and provide adequate ventilation.

As conditions warrant, wear a NIOSH approved (or equivalent) self-contained breathing apparatus, or respirator, and appropriate personal protection (rubber boots, safety goggles, and heavy rubber gloves).

### 6.2 Environmental precautions

Take steps to avoid release into the environment, if safe to do so.

### 6.3 Methods and materials for containment and cleaning up

Contain spill and collect, as appropriate.

Transfer to a chemical waste container for disposal in accordance with local regulations.

## 7 Handling and Storage

### 7.1 Precautions for safe handling

Avoid breathing dust/fume/gas/mist/vapours/spray.

Avoid prolonged or repeated exposure.

### 7.2 Conditions for safe storage

Keep container tightly closed.

Store in accordance with information listed on the product insert.

## 8 Exposure Controls/Personal Protection

### 8.1 Exposure limits

Component	CAS #	Value	Control parameters
12-O-Tetradecanoylphorbol-13-acetate	16561-29-8	No data available	No data available

### 8.2 Engineering controls

Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits.

### 8.3 Personal protective equipment

#### 8.3.1 Eye/face protection

Safety glasses

## Safety Data Sheet

**PHORBOL 12-MYRISTATE 13-ACETATE****EFFECTIVE DATE: 2017-01-17****8.3.2 Skin protection**

Compatible chemical-resistant gloves  
Lab coat

**8.3.3 Respiratory protection**

NIOSH (US) or CEN (EU) approved respirator, as conditions warrant.

**8.3.4 General hygiene considerations**

Do not take internally.  
Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower.  
Wash thoroughly after handling.

**8.3.5 Environmental exposure controls**

No data available

---

## 9 Physical and Chemical Properties

**9.1 Information on basic physical and chemical properties**

Appearance	A crystalline solid
Odour	No data available
Odour threshold	No data available
pH	No data available
Melting point/freezing point	No data available
Boiling point/boiling range	No data available
Flash point	No data available
Evaporation rate	No data available
Flammability (solid, gas)	No data available
Upper/lower flammability or explosive limits	No data available
Vapour pressure	No data available
Vapour density	No data available
Relative density	No data available
Solubility	No data available
Partition coefficient: n-octanol/water	No data available
Auto-ignition temperature	No data available
Decomposition temperature	No data available
Viscosity	No data available

---

## 10 Stability and Reactivity

<b>10.1 Reactivity</b>	No data available
<b>10.2 Chemical stability</b>	Stable
<b>10.3 Possibility of hazardous reactions</b>	No data available
<b>10.4 Conditions to avoid</b>	No data available
<b>10.5 Incompatible materials</b>	Strong oxidizing agents, strong bases

**Safety Data Sheet****PHORBOL 12-MYRISTATE 13-ACETATE****EFFECTIVE DATE: 2017-01-17****10.6 Hazardous decomposition products**

Carbon dioxide, carbon monoxide

**11 Toxicological Information****11.1 Acute toxicity**

Oral: No data available  
Inhalation: No data available  
Dermal: No data available  
Other: No data available

**11.2 Skin corrosion/irritation**

No data available

**11.3 Serious eye damage/eye irritation**

No data available

**11.4 Respiratory and/or skin sensitization**

No data available

**11.5 Germ cell mutagenicity**

No data available

**11.6 Carcinogenicity**

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.  
ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.  
NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.  
OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

**11.7 Reproductive toxicity**

Investigated as a reproductive effector.

**11.8 Specific target organ toxicity - single exposure**

No data available

**11.9 Specific target organ toxicity - repeated exposure**

No data available

**11.10 Aspiration hazard**

No data available

**11.11 Potential health effects**

Inhalation: May be harmful if inhaled. May cause respiratory tract irritation.  
Ingestion: May be harmful if swallowed.  
Skin: May be harmful if absorbed through skin. Causes skin irritation.  
Eyes: May cause eye irritation.

**11.12 Signs and symptoms of exposure**

Investigated as a mutagen and tumorigen.

Target Organs: Blood, Bone marrow, Gastrointestinal System, Lungs, Skin.

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

## Safety Data Sheet

**PHORBOL 12-MYRISTATE 13-ACETATE**
**EFFECTIVE DATE: 2017-01-17**

11.13 RTECS #    QH4377000

### 12 Ecological Information

- |   |  |
|---|--|
| <b>12.1 Toxicity</b>                      | Avoid release into the environment.<br>Runoff from fire control or dilution water may cause pollution. |
| <b>12.2 Persistence and degradability</b> | No data available  |
| <b>12.3 Bioaccumulative potential</b>     | No data available  |
| <b>12.4 Mobility in soil</b>              | No data available  |
| <b>12.5 Other adverse effects</b>         | No data available  |

### 13 Disposal Considerations

- 13.1 Waste disposal method**  
Dispose in accordance with local, provincial/state, and federal regulations.
- 13.2 Contaminated packaging**  
Dispose of as unused product.

### 14 Transport Information

- |  |                   |
|--|-------------------|
| <b>14.1 UN number</b>                  | No data available |
| <b>14.2 UN proper shipping name</b>    | No data available |
| <b>14.3 Transport hazard class(es)</b> | No data available |
| <b>14.4 Packing group</b>              | No data available |
| <b>14.5 Environmental hazards</b>      | No data available |
| <b>14.6 Special precautions</b>        | No data available |

### 15 Regulatory Information

#### 15.1 US EPA SARA Title III

Hazardous Components (Chemical Name)	CAS #	Sec.302 (EHS)	Sec.304 RQ	Sec.313 (TRI)	Sec.110
12-O-Tetradecanoylphorbol-13-acetate	16561-29-8	No	No	No	No

#### 15.2 Other US EPA or State Lists

Hazardous Components (Chemical Name)	CAS #	CAA HAP, ODC	CWA NPDES	TSCA	CA PROP.65
12-O-Tetradecanoylphorbol-13-acetate	16561-29-8	No	No	No	No

#### 15.3 EU

This SDS was prepared in accordance with Regulation (EC) No.1272/2008 and European Directive 67/548/EEC as amended.

**Safety Data Sheet****PHORBOL 12-MYRISTATE 13-ACETATE****EFFECTIVE DATE: 2017-01-17****15.4 Canada**

Not WHMIS controlled

**16 Other Information****16.1 Prepared by:** Quality Control, STEMCELL Technologies Inc.**16.2 Revision:** 1\_0\_0**16.3 Notice:** The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. STEMCELL Technologies Inc. shall not be held liable for any damage resulting from handling or from contact with the product. The information contained in this Safety Data Sheet (SDS) is current as of the Effective Date shown in this document and may be subject to amendment by STEMCELL Technologies Inc.**16.4 Disclaimer:** **THIS PRODUCT IS FOR RESEARCH USE ONLY. NOT INTENDED FOR HUMAN OR ANIMAL DIAGNOSTIC OR THERAPEUTIC USES.**