

## Safety Data Sheet


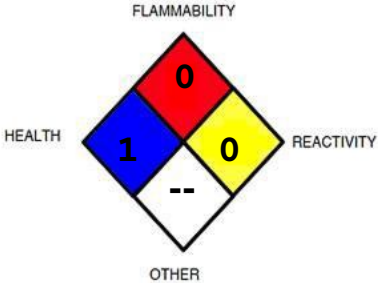
### Section 1: Product & Company Identification

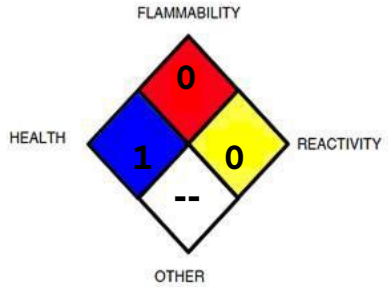
<b>Product Name:</b>	Phorbol 12-myristate 13-acetate
<b>Product #:</b>	P-1039
<b>Synonyms:</b>	PMA; 12-O-Tetradecanoylphorbol-13-acetate; TPA; Tetradecanoic acid, (1aR,1bS,4aR,7aS,7bS,8R,9R,9aS)-9a-(acetyloxy)-1a,1b,4,4a,5,7a,7b,8,9,9a-decahydro-4a,7b-dihydroxy-3-(hydroxymethyl)-1,1,6,8-tetramethyl-5-oxo-1H-cyclopropa[3,4]benz[1,2-e]azulen-9-yl ester
<b>Supplier:</b>	AG Scientific Holdings, LLC 9950 Scripps Lake Drive, Suite 104 San Diego CA 92131 Tele# + 858-452-9925
<b>Emergency Tele#:</b>	ChemTel, Tele# in USA 1-800-255-3924, International 1-813-248-0585

### Section 2: Composition / Information on Ingredients

Component	CAS#	EC #	% Composition
Phorbol 12-myristate 13-acetate	16561-29-8	605-413-5	100

### Section 3: Hazards Identification

<b>Symbols</b>	
<b>HMIS Classification</b>	<p>FLAMMABILITY</p> <p>HEALTH</p> <p>REACTIVITY</p> <p>OTHER</p> 

<b>NFPA Classification</b>	
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## Section 4: First Aid Measures

<b>General Overview:</b>	May cause anemia, cough, CNS depression, drowsiness, headache, heart damage, lassitude (weakness, exhaustion), liver damage, narcosis, reproductive effects, teratogenic effects. No further relevant information available.
<b>Inhalation:</b>	In case of unconsciousness place patient stably in side position for transportation.
<b>Skin:</b>	Immediately wash with water and soap and rinse thoroughly.
<b>Eyes:</b>	Rinse opened eye for several minutes under running water.
<b>Ingestion:</b>	If symptoms persist consult doctor.
	See section 11 for more detailed information on health effects & symptoms.

## SECTION 5: Fire Fighting Measures

<b>Flammability of the product:</b>	Product is not flammable
<b>Extinguishing Media:</b>	Use firefighting measures that suit the environment. A solid water stream may be inefficient.
<b>Hazardous thermal (de)composition products:</b>	No further relevant information available
<b>Special Fire Fighting Procedures:</b>	No special measures required
<b>Flash Point:</b>	Not applicable





## Section 6: Accidental Release Measures

<b>Personal Precautions:</b>	Not required
<b>Environmental Precautions:</b>	Do not allow to enter sewers, surface or ground water.
<b>Methods for Clean-up:</b>	Pick up mechanically

## SECTION 7: Handling & Storage

<b>Storage:</b>	Keep container tightly closed. Store at -20°C.
<b>Handling:</b>	No special precautions are necessary if used correctly. Avoid breathing dust/fume/gas/mist/vapors/spray. Avoid prolonged or repeated exposure. Keep away from sources of ignition. Take precautionary measures against static discharge.

## SECTION 8: Exposure controls / Personal Protection

<b>Respiratory Protection:</b>	 <p>NIOSH/MSHA-approved respirator.</p>
<b>Skin and Body:</b>	  <p>Chemical-resistant gloves and lab coat/other protective clothing. Avoid prolonged or repeated exposure. Wash thoroughly after handling.</p>
<b>Eyes:</b>	 <p>Safety goggles.</p>
<b>Ventilation/Engineering Measures:</b>	Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits.

<b>Hygiene:</b>	Handle in accordance with good industrial hygiene and safety practice. Keep away from food, drink, and animal feeding stuffs. Do not eat, drink, or smoke when using this product. Remove and wash contaminated clothing and gloves, including the inside, before re-use. Wash hands before breaks and after work.
<b>Other:</b>	Contains no substances with occupational exposure limit values.

## SECTION 9: Physical and Chemical Properties

<b>Appearance &amp; Odor:</b>	White to off-white solid
<b>Formula</b>	C <sub>36</sub> H <sub>56</sub> O <sub>8</sub>
<b>Molecular Wt.</b>	616.8
<b>Melting Pt.</b>	No data available
<b>Boiling Pt.</b>	No data available
<b>Density:</b>	No data available
<b>Vapor Pressure:</b>	No data available
<b>Evaporation Rate:</b>	No data available
<b>Vapor Density:</b>	No data available
<b>Solubility:</b>	No data available
<b>Flash Point:</b>	No data available
<b>Autoignition Temp:</b>	No data available

## SECTION 10: Stability and Reactivity

<b>Stability:</b>	Stable under recommended storage conditions.
<b>Hazardous decomposition products:</b>	Carbon oxides
<b>Materials to Avoid:</b>	Strong oxidizing agents
<b>Conditions to avoid:</b>	No data available

## SECTION 11: Toxicological Information

<b>RTECS#:</b>	QH4377000
<b>ACUTE Toxicity:</b>	LD/LC50 Intraperitoneal >1 mg/kg (mouse)
<b>CHRONIC Toxicity:</b>	N/A
<b>Chronic Exposure:</b> <b>Carcinogen:</b> <b>Mutagen:</b> <b>Teratogen:</b> <b>Reproductive:</b>	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. AGGIH: No component of this product present at levels greater than or equal to 0.1% is identified as probable, potential human carcinogen by ACGIH.

	<p>NTP: No component of this product present at levels greater than or equal to 0.1% is identified as known or, anticipated human carcinogen by NTP.</p> <p>OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as known or, potential human carcinogen by OSHA.</p> <p>EPA: No classification on carcinogenic data is available from EPA</p>
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## SECTION 12: Ecological Information

<b>Ecotoxicity:</b>	Water hazard class 1 (Self-assessment): slightly hazardous for water Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
<b>Mobility:</b>	No data available
<b>Persistence and degradability:</b>	No data available
<b>Bioaccumulative potential:</b>	No data available
<b>Other adverse effects:</b>	No data available
<b>Corrosivity Characteristic:</b>	No data available
<b>General Notes:</b>	To the best of our knowledge, the chemical, physical and toxicological properties have not been thoroughly investigated.

## SECTION 13: Disposal Considerations

<b>Residue Waste or Unused product:</b>	Must not be disposed of together with household garbage. Do not allow product to reach sewage system.
<b>Contaminated Packaging:</b>	Disposal must be made according to official regulations.

## SECTION 14: Transportation Information

<b>UN ID#:</b>	N/A
<b>ADR / RID (LAND):</b>	Not regulated
<b>DOT regulations:</b>	Not regulated
<b>IMDG/IMO (SEA):</b>	Not regulated
<b>IATA/DGR (AIR):</b>	Not regulated
<b>Special Provisions:</b>	Not regulated

## SECTION 15: Regulatory Information

<b>Health Phrases:</b>	H315 Causes skin irritation
<b>Risk Phrases:</b>	N/A
<b>Safety Phrases:</b>	P264 Wash thoroughly after handling.

	<p>P280 Wear protective gloves.  P302+P352 If on skin: Wash with plenty of water.  P321 Specific treatment (see on this label).  P332+P313 If skin irritation occurs: Get medical advice/attention.  P362+P364 Take off contaminated clothing and wash it before reuse.</p>
<b>EU Regulations:</b>	N/A
<b>US Regulations:</b>	<p>TSCA: Substance is not listed  California Proposition 65: Substance is not listed</p>
<b>U.S. Federal Regulations:</b>	<p>SARA 302/304/311/312 extremely hazardous substances: No products were found  SARA 302/304 emergency planning and notification: No products were found.  SARA 302/304/311/312 hazardous chemicals: No products were found.  SARA 311/312 MSDS distribution-chemical inventory-hazard identification: No products were found.  SARA 313 toxic chemicals notification and release reporting: No products were found.</p> <p>Clean Water Act (CWA) 307: No products were found.  Clean Water Act (CWA) 311: No products were found.  Clean Air Act (CAA) 112 accidental release prevention: No products were found.  Clean Air Act (CAA) 112 regulated flammable substances: No products were found.  Clean Air Act (CAA) 112 regulated toxic substances: No products were found.  OSHA: No Products were found.</p>
<b>WHMIS (Canada):</b>	

## SECTION 16: Other Information

**LIABILITY STATEMENT:** *The above information is believed to be correct but does not purport to be all-inclusive and shall be used only as a guide. AG Scientific shall not be held liable for any damages resulting from handling or from contact with the above product. AG Scientific products are for research purposes only. Not for human use or consumption.*