

Santa Cruz Biotechnology, Inc.

## Material Safety Data Sheet

PDDHV : sc-24016



### CHEMICAL IDENTIFICATION

Synonyms: Synonyms: Phorbol 12,13-didecanoate 20-homovanillate

Description: Resiniferatoxin-type phorboid vanilloid with capsaicin-like selectivity for the vanilloid receptor VR-1.)

References:

1. Szallasi, A., *et al.* 1999. "Resiniferatoxin-type phorboid vanilloids display capsaicin-like selectivity at native vanilloid receptors on rat DRG neurons and at the cloned vanilloid receptor VR-1." *Br. J. Pharmacol.* **128**: 428-434.
2. Macha, A., *et al.* 2000. "Phorboid 20-homovanillates induce apoptosis through a VR1-independent mechanism." *Chem. Biol.* **7**: 483-492.
3. Szallasi, A. and Blumberg, P. M. *et al.* 1999. " Vanilloid (Capsaicin) receptors and mechanisms." *Pharmacol. Rev.* **51**: 159.

### COMPOSITION/INFORMATION ON INGREDIENTS

CAS #: NONE

Molecular Formula: C<sub>49</sub>H<sub>72</sub>O<sub>11</sub>

Molecular Weight: 837.10

Solubility: Soluble in DMSO or ethanol

Storage: Store tightly sealed at or below 4 °C in the dark

Purity: >98%

### HAZARDS IDENTIFICATION

Label precautionary statements: highly toxic (USA). Very toxic (EU). Very toxic by inhalation, in contact with skin, and if swallowed; irritating to eyes, respiratory system and skin.

Target organ(s): bone marrow.

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).

### FIRST-AID MEASURES

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

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

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

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.

### FIRE EXTINGUISHING MEASURES

Extinguishing media: water spray, carbon dioxide, dry chemical powder or appropriate foam.

Special firefighting procedures: wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.

Unusual fire and explosions hazards: emits toxic fumes under fire conditions.

### ACCIDENTAL RELEASE MEASURES

Wear self-contained breathing apparatus, rubber boots and heavy rubber gloves; evacuate area. Combine material with commercial bleach, absorb on sand or vermiculite, and place in a closed container for disposal. Wash spill site with commercial bleach followed by water.

### HANDLING AND STORAGE

See Section 8 for handling. Store tightly sealed at or below 4 °C in the dark.

### EXPOSURE CONTROLS/PERSONAL PROTECTION

Personal protective equipment as follows:

Breathing equipment: NIOSH/MSHA-approved respirator.

Protection of hands: chemical-resistant rubber gloves.

Eye protection: chemical safety goggles.

Avoid prolonged or repeated exposure. Keep tightly closed.

### PHYSICAL AND CHEMICAL PROPERTIES

Solubility: DMSO or Ethanol

### STABILITY AND REACTIVITY

Stability: stable.

Conditions to avoid: protect from light. Incompatibilities: strong bases, strong oxidizing agents.

Hazardous combustion or decomposition products: carbon monoxide, carbon dioxide.

Hazardous polymerization will not occur.

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#### TOXICOLOGICAL INFORMATION

Acute effects: May cause skin irritation, may be harmful if absorbed through the skin. May cause eye irritation. May be harmful if inhaled; material may be irritating to mucous membranes and upper respiratory tract; may be harmful if swallowed.

Acute effects: the toxicological properties have not been thoroughly investigated. Causes skin irritation; may be fatal if absorbed through skin.

Causes eye irritation.

May be fatal if inhaled; material is irritating to mucous membranes and upper respiratory tract.

May be fatal if swallowed; tumor promoter; phorbol derivatives are purgatives if taken internally.

Chronic effects: phorbol esters are some of the most potent tumor promoters known to man; some of the phorbol esters enhance tumor promotion of known carcinogens ten fold; use extreme caution when handling these compounds with carcinogenic compounds.

Target organ(s): bone marrow.

#### ECOLOGICAL INFORMATION

Data not yet available.

#### DISPOSAL CONSIDERATIONS

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.

#### TRANSPORT INFORMATION

Contact Santa Cruz Biotechnology for transportation information.

#### REGULATORY INFORMATION

Risk phrases: may be irritating to eyes, skin and respiratory system.

European information

Caution: substance not yet fully tested.

R 26/27/28 Very toxic by inhalation, in contact with skin and if swallowed.

R 36/37/38 Irritating to eyes, respiratory system and skin.

S 45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

S 26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

S 27 Take off immediately all contaminated clothing.

S 36/37/39 Wear suitable protective clothing, gloves and eye/face protection.

#### OTHER INFORMATION

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. Santa Cruz Biotechnology shall not be held liable for any damage resulting from handling or from contact with the product.