

# Material Safety Data Sheet (MSDS) for Serine/Threonine Phosphatase Inhibitor (Calyculin A)

## I. Identification

**Product name:** Serine/Threonine Phosphatase Inhibitor (Calyculin A)

**Chemical name:** Calyculin A

**CAS number:** 101932-71-2

**Empirical formula:** C<sub>50</sub>H<sub>81</sub>N<sub>4</sub>O<sub>15</sub>P

**Molecular weight:** 1009.18

**Chemical family:** Polyene phosphate

**Manufacturer Supplier:** Cell Signaling Technology  
3 Trask Lane  
Danvers, MA 01923 USA  
978-867-2300 TEL  
978-867-2400 FAX  
978-578-6737 EMERGENCY TEL

## II. Physical Data

<b>Boiling point:</b>	N/A (solid compound)
<b>Specific gravity:</b>	N/A (solid compound)
<b>Vapor density:</b>	N/A (solid compound)
<b>Percent volatile by volume:</b>	N/A (solid compound)
<b>Freezing point:</b>	Solid at working temperatures
<b>Vapor pressure at 20°C:</b>	N/A (solid compound)
<b>Solubility in water:</b>	Not soluble
<b>Organic Solvents:</b>	Soluble in DMSO or ethanol.
<b>Appearance:</b>	Clear or whitish film adhering to inside of tube

## III. Ingredients

**Material:** Supplied as pure compound

## IV. Fire and Explosion Hazard Data

**Flash point:** N/A (solid compound)

**Auto-ignition temperature:** N/A

**Danger of explosion:** None

**Extinguishing media:** Compound not to be used above milligram amounts; fire extinguishing media should match other materials in fire.

**Special fire fighting procedures:** If involved in fire, don NIOSH/MSHA-approved self-contained breathing apparatus that is flame/chemical resistant.

**Unusual fire and explosion hazards:** May emit toxic fumes under fire conditions, (i.e. carbon monoxide and carbon dioxide).

## V. Health Hazard Data: Special Hazard

**TUMOR PROMOTER.** Gloves and mask should be worn when using this compound. Care must be taken to prevent contact through all routes of exposure.

**Hazard Description:** may be an irritant; may cause irritation to eyes, skin, mucous membranes. Information pertaining to particular dangers for man and environment:

**HMIS Ratings:** Health = 1 Flammability = 0 Reactivity = 0

**Chemical listed as carcinogen or potential carcinogen:** No

### Signs and Symptoms of Exposure

Acute effects of overexposure—None known

### Acute Overexposure

Acute effects of swallowing	Not known
Acute effects of skin absorption	Not known
Acute effects of inhalation	Not known; presumed to be very toxic
Acute effects of skin contact	Not known
Acute effects of eye contact	Not known; presumed to be very toxic

**Chronic effects of overexposure:** Effects in humans not known; may be a carcinogen or tumor promoter

## Emergency and First Aid Procedures

**After Inhalation:** If inhaled, remove to fresh air; if breathing is difficult, give oxygen; if breathing stops, give artificial respiration.

**After swallowing:** If swallowed, wash out mouth with copious amounts of water; call physician.

**After Skin Contact:** Flush with copious amounts of water; remove contaminated clothing and shoes; call a physician.

**After Eye Contact:** Flush with copious amounts of water; assure adequate flushing by separating the eyelids with fingers; call a physician.

## VI. Reactivity Data

**Stability/conditions to avoid:**

Protect from light and heat.

**Incompatibility/Materials to avoid:**

Avoid acids an bases.

**Combustion/Decomposition products:**

Undetermined

## VII. Spill or Leak Procedures

### Accidental Release Measures:

**Safety Precautions:** Cordon off spill area, wear self contained breathing apparatus, protective clothing, and heavy rubber gloves.

**Cleaning:** Absorb solutions with finely-powdered liquid binding material (universal binders); decontaminate surfaces and equipment by scrubbing with alcohol.

**Waste disposal method:** Dispose of as cancer suspect agent. Observe all federal, state, and local regulations when storing or disposing of this substance. For assistance, contact the district director of the Environmental Protection Agency.

### Precautions

Safety shower and eye bath.

Do not get in eyes, on skin, or on clothing.

Wash thoroughly after handling.

Observe all federal, state and local laws.

## VIII. Special Protection Information

**Respiratory protection:** Do not work with this compound in powder or aerosol form.

**Ventilation:** Do not work with this compound in powder or aerosol form.

**Protective equipment:** Wear suitable protective clothing, chemical resistant gloves and lab safety glasses.

## IX. Special Precautions

**Precautions to be taken in handling and storage:** This compound is sold only for research use by scientists familiar with the toxicology of organic chemicals and tumor promoters and who are well trained in good laboratory habits, such as keeping hands clean at all times and not rubbing eyes with hands while working in the laboratory.

This compound is sold only in milligram quantities for use in extremely dilute solutions in biological research. No other use is intended and any other use involves substantial hazards.

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide for experienced personnel. Cell Signaling Technology, Inc., shall not be held liable for any damage resulting from the handling of or from contact with the above product. The burden of safe use of this material rests entirely with the user.

Revised: April 2004