

Protein

(15)



SIGMA-ALDRICH

Material Safety Data Sheet

Date Printed: 03/23/2004
Date Updated: 09/01/2002
Version 1.20

Section 1 - Product and Company Information

Product Name: PROTEIN KINASE C, BETA I ISOZYME
Product Number: P1787
Brand: Sigma Chemical
Company: Sigma-Aldrich
Street Address: 3050 Spruce Street
City, State, Zip, Country: SAINT LOUIS, MO 63103 US
Technical Phone: 314 771 5765
Fax: 800 325 5052
Emergency Phone: 414 273 3850 Ext. 5996

Section 2 - Composition/Information on Ingredient

Table with 4 columns: Substance Name, CAS #, SARA 313, Percent. Lists ingredients like GLYCEROL, WATER, SODIUM CHLORIDE, etc.

Formula
Synonyms

Section 3 - Hazards Identification

Emergency Overview
Caution: Avoid contact and inhalation. Target organ(s): Kidneys.
HMIS Rating
Health: 1\*
NFPA Rating
Health: 1
\*additional chronic hazards present.
For additional information on toxicity, please refer to Section 11.

Section 4 - First Aid Measures

Oral Exposure
Inhalation Exposure
Dermal Exposure
Eye Exposure

Section 5 - Fire Fighting Measures

Autoignition Temp: N/A
Extinguishing Media
Water spray. 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)
Emits toxic fumes under fire conditions.

Section 6 - Accidental Release Measures

Procedure(s) of Personal Precaution(s)
Wear respirator, chemical safety goggles, rubber boots, and heavy rubber gloves.
Methods for Cleaning Up
Absorb on sand or vermiculite and place in closed containers for disposal.

Section 7 - Handling and Storage

Handling
User Exposure
Avoid inhalation. Avoid contact with eyes, skin, and clothing.
Storage
Suitable
Keep tightly closed. Store at -70°C.

Section 8 - Exposure Controls / PPE

Engineering Controls
Safety shower and eye bath.
Personal Protective Equipment
Respiratory
Government approved respirator.
Hand
Compatible chemical-resistant gloves.

**Eye**  
Chemical safety goggles.  
**Skin-Specific**  
Chemical resistant apron.

**General Hygiene Measures**  
Wash thoroughly after handling. Wash contaminated clothing before reuse.

## Section 9 - Physical/Chemical Properties

**Appearance**  
**Physical State**  
Liquid

**Molecular Weight:** N/A

pH 7.4  
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  
SG/Density 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  
Partition Coefficient N/A  
Decomposition Temp. N/A  
Flash Point °F N/A  
Flash Point °C N/A  
Explosion Limits N/A

**Flammability** N/A  
**Autoflammation Temp** N/A  
**Solubility** N/A

N/A = not available

## Section 10 - Stability and Reactivity

**Stability**  
**Stable**  
Stable.  
**Materials to Avoid**  
Strong oxidizing agents.

**Hazardous Decomposition Products**  
**Hazardous Decomposition Products**  
Nature of decomposition products not known.

**Hazardous Polymerization**  
**Hazardous Polymerization**  
Will not occur.

## Section 11 - Toxicological Information

**Route of Exposure**  
**Skin Contact**  
May cause skin irritation.  
**Skin Absorption**  
May be harmful if absorbed through the skin.  
**Eye Contact**  
May cause eye irritation.  
**Inhalation**  
May be harmful if inhaled. Material may be irritating to mucous membranes and upper respiratory tract.  
**Ingestion**  
May be harmful if swallowed.

**Sensitization**  
**Sensitization**  
Prolonged or repeated exposure may cause allergic reactions in certain sensitive individuals.

**Target Organ(s) or System(s)**  
Kidneys.

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

**RTECS Number:** N/A

## 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:** None  
**Non-Hazardous for Transport:** This substance is considered to be non-hazardous for transport.

**IATA**  
**Non-Hazardous for Air Transport:** Non-hazardous for air transport.

## Section 15 - Regulatory Information

**US Classification and Label Text**  
**US Statements**  
Caution: Avoid contact and inhalation. Target organ(s): Kidneys.

**United States Regulatory Information**  
**SARA Listed:** No

Flowin

R

**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**

---

**Disclaimer**

For R&D use only. Not for drug, household or other uses.

**Warranty**

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. Sigma-Aldrich Inc., shall not be held liable for any damage resulting from handling or from contact with the above product. See reverse side of invoice or packing slip for additional terms and conditions of sale. Copyright 2004 Sigma-Aldrich Co. License granted to make unlimited paper copies for internal use only.

