

# Material Safety Data Sheet (MSDS) for Protease Inhibitor Cocktail (200X)

New 03/08



## I. IDENTIFICATION:

**Product name:** Protease Inhibitor Cocktail (200X)  
**Product Catalog Number:** Component of kit #9002 and #9003  
**CAS number:** None  
**Manufacturer Supplier:** Cell Signaling Technology®  
3 Trask Lane  
Danvers, MA 01923 USA  
1-978-867-2300 TEL  
1-978-867-2400 FAX  
1-978-578-6737 Emergency Phone

## II. COMPOSITION/INFORMATION ON INGREDIENTS:

Ingredient	CAS#	Percent
Dimethyl sulfoxide (DMSO)	67-68-5	>96%
4-(2-aminoethyl)benzenesulfonyl fluoride hydrochloride	30827-99-7	2.49%
Aprotinin	9087-70-1	0.05%
Bestatin hydrochloride	65391-42-6	0.12%
N-(trans-epoxysuccinyl)-L-leucine 4-guanidinobutylamide	66701-25-5	0.09%
Leupeptin hemisulfate	103476-89-7	0.1%
Pepstatin A	26305-03-3	0.1%

## III. HAZARD IDENTIFICATION:

Combustible.

**Target organs:** Eyes. Skin. Readily absorbed through skin.

<b>HMIS Rating:</b>	Health: 0	Flammability: 2	Reactivity: 0
<b>NFPA Rating:</b>	Health: 0	Flammability: 2	Reactivity: 0

## IV. FIRST AID MEASURES:

**Inhalation:** Remove to fresh air. If breathing is difficult, get medical attention.

**Ingestion:** If person is conscious, wash out mouth with water. Get medical attention.

**Skin Exposure:** Wash skin with soap and water. If irritation develops or persists, get medical attention.

**Eye Exposure:** Immediately flush eyes with water for at least 15 minutes. Get medical attention.

## V. FIRE FIGHTING MEASURES:

**Flash Point:** 188.6°F, 87°C Method: closed cup.

**Autoignition Temperature:** Not applicable.

**Explosion:** Not applicable.

**Fire Extinguishing Media:** Water spray, dry chemical, alcohol foam, or carbon dioxide.

**Firefighting:** Wear protective clothing and self-contained breathing apparatus to prevent contact with skin and eyes.

**Note:** Combustible liquid. Emits toxic fumes under fire conditions.

## VI. ACCIDENTAL RELEASE MEASURES:

Wear appropriate personal protective equipment as indicated in Section VIII. Absorb liquid with an absorbent material. Transfer contaminated absorbent to a closed chemical waste container for disposal. Wash spill site after material has been picked up for disposal.

## VII. HANDLING AND STORAGE:

Store at -20°C in tightly closed container under inert gas. Hygroscopic. Avoid prolonged or repeated exposure. Avoid contact with eyes, respiratory system, skin, and clothing. Wash thoroughly after handling. DMSO is readily absorbed through the skin and may carry materials with known or unknown toxicological properties into the body.

## VIII. EXPOSURE CONTROLS/PERSONAL

**Ventilation System:** A system of local and general exhaust is recommended.

**Skin Protection:** Wear compatible chemical resistant gloves and protective clothing.

**Eye protection:** Wear chemical safety goggles. Maintain emergency eyewash and shower in work area.

## IX. EXPOSURE CONTROLS/PERSONAL PROTECTION:

<b>Appearance:</b>	Liquid
<b>Odor:</b>	Data not available
<b>pH:</b>	Data not available
<b>Boiling Point:</b>	Data not available
<b>Melting Point:</b>	Data not available
<b>Freezing Point:</b>	Data not available
<b>Volatile Organic Compounds (VOC):</b>	Data not available
<b>Autoignition temp.</b>	Data not available
<b>Solubility:</b>	Data not available

## X. STABILITY AND REACTIVITY:

**Stability:** Stable.

**Conditions to avoid:** Exposure to moisture may affect product quality.

**Hazardous Decomposition:** Acid chlorides, phosphorus halides, strong acids, strong oxidizing agents, strong reducing agents.

**Hazardous polymerization:** Will not occur.

## XI. TOXICOLOGICAL INFORMATION:

**Skin Exposure:** May cause skin irritation. May be harmful if absorbed through skin.

**Eye Exposure:** May cause eye irritation.

**Inhalation:** May be harmful if inhaled. Material may be irritating to mucous membrane and upper respiratory tract.

**Ingestion:** May be harmful if swallowed.

**Target organs:** Eyes, skin.

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

## XII. ECOLOGICAL INFORMATION:

Data not available.

## XIII. DISPOSAL CONSIDERATIONS:

Dispose of in accordance with federal, state and local environmental regulations. Contact a licensed professional waste disposal service to dispose of this material.

## XIV. TRANSPORT INFORMATION:

### D.O.T.

**Proper Shipping Name:** Combustible liquid, n.o.s  
UN# NA1993.

**Class:** Combustible Liquid.

**Packing Group:** Packing Group III.

**Hazard Label:** None.

**PIH:** Not PIH.

### IATA

**Proper Shipping Name:** None.

This substance is considered non-hazardous for air transport.

## XV. REGULATORY INFORMATION:

**US Regulations/Classifications:** Combustible.

**Target organs:** Eyes. Skin. Readily absorbed through skin.

**SARA Listed:** No.

**Canada (WHMIS):** DSL: No, NDSL: No.

## XVI. OTHER INFORMATION:

This product is not intended for use in humans. To the best of our knowledge, this document is accurate. It is intended to serve as a guide for safe use of this product in a laboratory setting by experienced personnel. The burden of safe use of this material rests entirely with the user. The above information is believed to be accurate but is not necessarily all-inclusive and shall be used only as a guide. Cell Signaling Technology, Inc., shall not be held liable for any damage resulting from the handling of or from contact with the above product.