

Issuing Date: 2025-03-05

Version: 1

1. Identification

A. Product identifier

Product name MDL-28170 (Calpain Inhibitor III)**MSDS Number** 10727

B. Relevant identified uses of the substance or mixture and uses advised against

Identified uses For Research Use Only. Not for Use in Diagnostic Procedures.**Uses advised against** No information available

C. Supplier's details

Manufacturer

Cell Signaling Technology, Inc.
3 Trask Lane
Danvers, MA 01923
United States
TEL: +1 978 867 2300
FAX: +1 978 867 2400

Supplier

Seoulin Bioscience Co., Ltd.
경기도 성남시 분당구 대왕판교로 700
TEL: 1670-5911
E-mail: support@seoulin.co.kr

Supplier

Koram Biotech Co., Ltd.
서울시 강남구 선릉로 76길 4
TEL: 02-556-0311
Email: koram@korambiotech.com

For further information, please contact**Email address** support@cellsignal.com

Emergency telephone number **CHEMTREC** 24 hours a day, 7 days a week, 365 days a year
+1 703 527 3887 (INTERNATIONAL) +1 800 424 9300 (NORTH AMERICA)
080-880-0468

2. Hazard(s) identification

A. Classification of the substance or mixture

Not a hazardous substance or mixture according to the Globally Harmonized System (GHS).

B. GHS Label elements, including precautionary statements

Signal Word

None

Hazard Statements

None

C. Other hazards which do not result in classification

Not applicable

3. Composition/information on ingredients

Not a hazardous substance or mixture according to the Globally Harmonized System (GHS)

Chemical name	CAS No	Weight-%	Other information
N-[(1S)-1-[[[(1-formyl-2-phenylethyl)amino]carbonyl]-2-methylpropyl]-, phenylmethyl ester	88191-84-8	100	

4. First-aid measures

- A. In case of eye contact** Rinse thoroughly with plenty of water, also under the eyelids. If symptoms persist, call a physician.
- B. In case of skin contact** If symptoms persist, call a physician.
- C. In case of inhalation** Move to fresh air. If not breathing, give artificial respiration. If symptoms persist, call a physician.
- D. In case of ingestion** Clean mouth with water and afterwards drink plenty of water. If symptoms persist, call a physician.
- E. Indication of immediate medical attention and special treatment needed, if necessary**
- Note to physicians** Treat symptomatically.
- Symptoms** No information available.

5. Fire-fighting measures

A. Suitable (and unsuitable) extinguishing media

Suitable Extinguishing Media Use extinguishing measures that are appropriate to local circumstances and the surrounding environment, Carbon dioxide (CO₂), Water spray, Dry chemical, Alcohol-resistant foam

Unsuitable Extinguishing Media No information available

B. Specific hazards arising from the chemical No information available

C. Special Protective Equipment for Firefighters Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.

6. Accidental release measures

A. Personal precautions, protective equipment and emergency procedures

Personal precautions Avoid contact with skin, eyes and clothing. Use personal protective equipment. Remove combustible material and, if possible, all exposed reservoirs. Ensure adequate ventilation.

For emergency responders Use personal protection recommended in Section 8.

B. Environmental precautions See Section 12 for additional information.

C. Methods and material for containment and cleaning up

Methods for containment	Prevent further leakage or spillage if safe to do so.
Methods for cleaning up	Sweep up and shovel into suitable containers for disposal. Avoid dust formation.
Prevention of secondary hazards	Clean contaminated objects and areas thoroughly observing environmental regulations.

7. Handling and storage

A. Precautions for safe handling

Advice on safe handling	Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes and clothing. Wear personal protective equipment. The containers in use must be kept in vertical position, so as to avoid the intrusion of the liquid phase in facilities designed for the gas phase. Avoid dust formation in confined areas.
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B. Conditions for safe storage, including any incompatibilities

Storage Conditions	Keep container tightly closed in a dry and well-ventilated place.
Incompatible products	Strong acids, Strong bases
General hygiene considerations	Handle in accordance with good industrial hygiene and safety practice.

8. Exposure controls/personal protection

A. Control Parameters

Occupational exposure limits	This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.
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B. Appropriate engineering controls

Engineering controls	Showers Eyewash stations Ventilation systems
Environmental exposure controls	No information available.

C. Personal Protective Equipment

Respiratory protection	In case of inadequate ventilation wear respiratory protection.
Eye protection	Safety glasses with side-shields
Hand protection	Impervious gloves
Body protection	Wear suitable protective clothing.

9. Physical and chemical properties

Information on basic physical and chemical properties

A. Appearance	Powder
Physical State	Solid
color	White
B. Odor	No information available
C. Odor Threshold	No information available

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
D. pH	No information available	None known
E. Melting point/freezing point	No information available	None known
F. Initial boiling point and boiling range	No information available	None known
G. Flash point	No information available	None known
H. Evaporation rate	No information available	None known
I. Flammability	No information available	None known
J. Upper/lower flammability or explosive limits		
Upper explosion limit	No information available.	No information available
Lower explosion limit	No information available.	No information available
K. Vapor pressure	No information available	None known
L. Solubility(ies)		
Solubility	No information available.	None known
Solubility in other solvents	No information available	None known
M. Relative vapor density	No information available	None known
N. Specific Gravity	No information available	None known
O. Partition coefficient: n-octanol/water	No information available	None known
P. Autoignition Point	No information available	None known
Q. Decomposition temperature	No information available	None known
R. Viscosity		
Viscosity	No information available	None known
Viscosity, dynamic	No information available	None known
S. Molecular Weight	No information available	
Other information		
Explosive properties	No information available	
Oxidizing properties	No information available	
Softening point	No information available	
VOC content	No information available	
Liquid Density	No information available	

10. Stability and reactivity

A. Chemical stability and possibility of hazardous reactions

Stability Stable under normal conditions.

Possibility of hazardous reactions None under normal processing.

Explosion Data

Sensitivity to mechanical impact None

Sensitivity to static discharge None

B. Conditions to Avoid	Extremes of temperature and direct sunlight
C. Incompatible products	Strong acids, Strong bases
D. Hazardous Decomposition Products	Carbon oxides (COx), Nitrogen oxides (NOx)

11. Toxicological information

A. Information on the likely routes of exposure

Product Information

Inhalation	There is no data available for this product.
Ingestion	There is no data available for this product.
Eye contact	There is no data available for this product.
Skin contact	There is no data available for this product.
Symptoms	No information available.

B. Health hazards information

Numerical measures of toxicity	No information available
Skin corrosion/irritation	No information available.
Serious eye damage/eye irritation	No information available
Sensitization	No information available
Carcinogenicity	No information available.
Mutagenic effects	No information available
Reproductive toxicity	No information available.
Specific target organ toxicity (STOT) – single exposure	No information available
Specific target organ toxicity (STOT) – repeated exposure	No information available
Target Organ Effects	No information available.
Aspiration hazard	No information available.

12. Ecological information

A. Ecotoxicity	The environmental impact of this product has not been fully investigated.
B. Persistence and degradability	No information available.

- C. **Bioaccumulative potential** No information available.
- D. **Mobility in soil** No information available.
- E. **Other adverse effects** No information available.

13. Disposal considerations

A. Waste treatment methods

Waste from residues/unused products Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation.

B. Disposal considerations

Contaminated packaging Do not reuse empty containers.

14. Transport information

- A. **UN number** Not regulated
- B. **UN proper shipping name** Not regulated
- C. **Transport hazard class(es)** Not regulated
- D. **Packing group** Not regulated
- E. **Marine Pollutant** Not regulated
- F. **Special precautions for user** No information available

15. Regulatory information

A. Industrial Safety and Health Law Not applicable

Harmful substances subject to control Not applicable

Harmful agents subject to work environment monitoring Not applicable

Harmful agents subject to workers requiring health examination Not applicable

B. Chemicals Control Act not applicable

Chemicals Control Act (CCA) - Accident Precaution Chemicals Not applicable

C. Safety Control of Dangerous Substances Act No information available

D. Wastes Management Dispose of waste in accordance with environmental legislation.

E. Other Regulations No information available

International inventories

TSCA 8(b) Contact supplier for inventory compliance status.

DSL/NDSL Contact supplier for inventory compliance status.

EINECS/ELINCS Contact supplier for inventory compliance status.

ENCS Contact supplier for inventory compliance status.

IECSC Contact supplier for inventory compliance status.

KECL Contact supplier for inventory compliance status.

PICCS
AICS

Contact supplier for inventory compliance status.
Contact supplier for inventory compliance status.

TSCA - *United States Toxic Substances Control Act Section 8(b) Inventory*
 DSL/NDSL - *Canadian Domestic Substances List/Non-Domestic Substances List*
 EINECS/ELINCS - *European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances*
 ENCS - *Japan Existing and New Chemical Substances*
 IECS - *China Inventory of Existing Chemical Substances*
 KECL - *Korean Existing and Evaluated Chemical Substances*
 PICCS - *Philippines Inventory of Chemicals and Chemical Substances*
 AICS - *Australian Inventory of Chemical Substances*

16. Other information

A. Information source and references

Prepared By No information available.

B. Issuing Date: 2025-03-05

C. Revision number and date

Version: 1

D. Other information .

Key or legend to abbreviations and acronyms used in the safety data sheet

IMDG International Maritime Dangerous Goods (IMDG)

Legend Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

TWA:	Time weighted average	STEL:	Short term exposure limit
Ceiling:	Maximum limit value:	*	Skin designation

Key literature references and sources for data used to compile the SDS

Agency for Toxic Substances and Disease Registry (ATSDR)
 U.S. Environmental Protection Agency ChemView Database
 European Food Safety Authority (EFSA)
 EPA (Environmental Protection Agency)
 Acute Exposure Guideline Level(s) (AEGL(s))
 U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act
 U.S. Environmental Protection Agency High Production Volume Chemicals
 Food Research Journal
 Hazardous Substance Database
 International Uniform Chemical Information Database (IUCLID)
 Japan GHS Classification
 Australia National Industrial Chemicals Notification and Assessment Scheme (NICNAS)
 NIOSH (National Institute for Occupational Safety and Health)
 National Library of Medicine's ChemID Plus (NLM CIP)
 National Library of Medicine's PubMed database (NLM PUBMED)
 National Toxicology Program (NTP)
 New Zealand's Chemical Classification and Information Database (CCID)
 Organization for Economic Co-operation and Development Environment, Health, and Safety Publications
 Organization for Economic Co-operation and Development High Production Volume Chemicals Program
 Organization for Economic Co-operation and Development Screening Information Data Set

RTECS (Registry of Toxic Effects of Chemical Substances)
World Health Organization

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End of Safety Data Sheet