
1. PRODUCT AND COMPANY IDENTIFICATION

Product Name Nocodazole
Product Number 2190
Identified Uses For Research Use Only (RUO). Not intended for use in humans or animals.
Not intended for therapeutic or diagnostic procedures.

Manufacturer/Supplier Cell Signaling Technology, Inc.
3 Trask Lane
Danvers, MA 01923 USA

Phone #: 978-867-2300

2. HAZARDS IDENTIFICATION

Emergency Overview

Warning



OSHA Hazards

Teratogen, Mutagen

GHS Classification

Germ Cell mutagenicity (Category 2)
Reproductive toxicity (Category 2)

Physical State

Solid powder

Potential Health Effects

Acute Toxicity

Eyes	May cause eye irritation.
Skin	May be harmful if absorbed through skin. May cause skin irritation.
Inhalation	May be harmful if inhaled. May cause respiratory tract irritation
Ingestion	May be harmful if swallowed.

Target organ effects

Nerves, Adrenal cortex, Kidneys, Cardiovascular System, Reproductive system, liver, gastrointestinal tract, cardiovascular system, stomach.

Chronic Effects

Carcinogenic effects	No data available.
Mutagenic effects	Classified POSSIBLE for human. Mutagenic for mammalian germ and somatic cells based on <i>in vitro</i> studies.
Reproductive toxicity	Classified reproductive toxin/ female; Classified reproductive toxin/ male (SUSPECTED)
Sensitization	Prolonged or repeated exposure may cause allergic reactions in sensitive individuals.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous Ingredients

Chemical Name	CAS No.	EC No.	Concentration
Nocodazole	31430-18-9	250-626-5	>95%

4. FIRST AID MEASURES

Eye Contact	Rinse immediately with plenty of water for at least 15 minutes. Get medical attention.
Skin Contact	Rinse immediately with soap and plenty of water. Get medical attention immediately.
Inhalation	Move to fresh air. Get medical attention.
Ingestion	Call Poison Control immediately. Never give anything by mouth to an unconscious person. Rinse mouth with water.
Notes to physician	Treat symptomatically.

5. FIRE FIGHTING MEASURES

Flash Point	See Section 9. Physical and Chemical Properties
Suitable Extinguishing Media	Use dry chemical , water spray, alcohol resistant foam or carbon dioxide.
Special exposure hazards	Hazardous decomposition products formed under fire conditions –toxic gases can be evolved.
Special protection for fire fighters	Wear self-contained breathing apparatus and protective unit
Other information	No data available

6. ACCIDENTAL RELEASE MEASURES

Personal precautions	Avoid contact with skin, eyes, clothing. Avoid creating dusts during clean up.
Environmental precautions	Prevent product from entering drains. Prevent further spillage if safe to do so.

7. HANDLING AND STORAGE

Safe handling advice	Ensure adequate ventilation. Handle in accordance with good industrial hygiene and safety practice.
Storage conditions	Keep container tightly closed in cool dry place.
Incompatibilities	No data available
Specific end uses	No data available

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Limits

This product contains no substances with established exposure limit values.

Engineering Measures

Emergency eyewash and safety shower. Mechanical exhaust required.

Hygiene Measures

Do not eat, drink or smoke when handling product. Wear suitable gloves and eye/face protection. Wash hands thoroughly after handling product. Regular cleaning of equipment, work area and clothing is recommended. Wash contaminated clothing before reuse.

Personal Protective Equipment**Respiratory Protection**

In case of insufficient ventilation wear suitable respiratory protective equipment tested and approved under appropriate government standards such as NIOSH, CEN)

Eye Protection:

Face shield and safety glasses tested and approved under appropriate government standards such as NIOSH,

Skin and body protection:

Wear suitable protective clothing, protective shoes or boots.

Hand protection:

Wear compatible chemical resistant gloves. Dispose of gloves in accordance with applicable laws and good laboratory practices.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical State	solid powder
Appearance	yellow to red
Odor	no data available
pH	no data available
Melting point/freezing point	no data available
Boiling point	no data available
Evaporation rate	no data available
Flash point	no data available
Autoignition temperature	no data available
Flammability limits in air	no data available
Explosive properties	no data available
VOC content	no data available
Decomposition temperature	no data available
Solubility	no data available

10. STABILITY AND REACTIVITY

Stability	Stable under normal conditions.
Conditions/Materials to avoid	Oxidizing agents, alkalis. Slightly reactive with acids.
Hazardous decomposition products	Carbon oxides, nitrogen oxides.

11. TOXICOLOGICAL INFORMATION

Acute Toxicity

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

Acute Oral Toxicity : No data available.

Routes of Exposure
Potential Health Effects
Acute Toxicity

Eyes	May cause eye irritation.
Skin	May be harmful if absorbed through skin. May cause skin irritation.
Inhalation	May be harmful if inhaled. May cause respiratory tract irritation
Ingestion	May be harmful if swallowed.

Target organ effects No information available

Chronic Effects

Carcinogenic effects	No information available
Mutagenic effects	Classified as POSSIBLE for human.
Reproductive toxicity	No information available
Teratogenic effects	Classified as POSSIBLE for human.
Sensitization	No information available

Additional Information: RTECS DD6521000

12. ECOLOGICAL INFORMATION

Ecotoxicity	Toxic to aquatic organisms
Persistence and degradability	No data available
Bioaccumulation	No data available
Mobility	No data available

13. DISPOSAL CONSIDERATIONS

Waste Disposal Methods Dispose of in accordance with all applicable environmental laws and regulations.

14. TRANSPORT INFORMATION

IATA	Not regulated
DOT	Not regulated
IMDG	Not regulated

15. REGULATORY INFORMATION
OSHA Hazards

Teratogen, Mutagen

GHS Classification

Germ Cell mutagenicity (Category 2)
Reproductive toxicity (Category 1B)



Pictogram:
Signal Word:

Warning

Hazard Statements

H341 Suspected of causing genetic defects.
H361d Suspected of damaging the unborn child.

Precautionary Statements

P281 Use personal protective equipment as required.

U.S. Federal Regulations

SARA 302

No chemicals in this material are subject to reporting requirements established by SARA Title III, Section 302

SARA 311/312

Chronic Health Hazard

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals that exceed the reporting levels of the Act and Title 40 of the Code of Federal Regulations, Part 372.

Clean Water Act

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

Clean Air Act, Section 112 Hazardous Air Pollutants (HAPs) (see 40 CFR 61)

This product does not contain any substances regulated as hazardous air pollutants (HAPs) under Section 112 of the Clean Air Act Amendments of 1990.

U.S. State Regulations

Massachusetts Right-to-Know Components:

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New Jersey Right-to-Know Components:

Nocodazole

CAS# 31430-18-9

Pennsylvania Right-to-Know Components:

Nocodazole

CAS# 31430-18-9

California Proposition 65

Warning! This product does not contain chemicals known to the State of California to cause birth defects or other reproductive harm.

WHMIS Hazard Class

D2A Very Toxic Material causing other toxic effects

D2B Toxic Material causing other toxic effects

This product has been classified according to the hazard criteria of the CPR and the MSDS contains all of the information required by the CPR.

16. OTHER INFORMATION

Revision date 2012-07-27
Revision Note ***Indicates updated section

Disclaimer

The information provided on this material safety data sheet is to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.

End of Material Safety Data Sheet