

Safety Data Sheet (SDS) According to the REACH Regulation (EC) No. 1907/2006

Issuing Date: 2014-11-24

Revision Date: 2024-11-11

Version: 5

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product No 2112
Product name Cycloheximide

Contains

Chemical name Cycloheximide (90 - 100%)	Index No. 613-140-00-8	CAS No 66-81-9
---	----------------------------------	--------------------------

Formula Molecular Weight	C ₁₅ H ₂₃ NO ₄ 281.35
---	---

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

Identified uses For Research Use Only. Not for Use in Diagnostic Procedures.

1.3. Details of the supplier of the safety data sheet

Importer Cell Signaling Technology Europe B.V. Dellaertweg 9b 2316 WZ Leiden The Netherlands TEL: +31 (0)71 7200 200 FAX: +31 (0)71 891 0019	Manufacturer Cell Signaling Technology, Inc. 3 Trask Lane Danvers, MA 01923 United States TEL: +1 978 867 2300 FAX: +1 978 867 2400
---	--

Website E-mail Address	www.cellsignal.com info@cellsignal.eu
---	--

1.4. 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)

Europe	112
Austria	+43 1 3649237
Belgium	+32 2 808 32 37
Denmark	+45 69 91 85 73
Finland	+358 9 42419014
France	+33 9 75 181407
Germany	0800 1817059
Ireland	+353 1 901 4670
Italy	+39 02 4555 7031
Netherlands	+31 85 888 0596
Portugal	+351 308 801 773
Spain	+34-931768545

Sweden	+46 8 525 034 03
Switzerland	+41-435082011
United Kingdom	+44 20 3807 3798

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Regulation (EC) No. 1272/2008

Acute oral toxicity	Category 2 - (H300)
Germ cell mutagenicity	Category 2 - (H341)
Reproductive toxicity	Category 1B - (H360)
Chronic aquatic toxicity	Category 2 - (H411)

2.2. Label elements



Signal word

Danger

Hazard statement(s)

H300 - Fatal if swallowed.

H341 - Suspected of causing genetic defects.

H360 - May damage fertility or the unborn child.

H411 - Toxic to aquatic life with long lasting effects.

Precautionary statement(s)

P203 - Obtain, read and follow all safety instructions before use.

P264 - Wash face, hands and any exposed skin thoroughly after handling.

P270 - Do not eat, drink or smoke when using this product.

P273 - Avoid release to the environment.

P280 - Wear protective gloves/protective clothing/eye protection/face protection.

P301 + P310 - IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.

P318 - IF exposed or concerned, get medical advice.

P330 - Rinse mouth.

P391 - Collect spillage.

P405 - Store locked up.

P501 - Dispose of contents/container to an approved waste disposal plant.

2.3. Other hazards

Avoid contact during pregnancy and while nursing.

For the full text of the H-phrases & EUH-phrases mentioned in this Section, see Section 16

SECTION 3: Composition/information on ingredients

Formula $C_{15}H_{23}NO_4$
CAS No 66-81-9

Chemical name	CAS No	Weight-%	EC No	Classification (1272/2008)	REACH Registration Number
Cycloheximide	66-81-9	100	200-636-0	Acute Tox. 1 (H300) Muta. 2 (H341) Repr. 1B (H360D) Aquatic Chronic 2 (H411)	no data available

For the full text of the R-phrases mentioned in this Section, see Section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

General advice	Show this safety data sheet to the doctor in attendance. When symptoms persist or in all cases of doubt seek medical advice.
Inhalation	Move to fresh air. If symptoms persist, call a physician.
Skin contact	Wash off immediately with soap and plenty of water removing all contaminated clothes and shoes. If skin irritation occurs, get medical advice/attention.
Eye contact	Rinse thoroughly with plenty of water, also under the eyelids. Keep eye wide open while rinsing. If eye irritation persists, consult a specialist.
Ingestion	Clean mouth with water and afterwards drink plenty of water. Do NOT induce vomiting. Immediate medical attention is required.
Protection of first-aiders	Use personal protective equipment. Avoid contact with skin, eyes and clothing.

4.2. Most important symptoms and effects, both acute and delayed

Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.

4.3. Indication of any immediate medical attention and special treatment needed

Notes to physician Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable Extinguishing Media	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment Water spray Foam Carbon dioxide (CO ₂) Dry powder
Unsuitable Extinguishing Media	No information available

5.2. Special hazards arising from the substance or mixture

Thermal decomposition can lead to release of irritating gases and vapors.

Hazardous Combustion Products Carbon oxides (CO_x), Nitrogen oxides (NO_x)

5.3. Advice for firefighters

Wear self-contained breathing apparatus and protective suit.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

For non-emergency personnel Use personal protective equipment. For personal protection see section 8. Avoid contact with skin, eyes and inhalation of vapors. Ensure adequate ventilation.
For emergency responders Use personal protection recommended in Section 8.

6.2. Environmental precautions

Should not be released into the environment. Do not let product enter drains. Keep out of waterways.

6.3. Methods and material for containment and cleaning up

Methods for containment Prevent further leakage or spillage if safe to do so. Cover powder spill with plastic sheet or tarp to minimize spreading.
Methods for cleaning up Sweep up and shovel into suitable containers for disposal. Avoid dust formation. Clean contaminated surface thoroughly.

6.4. Reference to other sections

See Sections 8 & 13 for additional information.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Wear personal protective equipment. Do not eat, drink or smoke when using this product. Avoid contact with skin, eyes and clothing. Remove and wash contaminated clothing before re-use. Wash thoroughly after handling. Ensure adequate ventilation.

7.2. Conditions for safe storage, including any incompatibilities

Keep container tightly closed in a dry and well-ventilated place. Store locked up.

7.3. Specific end use(s)

Use as a laboratory reagent.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

The product does not contain any hazardous materials with occupational exposure limits established.

8.2. Exposure controls

Appropriate engineering controls
Showers, eyewash stations, and ventilation systems

Individual protection measures, such as personal protective equipment
Eye/face protection Tightly fitting safety goggles.
Skin protection Wear protective gloves and protective clothing.

Hand protection	Impervious gloves.
Other	Impervious clothing
Respiratory protection	In case of inadequate ventilation wear respiratory protection.

Environmental Exposure Controls

Local authorities should be advised if significant spillages cannot be contained Do not allow material to contaminate ground water system Prevent product from entering drains

SECTION 9: Physical and chemical properties**9.1. Information on basic physical and chemical properties**

Physical state	Solid - Crystalline Powder
Color	Beige
Odor	No information available

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
pH	No information available	No information available
Melting point/freezing point	107-120 °C	No information available
Boiling point or initial boiling point and boiling range	No information available	No information available
Flash point	No information available	No information available.
Evaporation rate	No information available	No information available
Flammability	No information available	No information available
Upper/lower flammability or explosive limits	/	No information available
Vapor pressure	4.5×10^{-13}	@ 25 °C
Relative vapor density	No information available	No information available
Density and/or relative density	No information available	No information available
Solubility	No information available.	No information available
Partition coefficient: n-octanol/water	No information available	No information available
Autoignition temperature	No information available	No information available
Decomposition temperature	No information available	No information available.
Viscosity	No information available	No information available
Explosive properties	No information available	No information available
Oxidizing properties	No information available	No information available

9.2. Other information

Softening point	No information available
Molecular Weight	281.35
Solubility in other solvents	No information available
VOC content	No information available
Liquid Density	No information available

SECTION 10: Stability and reactivity**10.1. Reactivity**

No information available.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

Hazardous polymerization	Hazardous polymerization does not occur.
---------------------------------	--

Hazardous reactions None under normal processing

10.4. Conditions to avoid

None known based on information supplied.

10.5. Incompatible materials

Strong oxidizing agents, Strong bases, Acid chlorides, Acid anhydrides.

10.6. Hazardous decomposition products

Nitrogen oxides (NO_x)
Carbon oxides (CO_x)

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

This material should only be handled by, or under the close supervision of, those properly qualified in the handling and use of potentially hazardous chemicals. It should be borne in mind that the toxicological and physiological properties of this compound is not well defined.

Chemical name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Cycloheximide	2 mg/kg (Rat)	-	-

Information on likely routes of exposure

Inhalation There is no data available for this product.
Eye contact Contact with eyes may cause irritation.
Skin contact May cause irritation.
Ingestion Very toxic if swallowed.

Symptoms Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.

Skin corrosion/irritation Causes skin irritation.
Serious eye damage/eye irritation Irritating to eyes.
Sensitization No information available.
Mutagenic effects Animal experiments showed mutagenic and teratogenic effects.
Carcinogenicity No information available.

Reproductive toxicity Experiments have shown reproductive toxicity effects on laboratory animals. May cause adverse reproductive effects - such as birth defect, miscarriages, or infertility.

STOT - single exposure No information available.
STOT - repeated exposure No information available.
Aspiration Hazard No information available.

11.2. Information on other hazards

No information available.

SECTION 12: Ecological information

12.1. Toxicity

Toxic to aquatic life with long lasting effects.

Chemical name	Toxicity to algae	Toxicity to fish	Toxicity to daphnia and other aquatic invertebrates
Cycloheximide	-	LC50 1.6 mg/L (Oryzias latipes) 48 h	-

12.2. Persistence and degradability

Not readily biodegradable. Biological degradability (28d): 1% @ 100 mg/L

12.3. Bioaccumulative potential

Bioaccumulation Not likely to bioaccumulate.

Bioconcentration factor (BCF) <0.3 @ 50 ug L⁻¹

12.4. Mobility in soil

No information available.

12.5. Results of PBT and vPvB assessment

No information available.

12.6. Endocrine disrupting properties

This product does not contain any known or suspected endocrine disruptors

12.7. Other adverse effects

No information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste from residues / unused products	Should not be released into the environment. Dispose of in accordance with the European Directives on waste and hazardous waste.
Contaminated packaging	Empty containers should be taken to an approved waste handling site for recycling or disposal.
Other information	According to the European Waste Catalogue, Waste Codes are not product specific, but application specific. Waste codes should be assigned by the user based on the application for which the product was used.

SECTION 14: Transport information

IMDG/IMO

14.1 UN number	UN2811
14.2 UN proper shipping name	Toxic solid, organic, n.o.s. (Cycloheximide)
14.3 Transport hazard class(es)	6.1
14.4 Packing group	I
14.5 Environmental hazards	None
14.6 Special precautions for user	None
14.7 Maritime transport in bulk according to IMO instruments	Not regulated

ADR/RID

14.1 UN number	UN2811
14.2 UN proper shipping name	Toxic solid, organic, n.o.s. (Cycloheximide)
14.3 Transport hazard class(es)	6.1
14.4 Packing group	I
14.5 Environmental hazards	None
14.6 Special precautions for user	None

IATA

14.1 UN number	UN2811
14.2 UN proper shipping name	Toxic solid, organic, n.o.s. (Cycloheximide)
14.3 Transport hazard class(es)	6.1
14.4 Packing group	I
14.5 Environmental hazards	None
14.6 Special precautions for user	None

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

Registration, Evaluation, Authorization and Restriction of Chemicals (REACH)

This product does not contain Substances of Very High Concern (SVHC).

SEVESO Directive Information

H1 - Acute Toxic [5 tonnes (Lower-tier) 20 tonnes (Upper-tier)]

International inventories

TSCA 8(b)	-
DSL/NDSL	-
EINECS/ELINCS	Complies
ENCS	Complies
IECSC	Complies
KECL	Complies
PICCS	Complies
AICS	Complies

International inventories legend

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
 IECSC - 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

15.2. Chemical safety assessment

For this substance a chemical safety assessment has not been carried out

SECTION 16: Other information

Full text of H-Statements referred to under Sections 2 and 3

H300 - Fatal if swallowed

H341 - Suspected of causing genetic defects if inhaled

H360D - May damage the unborn child

H411 - Toxic to aquatic life with long lasting effects

Classification procedure: Expert judgment and weight of evidence determination.

Issuing Date: 2014-11-24

Revision Date: 2024-11-11

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered 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 materials or in any process, unless specified in the text.