

Safety Data Sheet according to Regulation (EU) 2015/830 Date of issue: 19/10/2010 Revision date: 21/09/2017 Supersedes 03/08/2011 C0176

Version: 2.0

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

1.1. Product identifier	
Product form	: Substance
Trade name	: Cycloheximide
Chemical name	: cycloheximide (ISO), 4-{}{(2R)-2-[(1S,3S,5S)-3,5-dimethyl-2-oxocyclohexyl]- 2-hydroxyethyl}piperidine-2,6-dione
EC Index-No.	: 613-140-00-8
EC-No.	: 200-636-0
CAS-No.	: 66-81-9
Product code	: C0176
Formula	: C15H23NO4
Product group	: Raw material

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

1.2.1. Relevant identified uses

Main use category	: Professional use
Industrial/Professional use spec	: For professional use only. Duchefa Biochemie B.V. products are intended
	only for "in vitro laboratory" research purposes.

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

Supplier

Duchefa Biochemie B.V. A. Hofmanweg 71 2031 BH Haarlem - The Netherlands T +31(0)23-5319093 - F +31(0)23-5318027 info@duchefa.nl

1.4. Emergency telephone number

Emergency number

: Supplier contact information:

+31(0)23-5319093 (M-F 09:00-17:00) +31(0)6-30109355 (outside office hours)

Organisation/Company	Address	Comment
World Health Organization world directory of poison centres	http://apps.who.int/poisoncentres/	Consult website for a local poison centre

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Acute toxicity (oral), Category 1	H300
Germ cell mutagenicity, Category 2	H341
Reproductive toxicity, Category 1B	H360D
Hazardous to the aquatic environment — Chronic Hazard, Category 2	H411

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Full text of hazard classes and H-statements : see section 16

Adverse physicochemical, human health and environmental effects

No additional information available

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP)

	GHS06 GHS08 GHS09
Signal word (CLP)	: Danger
Hazard statements (CLP)	 H300 - Fatal if swallowed. H341 - Suspected of causing genetic defects. H360D - May damage the unborn child. H411 - Toxic to aquatic life with long lasting effects.
Precautionary statements (CLP)	 P201 - Obtain special instructions before use P281 - Use personal protective equipment as required P301+P310 - IF SWALLOWED: immediately call a POISON CENTER or doctor/physician P307+P313 - IF exposed: Get medical advice/attention. P273 - Avoid release to the environment

2.3. Other hazards

No additional information available

SECTION 3: Composition/information on ingredients

3.1. Substances

		· · · · · · · · · · · · · · · · · · ·
EC Index-No.	: 613-140-00-8	
EC-No.	: 200-636-0	
CAS-No.	: 66-81-9	
Name	: Cycloheximide	

Name	Product identifier	%
cycloheximide (ISO), 4-{}{(2R)-2-	(CAS-No.) 66-81-9	>= 95
[(1S,3S,5S)-3,5-dimethyl-2-oxocyclohexyl]-	(EC-No.) 200-636-0	
2-hydroxyethyl}}piperidine-2,6-dione	(EC Index-No.) 613-140-00-8	

Full text of H-statements: see section 16

3.2. Mixtures

Not applicable

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general	: In case of doubt or persist	ent symptoms, consult always a physicia	n.
First-aid measures after inhalation	: Remove victim to fresh air medical advice/attention.	. If not breathing, give artificial respiration	ı. Get
First-aid measures after skin contact	: Take off contaminated clo	thing. Wash off with soap and plenty of w	ater.
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First-aid measures after eye contact	: Rinse immediately with plenty of water. If eye irritation persists: Get medical advice/attention.
First-aid measures after ingestion	: Call a physician immediately. Do not induce vomiting.
4.2. Most important symptoms ar	nd effects, both acute and delayed
Symptoms/effects	: Fatal if swallowed. May damage the unborn child. Damage to kidneys and liver.

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

Treat symptomatically.

SECTION 5: Firefighting mea	asures	
5.1. Extinguishing media Suitable extinguishing media	: Dry powder. Carbon dioxide. Water spray.	
	. Dry powder, ediberraioxide, water opray.	
5.2. Special hazards arising from		
Hazardous decomposition products in case of fire	: Under fire conditions, hazardous fumes will be present.	
5.3. Advice for firefighters		
Precautionary measures fire	: Do not enter fire area without proper protective equipment, including respiratory protection. Wear proper protective equipment.	
Firefighting instructions	: Prevent fire fighting water from entering the environment.	
SECTION 6: Accidental relea	ise measures	
6.1. Personal precautions, protect	tive equipment and emergency procedures	
6.1.1. For non-emergency personne	91	
Emergency procedures	: Do not breathe dust.	
Measures in case of dust release	: Avoid dust formation.	
6.1.2. For emergency responders		
Protective equipment	: For further information refer to section 8: "Exposure controls/personal protection".	
6.2. Environmental precautions		
Notify authorities if product enters sewe	rs or public waters. Prevent entry to sewers and public waters.	
6.3. Methods and material for con	3. Methods and material for containment and cleaning up	
Methods for cleaning up	: Sweep up dry powder and dispose properly. Minimize generation of dust.	
6.4. Reference to other sections For further information refer to section 8	8. Concerning disposal elimination after cleaning, see section 13.	
SECTION 7: Handling and st	orage	

7.1. Precautions for safe handling

Precautions for safe handling	: Avoid contact with skin, eyes and clothing.
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7.2. Conditions for safe storage	Conditions for safe storage, including any incompatibilities	
Storage conditions	: Store in dry, well-ventilated area. Provide adequate ventilation to minimize dust concentrations.	
Storage temperature	: 2 - 8 °C	

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7.3. Specific end use(s)

For professional use only. Duchefa Biochemie B.V. products are intended only for "in vitro laboratory" research purposes.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

No additional information available

8.2. Exposure controls

Appropriate engineering controls:

Ensure good ventilation of the work station.

Hand protection:

Туре	Material	Permeation	Thickness (mm)	Standard
Gloves	Polyvinylchloride (PVC)	6 (> 480 minutes)	0,35	EN 374-1, EN 374- 2, EN 374-3, EN 420

Eye protection:

Protective goggles

Skin and body protection:

Long sleeved protective clothing. Chemical resistant apron

Respiratory protection:

Wear approved mask. filter type P3 (EN 143)

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Solid
Appearance	: Powder.
Molecular mass	: 281,4 g/mol
Colour	: White.
Odour	: No data available
Odour threshold	: No data available
pH	: No data available
Relative evaporation rate	: No data available
(butylacetate=1)	
Melting point	:107 - 120 °C
Freezing point	:No data available
Boiling point	: No data available
Flash point	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	:No data available
Flammability (solid, gas)	:No data available
Vapour pressure	: No data available
Relative vapour density at 20 °C	: No data available
Relative density	: No data available

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Solubility	: Water: < 20 g/l
Log Pow	: 0,55
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosive properties	: No data available
Oxidising properties	: No data available
Explosive limits	: No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

No additional information available

10.2. Chemical stability

Stable under recommended handling and storage conditions (see section 7).

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

No additional information available

10.5. Incompatible materials

Oxidizing agents and acids. Strong bases.

10.6. Hazardous decomposition products

When heated to decomposition, emits dangerous fumes.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity

: Oral: Fatal if swallowed.

Cycloheximide (66-81-9)	
LD50 oral rat	2 mg/kg
Skin corrosion/irritation	: Not classified
Serious eye damage/irritation	: Not classified
Respiratory or skin sensitisation	: Not classified
Germ cell mutagenicity	: Suspected of causing genetic defects.
Carcinogenicity	: Not classified
Reproductive toxicity	: May damage the unborn child.
STOT-single exposure	: Not classified
STOT-repeated exposure	: Not classified
Aspiration hazard	: Not classified

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SECTION 12: Ecological information

12.1. Toxicity

No additional information available

12.2. Persistence and degradability

No additional information available

12.3. Bioaccumulative potential

Cycloheximide (66-81-9)	
Log Pow	0,55

12.4. Mobility in soil

Cycloheximide (66-81-9)	
Ecology - soil	Prevent soil and water pollution.

12.5. Results of PBT and vPvB assessment

No additional information available

12.6. Other adverse effects

No additional information available

SECTION 13: Dis	posal considerations
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13.1. Waste treatment methods

Product/Packaging disposal recommendations	: Dispose in a safe manner in accord
Ecology - waste materials	: Avoid release to the environment.

: Dispose in a safe manner in accordance with local/national regulations.

SECTION 14: Transport information

In accordance with IMDG / IATA / ADR

ADR	IMDG	ΙΑΤΑ
14.1. UN number		
2811	2811	2811
14.2. UN proper shipping name	·	
TOXIC SOLID, ORGANIC, N.O.S.	TOXIC SOLID, ORGANIC, N.O.S.	Toxic solid, organic, n.o.s.
Transport document description		
UN 2811 TOXIC SOLID, ORGANIC, N.O.S., 6.1, I, (C/E), ENVIRONMENTALLY HAZARDOUS	UN 2811 TOXIC SOLID, ORGANIC, N.O.S., 6.1, I, MARINE POLLUTANT/ENVIRONMENTALLY HAZARDOUS	UN 2811 Toxic solid, organic, n.o.s., 6.1, I, ENVIRONMENTALLY HAZARDOUS
14.3. Transport hazard class(es)		
6.1	6.1	6.1
		6
14.4. Packing group		
1	1	1
14.5. Environmental hazards		
Dangerous for the environment : Yes	Dangerous for the environment : Yes	Dangerous for the environment : Yes

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ADR	IMDG	IATA
	Marine pollutant : Yes	
No supplementary information available		

14.6. Special precautions for user

Overland transportClassification code (ADR)Special provisions (ADR)Limited quantities (ADR)Excepted quantities (ADR)

	. 0
Excepted quantities (ADR)	: E5
Transport category (ADR)	: 1
Special provisions for carriage - Operation (ADR)	: S9, S14
Hazard identification number (Kemler No.)	: 66
Orange plates	- 66 2811
Tunnel restriction code (ADR)	: C/E
EAC code	: 2X
- Transport by sea	
Special provisions (IMDG)	: 274
Limited quantities (IMDG)	: 0
Excepted quantities (IMDG)	: E5
EmS-No. (Fire)	: F-A
EmS-No. (Spillage)	: S-A
Stowage category (IMDG)	: B
Properties and observations (IMDG)	: Toxic if swallowed, by skin contact or by inhalation.
MFAG-No	: 154
- Air transport	
PCA Excepted quantities (IATA)	: E5
PCA Limited quantities (IATA)	: Forbidden
PCA limited quantity max net quantity (IATA)	: Forbidden
PCA packing instructions (IATA)	: 666
PCA max net quantity (IATA)	: 5kg
CAO packing instructions (IATA)	: 673
CAO max net quantity (IATA)	: 50kg
Special provisions (IATA)	: A3, A5

: T2

: 0

: 274, 614

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code Not applicable

: 6L

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture 15.1.1. EU-Regulations

ERG code (IATA)

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No REACH Annex XVII restrictions Cycloheximide is not on the REACH Candidate List Cycloheximide is not on the REACH Annex XIV List

15.1.2. National regulations

Germany

Cormany	
VwVwS Annex reference	: Water hazard class (WGK) 3, severe hazard to waters (Classification according to VwVwS, Annex 1 or 2; ID No. 890)
12th Ordinance Implementing the Federal Immission Control Act - 12.BImSchV	: Is not subject of the 12. BlmSchV (Hazardous Incident Ordinance)
Netherlands	
SZW-lijst van kankerverwekkende stoffen	: The substance is not listed
SZW-lijst van mutagene stoffen	: The substance is not listed
NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Borstvoeding	: The substance is not listed
NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Vruchtbaarheid	: The substance is not listed
NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Ontwikkeling	: Cycloheximide is listed
Denmark	
Recommendations Danish Regulation	: Young people below the age of 18 years are not allowed to use the product Pregnant/breastfeeding women working with the product must not be in direct contact with the product

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

SECTION 16: Other information

Indication of changes:

1.4	Emergency number	Modified	
2	Classification according to Directive 67/548/EEC [DSD] or 1999/45/EC [DPD]	Removed	Obsolete

The requirements from the Danish Working Environment Authorities regarding work with carcinogens must be followed during use and disposal

Abbreviations and acronyms:

ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways	
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road	
BCF	Bioconcentration factor	
CLP	Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008	
DPD	Dangerous Preparations Directive 1999/45/EC	
DSD	Dangerous Substances Directive 67/548/EEC	
IATA	International Air Transport Association	
IMDG	International Maritime Dangerous Goods	

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LC50	Median lethal concentration
LD50	Median lethal dose
LOAEL	Lowest Observed Adverse Effect Level
NOAEC	No-Observed Adverse Effect Concentration
PBT	Persistent Bioaccumulative Toxic
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006
SDS	Safety Data Sheet
ATE	Acute Toxicity Estimate

Data sources

: Manufacturer. REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006.

Full text of H- and EUH-statements:

Acute Tox. 1 (Oral)	Acute toxicity (oral), Category 1
Acute Tox. 2 (Oral)	Acute toxicity (oral), Category 2
Aquatic Chronic 2	Hazardous to the aquatic environment — Chronic Hazard, Category 2
Muta. 2	Germ cell mutagenicity, Category 2
Repr. 1B	Reproductive toxicity, Category 1B
H300	Fatal if swallowed.
H341	Suspected of causing genetic defects.
H360D	May damage the unborn child.
H411	Toxic to aquatic life with long lasting effects.

SDS Biochemicals version 2017

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product