



-Cyclodextrin CAS No 7585-39-9

MATERIAL SAFETY DATA SHEET SDS/MSDS

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

1.1 Product identifiers

Product name : -Cyclodextrin

CAS-No. : 7585-39-9

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

Identified uses : Laboratory chemicals, Industrial & for professional use only.

1.3 Details of the supplier of the safety data sheet

Company : Central Drug House (P) Ltd

7/28 Vardaan House Ansari Road Daryaganj New Delhi-110002

INDIA

Telephone : +91 11 49404040

Email : care@cdhfinechemical.com

1.4 Emergency telephone number

Emergency Phone # : +91 11 49404040 (9:00am - 6:00 pm) [Office hours]

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008.

2.2 Label elements

Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008.

2.3 Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

SECTION 3: Composition/information on ingredients

3.1 Substances

Synonyms : Cycloheptaamylose

Cyclomaltoheptaose Schardinger -Dextrin

Caraway

beta-Cyclodextrin

Formula : C_{42H70O35}

Molecular weight : 1,134.98 g/mol CAS-No. : 7585-39-9 EC-No. : 231-493-2

No components need to be disclosed according to the applicable regulations.

SECTION 4: First aid measures

4.1 Description of first aid measures

General advice

Consult a physician. Show this safety data sheet to the doctor in attendance.

If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

In case of skin contact

Wash off with soap and plenty of water. Consult a physician.

In case of eye contact

Flush eyes with water as a precaution.

If swallowed

Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

4.2 Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

4.3 Indication of any immediate medical attention and special treatment needed

No data available

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

5.2 Special hazards arising from the substance or mixture

Carbon oxides

5.3 Advice for firefighters

Wear self-contained breathing apparatus for firefighting if necessary.

5.4 Further information

No data available

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Avoid dust formation. Avoid breathing vapours, mist or gas. Avoid breathing dust.

For personal protection see section 8.

6.2 Environmental precautions

Do not let product enter drains.

6.3 Methods and materials for containment and cleaning up

Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

6.4 Reference to other sections

For disposal see section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Provide appropriate exhaust ventilation at places where dust is formed.

For precautions see section 2.2.

7.2 Conditions for safe storage, including any incompatibilities

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

Storage class (TRGS 510): Non Combustible Solids

7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

8.2 Exposure controls

Appropriate engineering controls

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

Personal protective equipment

Eye/face protection

Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Body Protection

Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific work-place., The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection

Respiratory protection is not required. Where protection from nuisance le (EN 143) dust masks. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Control of environmental exposure

Do not let product enter drains.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

a) Appearance Form: powder

Colour: white

b) Odourc) Odour Thresholdd) pHNo data availableNo data available

e) Melting point/freezing

point

Melting point/range: 290 - 300 °C

f) Initial boiling point and

boiling range

No data available

g) Flash pointh) Evaporation rateNo data availableNo data available

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i) Flammability (solid, gas) No data available

Upper/lower No data available j) flammability or

Vapour pressure No data available k) Vapour density No data available I) m) Relative density 1.44 g/cm3 at 20 °C

14.3 g/l at 20 °C - soluble Water solubility

Partition coefficient: n-No data available

octanol/water

explosive limits

No data available

Auto-ignition temperature

> 250 °C -

q) Decomposition temperature

No data available r) Viscosity s) Explosive properties No data available No data available t) Oxidizing properties

9.2 Other safety information

> 400 - 700 kg/m3 Bulk density Burning rate $< 0.25 \, \text{mm/s}$

SECTION 10: Stability and reactivity

10.1 Reactivity

No data available

10.2 Chemical stability

Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions

No data available

10.4 Conditions to avoid

No data available

10.5 Incompatible materials

Strong oxidizing agents

10.6 Hazardous decomposition products

Hazardous decomposition products formed under fire conditions. - Carbon oxides Other decomposition products - No data available In the event of fire: see section 5

SECTION 11: Toxicological information

Information on toxicological effects 11.1

Acute toxicity

LD50 Oral - Rat - male and female - > 5,000 mg/kg(-Cyclodextrine)

(OECD Test Guideline 401)

LC50 Inhalation - Rat - male and female - 4 h - >= 4.9 mg/l(-Cyclodextrine)

(OECD Test Guideline 403)

LD50 Dermal - Rat - male and female - > 2,000 mg/kg(-Cyclodextrine)

(OECD Test Guideline 402)

Skin corrosion/irritation

Skin - Rabbit(-Cyclodextrine) Result: No skin irritation - 24 h (OECD Test Guideline 404)

Serious eye damage/eye irritation

Eves - Rabbit(-Cvclodextrine) Result: Mild eye irritation (OECD Test Guideline 405)

Respiratory or skin sensitisation

Maximisation Test - Guinea pig(-Cyclodextrine)

Result: Does not cause skin sensitisation.

(OECD Test Guideline 406)

Germ cell mutagenicity

Tests on bacterial or mammalian cell cultures did not show mutagenic effects.(-Cyclodextrine)

Hamster(-Cyclodextrine)

Lungs

Result: negative

OECD Test Guideline 477(-Cyclodextrine) Drosophila melanogaster - male and female

Result: negative

Carcinogenicity

Animal testing did not show any carcinogenic effects.(-Cyclodextrine)

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as

probable, possible or confirmed human carcinogen by IARC.

Reproductive toxicity

Specific target organ toxicity - single exposure

No data available(-Cyclodextrine)

Specific target organ toxicity - repeated exposure

No data available

Aspiration hazard

No data available (-Cyclodextrine)

Additional Information

Repeated dose toxicity - Rat - male - Oral - No observed adverse effect level - 650 mg/kg(-Cyclodextrine)

Repeated dose toxicity - Rat - female - Oral - No observed adverse effect level - 860 mg/kg(-Cyclodextrine)

RTECS: Not available

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

SECTION 12: Ecological information

12.1 Toxicity

Toxicity to fish static test LC50 - Cyprinus carpio (Carp) - 7,561 mg/l - 96 h(-Cyclodextrine)

(OECD Test Guideline 203)

Toxicity to daphnia and

Immobilization EC50 - Daphnia magna (Water flea) - > 100 mg/l - 48 h(-Cyclodextrine)

other aquatic

(OECD Test Guideline 202) invertebrates

Toxicity to algae Growth inhibition IC50 - Desmodesmus subspicatus (green algae) - > 100 mg/l

> - 72 h(-Cyclodextrine) (OECD Test Guideline 201)

Cell multiplication inhibition test EC50 - Pseudomonas putida - > 10,000 mg/l -Toxicity to bacteria

16 h(-Cyclodextrine)

12.2 Persistence and degradability

Biodegradability aerobic - Exposure time 28 d(-Cyclodextrine)

Result: 75 % - Readily biodegradable

(OECD Test Guideline 301F)

Biochemical Oxygen

Demand (BOD)

700 mg/g(-Cyclodextrine)

Chemical Oxygen Demand (COD)

1,090 mg/g(-Cyclodextrine)

12.3 Bioaccumulative potential

No data available

12.4 Mobility in soil

No data available(-Cyclodextrine)

12.5 Results of PBT and vPvB assessment

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

12.6 Other adverse effects

Additional ecological

No data available

information

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product

Offer surplus and non-recyclable solutions to a licensed disposal company. Dissolve or mix the material with a combustible solvent and burn in a chem scrubber.

Contaminated packaging

Dispose of as unused product.

SECTION 14: Transport information

14.1 UN number

IATA: -ADR/RID: -IMDG: -

14.2 UN proper shipping name

ADR/RID: Not dangerous goods IMDG: Not dangerous goods Not dangerous goods IATA:

14.3 Transport hazard class(es)

ADR/RID: -IMDG: -IATA: -

14.4 Packaging group

ADR/RID: -IMDG: -IATA: -

14.5 Environmental hazards

ADR/RID: no IMDG Marine pollutant: no IATA: no

14.6 Special precautions for user

No data available

SECTION 15: Regulatory information

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

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

15.2 Chemical safety assessment

For this product a chemical safety assessment was not carried out

SECTION 16: Other information

Further information

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Central Drug House (P) Ltd and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product. See www.cdhfinechemical.com for additional terms and conditions of sale.