Product Name: Sulfated β- Cyclodextrin (DS ~12) Sodium Salt	Product Number: CY-(E)-2045	Date: 2014.02.26.
CYCLOLAB		Date of Revision: 2014.02.26.
CYCLOLAB R&D. Ltd., Budapest, Hungary		Version: 2.1

1. Identification of the Substance/Preparation and Company

Name of substance/preparation:

Use of substance/preparation: Solubilizer, chiral separator

Chemical name: **\beta**-cyclodextrin sulfate sodium salt

Sodium Salt

Commercial name: Sulfated β-Cyclodextrin (DS ~12)

Information about Manufacturer:

Cyclolab R&D. Ltd., Budapest, Hungary H-1097 Budapest, IX. Illatos út 7, Hungary

Tel: (36-1)-347-60-60; Fax: (36-1)-347-60-68; e-mail: cyclolab@cyclolab.hu

2. Hazards Identification

Classification and labelling according to EC 1272/2008

H-phrase	-	-
P-phrase	-	-

Not a dangerous substance according to GHS.

Classification and labelling according to 67/548/EEC, EC 1999/45

	- 0	0	,	
R-phrase	-	•		
S-phrase	-	-		

This substance is not classified as dangerous according to Directive 67/548/EEC.

Further information:

Risk of dust explosion.

3. Composition/Information on ingredients

Chemical characterization:

β-Cyclodextrin sulfate sodium salt: > 90 % (w/w)

4. First-Aid Measures

General information

In case of accident or if you feel unwell seek medical advice (show label or MSDS where possible)

If inhaled

Provide fresh air.

In case of skin contact

Wash off with plenty of water and soap. Seek medical advice in case of continuous irritation

In case of eve contact

Rinse thoroughly with plenty of water. Seek medical advice in case of continuous irritation.

If swallowed

Rinse mouth with water. Drink several small portions of water. Do not induce vomiting. Never give anything by mouth to an unconscious person. In case of sickness seek medical advice.

5. Fire Fighting Measures

Suitable extinguishing media:

Water, extinguishing powder, alcohol-resistant foam, carbon dioxide

Extinguishing media which must not be used for safety reasons:

Special exposure hazards arising from the substance or preparation itself, combustion products, resulting gases:

At low oxygen level: carbon monoxide

Special protective equipment for fire fighters:

Use respiratory protection independent of recirculated air.

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6. Accidental Release Measures

Personal precautions:

Wear personal protection equipment. Avoid eye or skin contact. Avoid dust formation. Do not breath dust.

Environmental precautions:

Cover any spilled material in accordance with regulations to prevent dispersal by wind. Observe local/state/federal regulations.

Methods for cleaning up:

Take up mechanically and dispose of according to local/state/federal regulations. Avoid formation of dust and dust deposition. Dispose of cleansing water in accordance with local/state/federal regulations.

Further information:

Consider explosion protection. Eliminate all sources of ignition.

7. Handling and Storage

Handling

Precaution for safe handling: Observe the general rules for handling. Avoid dust formation.

Precautions against fire and explosion: Observe the general rules for fire prevention. Avoid dust deposit, remove dust regularly. Take precautionary measures against electrostatic charging. Take precautionary measures against dust explosion.

Storage

Conditions for storage rooms and vessels: at 2-8°C

Advice for storage of incompatible materials: none known

Further information for storage: Keep container tightly closed. During longer storage or heating over 60 °C may cause solubility problems due to decomposition and external or internal ester formation.

8. Exposure Control and Personal Protection Equipment

Exposure limits

n.d.

Exposure limited and controlled

Exposure in the workplace limited and controlled:

General protection and hygiene measures: Observe standard industrial hygiene practices for the handling of chemical substances.

Personal protection equipment:

Respiratory protection: In case of dust formation: fine dust mask without protection rating.

Hand protection: rubber gloves

Eye protection: tight fitting protective goggles Exposure to the environment limited and controlled:

Prevent material from entering surface waters and soil

Further information for system design and engineering measures

Observe information in section 7.

9. Physical and Chemical Properties

General information

Physical state/form	solid – powder
Colour	white or slightly yellow
Odour	n.a.

Important information about the protection of health, safety, and the environment

Flash point	n.d.
Ignition temperature	> 250°C
Auto-ignition temperature	n.d.
Oxidizing properties	no
Water solubility / miscibility	n.d.
pH- value	n.d.

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Other information

See Product Information Sheet

10. Stability and Reactivity

General information:

If stored and handled in accordance with standard industrial practices no hazardous reactions are known.

Conditions to avoid:

none known.

Materials to avoid:

Decomposes in strongly acidic and basic solutions

Hazardous decomposition products:

none known

11. Toxicological Information

General information:

According to our present state of knowledge no damaging effect expected when treated in accordance with standard industrial practices and local regulations where applicable.

Toxicological tests:

n d

Experience with man:

n.d.

12. Ecological Information

Ecotoxicity

n.d.

Mobility

n.d.

Persistence and degradability

Biodegradation / further information:

n.d.

Bio-accumulation potential

n.d.

Additional information

Prevent material from entering surface waters and soil. Only introduce into water purification plants in diluted state. No environmental problems expected if handled and treated in accordance with standard industrial practices and local regulations where applicable.

13. Disposal Considerations

Material

Recommendation:

Dispose of according to regulations by incineration in a special waste incinerator. Small quantities may be disposed of by incineration in an approved facility. Observe local/state/federal regulations.

Uncleaned packaging

Recommendation:

Completely discharge containers (no tear drops, no powder rest, scraped carefully). Containers may be recycled or re-used. Observe local/state/federal regulations.

14. Transport Regulations

Land transport ADR and RID:

Road ADR:

Not regulated for transport.

Railway RID:

Not regulated for transport

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Transport by sea IMDG-Code:

Sea IMDG-Code:

Not regulated for transport

Air transport ICAO-TI/IATA-DGR:

Air transport ICAO-TI/IATA-DGR:

Not regulated for transport

15. Regulatory Information

National and local regulations must be observed.

16. Other Information

Material

The above information describes exclusively the safety requirements of the product(s) and is based on our present-day knowledge. It does not represent a guarantee for the properties of the product(s) described in terms of the legal warranty regulations. Properties of the product are to be found in the respective product leaflet (if applicable).

Further information

This version supersedes all previous versions.