Material Safety Data Sheet

Date Printed: 20/DEC/2004 Date Updated: 14/MAR/2004 Version 1.3

According to 91/155/EEC

1 - Product and Company Information

Product Name B-CYCLODEXTRIN CRYSTALLINE

Product Number C4767

Company Sigma-Aldrich Pty, Ltd

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2 - Composition/Information on Ingredients

Product Name CAS # EC no Annex I

Index Number

B-CYCLODEXTRIN 7585-39-9 231-493-2 None

Formula C42H70O35 Molecular Weight 1,135.01 AMU

Synonyms beta-Cycloamylose * Cycloheptaamylose *

beta-Cycloheptaamylose * Cycloheptaglucan *
Cycloheptaglucosan * Cyclomaltoheptaose *
beta-Dextrin * Schardinger beta-dextrin

3 - Hazards Identification

SPECIAL INDICATION OF HAZARDS TO HUMANS AND THE ENVIRONMENT Not hazardous according to Directive 67/548/EC.

4 - First Aid Measures

AFTER INHALATION

If inhaled, remove to fresh air. If breathing becomes difficult, call a physician.

AFTER SKIN CONTACT

In case of contact, immediately wash skin with soap and copious amounts of water.

AFTER EYE CONTACT

In case of contact with eyes, flush with copious amounts of water for at least 15 minutes. Assure adequate flushing by separating the eyelids with fingers. Call a physician.

AFTER INGESTION

If swallowed, wash out mouth with water provided person is conscious. Call a physician.

EXTINGUISHING MEDIA

Suitable: Water spray. Carbon dioxide, dry chemical powder, or appropriate foam.

SPECIAL RISKS

Specific Hazard(s): Emits toxic fumes under fire conditions.

SPECIAL PROTECTIVE EQUIPMENT FOR FIREFIGHTERS

Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.

6 - Accidental Release Measures

PROCEDURE(S) OF PERSONAL PRECAUTION(S)

Exercise appropriate precautions to minimize direct contact with skin or eyes and prevent inhalation of dust.

METHODS FOR CLEANING UP

Sweep up, place in a bag and hold for waste disposal. Avoid raising dust. Ventilate area and wash spill site after material pickup is complete.

7 - Handling and Storage

HANDLING

Directions for Safe Handling: Avoid inhalation. Avoid contact with eyes, skin, and clothing. Avoid prolonged or repeated exposure.

STORAGE

Conditions of Storage: Keep tightly closed.

8 - Exposure Controls / Personal Protection

ENGINEERING CONTROLS

Safety shower and eye bath. Mechanical exhaust required.

GENERAL HYGIENE MEASURES

Wash thoroughly after handling.

PERSONAL PROTECTIVE EQUIPMENT

Respiratory Protection: Wear dust mask. Hand Protection: Protective gloves. Eye Protection: Chemical safety goggles.

9 - Physical and Chemical Properties

| Appearance | Color: White Form: Powder | |
|--|---|----------------------------|
| Property | Value | At Temperature or Pressure |
| pH BP/BP Range MP/MP Range Flash Point Flammability Autoignition Temp Oxidizing Properties Explosive Properties Explosion Limits | N/A N/A 290 °C N/A N/A N/A N/A N/A | |

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Vapor Pressure
                        N/A
SG/Density
                        N/A
Partition Coefficient
                        N/A
Viscosity
                        N/A
Vapor Density
                        N/A
Saturated Vapor Conc. N/A
Evaporation Rate
                       N/A
Bulk Density
                        N/A
Decomposition Temp.
                        N/A
Solvent Content
                       N/A
                        10 - 13 %
Water Content
Surface Tension
                       N/A
Conductivity
                        N/A
Miscellaneous Data
                       N/A
Solubility
                        N/A
10 - Stability and Reactivity
STABILITY
   Stable: Stable.
   Materials to Avoid: Strong oxidizing agents.
HAZARDOUS DECOMPOSITION PRODUCTS
   Hazardous Decomposition Products: Carbon monoxide, Carbon dioxide.
HAZARDOUS POLYMERIZATION
   Hazardous Polymerization: Will not occur
11 - Toxicological Information
RTECS NUMBER: GU2293000
ACUTE TOXICITY
   LD50
   Oral
   Rat
   18800 mg/kg
   LD50
   Intraperitoneal
   Rat
   356 MG/KG
   LD50
   Subcutaneous
   Rat
   3700 MG/KG
   T<sub>1</sub>D50
   Intravenous
   Rat
   1008 MG/KG
   LD50
   Oral
   Mouse
   > 12500 \text{ mg/kg}
   LD50
   Intraperitoneal
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Mouse

330 MG/KG

LD50 Subcutaneous Mouse 412 MG/KG

SIGNS AND SYMPTOMS OF EXPOSURE

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

ROUTE OF EXPOSURE

Skin Contact: May cause skin irritation.

Skin Absorption: May be harmful if absorbed through the skin.

Eye Contact: May cause eye irritation.

Inhalation: May be harmful if inhaled. Material may be

irritating to mucous membranes and upper respiratory tract.

Ingestion: May be harmful if swallowed.

CHRONIC EXPOSURE - REPRODUCTIVE HAZARD

Species: Rat
Dose: 350 GM/KG

Route of Application: Oral

Exposure Time: (MULTIGENERATION)

Result: Maternal Effects: Other effects. Effects on Newborn:

Growth statistics (e.g., reduced weight gain).

Species: Rat
Dose: 155 GM/KG

Route of Application: Oral

Exposure Time: (MULTIGENERATION)

Result: Effects on Fertility: Post-implantation mortality (e.g., dead and/or resorbed implants per total number of implants). Effects on Newborn: Growth statistics (e.g., reduced weight

qain).

12 - Ecological Information

No data available.

13 - Disposal Considerations

SUBSTANCE DISPOSAL

Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber. Observe all federal, state, and local environmental regulations.

14 - Transport Information

RID/ADR

Non-hazardous for road transport.

IMDG

Non-hazardous for sea transport.

IATA

Non-hazardous for air transport.

15 - Regulatory Information

Not hazardous according to Directive 67/548/EC.

16 - Other Information

WARRANTY

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a quide. 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. Sigma-Aldrich Inc., shall not be held liable for any damage resulting from handling or from contact with the above product. See reverse side of invoice or packing slip for additional terms and conditions of sale. Copyright 2004 Sigma-Aldrich Co. License granted to make unlimited paper copies for internal use only.

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