SIGMA-ALDRICH

Material Safety Data Sheet

Version 3.0 Revision Date 07/13/2007 Print Date 09/16/2011

| ODUCT AND COMPAN | | | | | | |
|--|---------------------------------|--|-------------------|--|--|--|
| Product name | Sucrose | | | | | |
| Product Number | : S8501 | | | | | |
| Brand | : Sigma | | | | | |
| Company | : Sigma-Aldrich | | | | | |
| | 3050 Spruce St SAINT LOUIS I | treet MO 63103 | | | | |
| Talanhana | USA : +1 800-325-583 | 20 | | | | |
| Telephone Fax | : +1 800-325-50 | | | | | |
| Emergency Phone # | | | | | | |
| MPOSITION/INFORMA | TION ON INGREDIENT | S | | | | |
| Synonyms | : alpha -D-Glc-(1 | ->2)-beta -D-Fru | | | | |
| Synonyme | alpha -D-Gluco | alpha -D-Glucopyranosyl beta -D-fructofuranoside | | | | |
| | | uranosyl-alpha -D-glucopyra | anoside | | | |
| | D(+)-Saccharose Sugar | | | | | |
| | Ougai | | | | | |
| Formula | : C12H22O11 | | | | | |
| | | | | | | |
| Molecular Weight | : 342.30 g/mol | | | | | |
| Molecular Weight CAS-No. | : 342.30 g/mol | Index-No. | Concentration [%] | | | |
| - | EC-No. | Index-No. | Concentration [%] | | | |
| CAS-No. | - | Index-No. | Concentration [%] | | | |
| CAS-No. Sucrose | EC-No. | | | | | |
| CAS-No. Sucrose | EC-No. | | | | | |
| CAS-No. Sucrose 57-50-1 | EC-No. | | | | | |
| CAS-No. Sucrose 57-50-1 | EC-No. | | | | | |
| CAS-No. Sucrose 57-50-1 AZARDS IDENTIFICATIO | EC-No. 200-334-9 ON | | | | | |
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4. FIRST AID MEASURES

If inhaled

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

In case of skin contact

Wash off with soap and plenty of water.

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.

5. FIRE-FIGHTING MEASURES

Flammable properties

Flash point no data available

Ignition temperature no data available Suitable extinguishing media

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

Special protective equipment for fire-fighters

Wear self contained breathing apparatus for fire fighting if necessary.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions

Avoid dust formation.

Environmental precautions

Do not let product enter drains.

Methods for cleaning up

Sweep up and shovel. Keep in suitable, closed containers for disposal.

7. HANDLING AND STORAGE

Handling

Provide appropriate exhaust ventilation at places where dust is formed. Normal measures for preventive fire protection.

Storage

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

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

| Components wit | | | | | |
|----------------|---------|-------|------------|------------|---|
| Components | CAS-No. | Value | Control | Update | Basis |
| | | | parameters | | |
| Sucrose | 57-50-1 | TWA | 10 mg/m3 | 1996-05-18 | US. American Conference of Governmental and Industrial Hygienists Threshold Limit Values for Chemical Substances in the Work Environment; Annual Reports for the Year |

Components with workplace control parameters

| | | | | | 2004:Committees on Threshold Limit Values (TLVs) and Biological Exposure Indices (BEIs) | |
|---------|--|-----|----------|------------|---|--|
| Remarks | Refers to Appendix A Carcinogens. 1996 Adoption | | | | | |
| | | TWA | 15 mg/m3 | 1989-03-01 | US. Department of Labor - Occupational Safety and Health Administration (OSHA) 29 CFR 1910.1000 Z-1-A | |
| | | TWA | 5 mg/m3 | 1989-03-01 | US. Department of Labor - Occupational Safety and Health Administration (OSHA) 29 CFR 1910.1000 Z-1-A | |
| | | TWA | 15 mg/m3 | 1993-06-30 | US. Department of Labor - Occupational Safety and Health Administration (OSHA) Permissible Exposure Limits (PEL) 29 CFR 1910.1000 Air Contaminants. | |
| | | TWA | 5 mg/m3 | 1993-06-30 | US. Department of Labor - Occupational Safety and Health Administration (OSHA) Permissible Exposure Limits (PEL) 29 CFR 1910.1000 Air Contaminants. | |

Personal protective equipment

Respiratory protection

Respiratory protection is not required. Where protection from nuisance levels of dusts are desired, use type N95 (US) or type P1 (EN 143) dust masks. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Hand protection

For prolonged or repeated contact use protective gloves.

white

Eye protection

Safety glasses

Hygiene measures

General industrial hygiene practice.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance

Form crystalline

Colour

Safety data

pН

5.5 - 7 at 342 g/l at 25 °C (77 °F)

| Melting point | 189 - 191 °C (372 - 376 °F) |
|-----------------------|---|
| Boiling point | no data available |
| Flash point | no data available |
| Ignition temperature | no data available |
| Lower explosion limit | no data available |
| Upper explosion limit | no data available |
| Water solubility | 342 g/l at 20 °C (68 °F) - completely soluble |

10. STABILITY AND REACTIVITY

Storage stability

Stable under recommended storage conditions.

Materials to avoid

Strong oxidizing agents

Hazardous decomposition products

Hazardous decomposition products formed under fire conditions. Carbon oxides

11. TOXICOLOGICAL INFORMATION

Acute toxicity

LD50 Oral - rat - 29,700 mg/kg Remarks: Behavioral:Somnolence (general depressed activity). Cyanosis Diarrhoea

Irritation and corrosion

no data available

Sensitisation

no data available

Chronic exposure

no data available

Signs and Symptoms of Exposure

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

Potential Health Effects

| Inhalation | May be harmful if inhaled. May cause respiratory tract irritation. |
|------------|---|
| Skin | May be harmful if absorbed through skin. May cause skin irritation. |
| Eyes | May cause eye irritation. |
| Ingestion | May be harmful if swallowed. |

12. ECOLOGICAL INFORMATION

Elimination information (persistence and degradability)

no data available

Ecotoxicity effects

no data available

Sigma - S8501

Further information on ecology

no data available

13. DISPOSAL CONSIDERATIONS

Product

Observe all federal, state, and local environmental regulations.

Contaminated packaging

Dispose of as unused product.

14. TRANSPORT INFORMATION

DOT (US)

Not dangerous goods

IMDG

Not dangerous goods

IATA Not dangerous goods

15. REGULATORY INFORMATION

OSHA Hazards No OSHA Hazards

TSCA Status On TSCA Inventory

DSL Status

All components of this product are on the Canadian DSL list.

SARA 302 Components

SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 Components

SARA 313: This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

SARA 311/312 Hazards

No SARA Hazards

Massachusetts Right To Know Components

| Sucrose | CAS-No. 57-50-1 | Revision Date 1991-07-01 |
|---------------------------------------|--------------------|-----------------------------|
| Pennsylvania Right To Know Components | | |
| Sucrose | CAS-No. 57-50-1 | Revision Date 1991-07-01 |
| New Jersey Right To Know Components | | Dovision Data |
| Sucrose | CAS-No. 57-50-1 | Revision Date 1991-07-01 |

California Prop. 65 Components

This product does not contain any chemicals known to State of California to cause cancer, birth, or any other reproductive defects.

16. OTHER INFORMATION

Further information

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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 Co., 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.