SAFETY DATA SHEET

Version 1.0 Revision Date 21.12.2023 Print Date 05.08.2024

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

1.1 Product identifiers

Product name : Sorbitan Monooleate (Span 80)

Product Number : CP-116

1.2 Other means of identification

Span 80

Sorbitan monooleate

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

Identified uses : For R&D use only. Not for pharmaceutical, household or other

uses.

1.4 Details of the supplier of the safety data sheet

Company : IMT Formosa New Materials Co., Ltd.

Rm. 1, 4F., No. 15, Aly. 15, Ln. 71, Changyu St., Sanmin Dist.,

Kaohsiung City 807, Taiwan (R.O.C.)

1.5 Emergency telephone

Emergency Phone Number: +886-926159317

SECTION 2: Hazards identification

2.1 GHS Classification

Not a hazardous substance or mixture.

2.2 GHS Label elements, including precautionary statements

Not a hazardous substance or mixture.

2.3 Other hazards - none

2.4

SECTION 3: Composition/information on ingredients

Substance / Mixture : Substance

3.1 Substances

Synonyms : Span 80

Sorbitan monooleate

Formula : $C_{24}H_{44}O_{6}$ Molecular weight : 428.60 g/mol CAS-No. : 1338-43-8EC-No. : 215-665-4

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

SECTION 4: First aid measures

4.1 First aid methods for different exposure routes

If inhaled

After inhalation: fresh air.

In case of skin contact

In case of skin contact: Take off immediately all contaminated clothing. Rinse skin with water/ shower.

In case of eye contact

After eye contact: rinse out with plenty of water. Remove contact lenses.

If swallowed

After swallowing: make victim drink water (two glasses at most). Consult doctor if feeling unwell

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 Protection of first responders and notes to physicians

No data available

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media

Foam Carbon dioxide (CO2) Dry powder

Unsuitable extinguishing media

For this substance/mixture no limitations of extinguishing agents are given.

5.2 Special hazards arising from the substance or mixture

Carbon oxides

Combustible.

Development of hazardous combustion gases or vapours possible in the event of fire.

5.3 Special protective equipment for firefighters

In the event of fire, wear self-contained breathing apparatus.

5.4 Special Fire Fighting Procedures

Prevent fire extinguishing water from contaminating surface water or the ground water system.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Advice for non-emergency personnel: Do not breathe vapors, aerosols. Evacuate the danger area, observe emergency procedures, consult an expert. 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

Cover drains. Collect, bind, and pump off spills. Observe possible material restrictions (see sections 7 and 10). Take up with liquid-absorbent material (e.g. Chemizorb \mathbb{R}). Dispose of properly. Clean up affected area.

6.4 Reference to other sections

For disposal see section 13.

SECTION 7: Handling and storage

7.1 Disposal

For precautions see section 2.2.

7.2 Conditions for safe storage, including any incompatibilities

Storage conditions

Tightly closed.

Storage class

Storage class (TRGS 510): 10: Combustible liquids

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

Ingredients with workplace control parameters

Contains no substances with occupational exposure limit values.

8.2 Exposure controls

Appropriate engineering controls

Change contaminated clothing. Wash hands after working with substance.

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). Safety glasses

Respiratory protection

Not required; except in case of aerosol formation.

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) Physical state: liquid, clear, viscous
- b) Color: dark brown
- c) Odor: No data available
- d) Melting point/freezing point: No data available
- e) Initial boiling point and boiling range: No data available
- f) Flammability (solid, gas) : No data available
- g) Explosion limit: No data available
- h) Flash point: > 113 °C closed cup
- i) Autoignition temperature: No data available
- j) Decomposition temperature: No data available
- k) pH: No data available

- l) Viscosity: Viscosity, kinematic: No data available Viscosity, dynamic: No data available
- m) Solubility(ies): No data available
- n) Partition coefficient: n-octanol/water: No data available
- o) Vapor pressure: No data available
- p) Density: 0.986 g/mL at 25 °C; 0.99 g/mL at 20 °C

Relative density: No data available

- q) Relative vapor density: No data available
- r) Particle characteristics: No data available
- s) Explosive properties: Not classified as explosive.
- t) Oxidizing properties: none

9.2 Other safety information

No data available

SECTION 10: Stability and reactivity

10.1 Reactivity

No data available

10.2 Chemical stability

The product is chemically stable under standard ambient conditions (room temperature).

10.3 Possibility of hazardous reactions

no information available

10.4 Conditions to avoid

no information available

10.5 Incompatible materials

No data available

10.6 Hazardous decomposition products

In the event of fire: see section 5

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

Oral: No data available Inhalation: No data available Dermal: No data available

Skin corrosion/irritation

Skin - Rabbit

Result: Mild skin irritation

Serious eye damage/eye irritation

Remarks: No data available

Respiratory or skin sensitization

No data available

Germ cell mutagenicity

Test Type: Human

Test system: lymphocyte Remarks: DNA inhibition

Carcinogenicity No data available

Reproductive toxicity

No data available

Specific target organ toxicity - single exposure

No data available

Specific target organ toxicity - repeated exposure

No data available

Aspiration hazard

No data available

11.2 Additional Information

RTECS: WG2932400

SECTION 12: Ecological information

12.1 Ecotoxicity

No data available

12.2 Persistence and degradability

No data available

12.3 Bioaccumulative potential

No data available

12.4 Mobility in soil

No data available

12.5 Results of PBT and vPvB assessment

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

12.6 Endocrine disrupting properties

No data available

12.7 Other adverse effects

No data available

SECTION 13: Disposal considerations

13.1 Disposal method

Product

The chemical must be disposed or recycled in accordance with Waste Disposal Act. See www.epa.gov.tw for the information of chemical waste disposal companies and their contacts. Waste material must be disposed of in accordance with the national and local regulations. Leave chemicals in original containers. No mixing with other waste. Handle uncleaned containers like the product itself. See www.retrologistik.com for processes regarding the return of chemicals and containers, or contact us there if you have further questions.

SECTION 14: Transport information

14.1 UN number

ADR/RID: - IMDG: - IATA-DGR: -

14.2 UN proper shipping name

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

14.3 Transport Hazard Classification

ADR/RID: - IMDG: - IATA-DGR: -

14.4 Packing category

ADR/RID: - IMDG: - IATA-DGR: -

14.5 Marine Pollutants (yes/no)

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

14.6 Special precautions for user

14.7 Incompatible materials

Further information

Not classified as dangerous in the meaning of transport regulations.

SECTION 15: Regulatory information

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

Occupational Safety and Health Act; Regulations on Occupational Safety and Health Facilities Waste Disposal Act; Standards for the Storage, Cleanup, Handling and Disposal of Industrial Waste

SECTION 16: Other information

Further information

Revision note No information available

The information provided in this Material Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet