



Certificate of Analysis

Batch Number: 4364009
Best Before End: June 2021

Characteristics	Standard Parameters	Result Value
Physical Appearance	Clear liquid at 30 °C	Conforms
% H ₂ O	3.0% max.	2.42%
Acidity No.	2.0 max.	1.2
Hydroxyl No	65-80	74
Saponification	45-55	48
pH Sol. 5%	6-8	6.07



SAFETY DATA SHEET

Polysorbate 80

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

1.1 Product identifier

- Product Name: Polysorbate 80
- Chemical Name: Polysorbate - 80
- CAS Number: 9005-65-6
- EC Number:
- Synonyms:
- The transition time according to REACH Regulation, Article 23 is still not expired.

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

- Use of the substance/mixture: Surfactant for industrial use

1.3 Details of the supplier of the safety data sheet

Madar Corporation
19-20 Sandleheath Industrial Estate,
Fordingbridge,
Hampshire,
SP6 1PA,
UK
Tel: 01425 655555
Email: technical@madarcorporation.co.uk

SECTION 2 Hazards identification

2.1 Classification of the substance or mixture

- CLP: None

2.2 Label elements

- Signal Word: None

2.2.1 Hazard statements

None

2.2.2 Precautionary statements

None

2.3 Other hazards

- No other hazards



SECTION 3 Composition/information on ingredients

3.1 Substances

3.1.1 Sorbitan monooleate 20 OE

CAS Number: 9005-65-6

This product is not identified as a PBT/vPvB substance.

3.2 Mixtures

- Not applicable
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SECTION 4 First aid measures

4.1 Description of first aid measures

- Do not induce vomiting
- Seek medical attention if irritation persists
- Treatment may vary with condition of victim and specifics of incident

4.1.1 Contact with eyes

Immediately flush eyes with plenty of flowing water for at least 15 minutes holding eyelids apart.

Consult an ophthalmologist

4.1.2 Contact with skin

After contact with skin, wash immediately with plenty of soap and water

4.1.3 Ingestion

Do not induce vomiting

Seek immediate medical attention

4.1.4 Inhalation

Move affected person to fresh air

Keep warm and at rest

4.2 Most important symptoms and effects, both acute and delayed

- None

4.3 Indication of any immediate medical attention and special treatment needed

- Treatment : None
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SECTION 5 Fire-fighting measures

5.1 Extinguishing media

SECTION 5 Fire-fighting measures (....)

- Suitable extinguishing media: Water, Carbon dioxide (CO2)
- Unsuitable extinguishing media: None in particular

5.2 Special hazards arising from the substance or mixture

- Do not inhale explosion and combustion gases. Burning produces heavy smoke.

5.3 Advice for firefighters

- Wear protective clothing as per section 8
- Wear self contained breathing apparatus.
- Collect contaminated fire extinguishing water separately
- Do not discharge into drains.
- Move containers from fire area if this can be done without risk.

SECTION 6 Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

- Wear personal protection equipment
- Remove person to safety
- See Section 7 and 8

6.2 Environmental Precautions

- Use suitable bunding around product and/or site to prevent environmental exposure
- Do not discharge into the drains/surface waters/groundwater. Do not discharge into the subsoil/soil.
- Retain contaminated washing water and dispose of it.
- In case of gas escape or of entry into waterways, soil or drains, inform the responsible authorities.
- Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid-or universal binding agents).

6.3 Methods and material for containment and cleaning up

- Wash with plenty of water.

6.4 Reference to other sections

- See Section 8 and 13

SECTION 7 Handling and storage

7.1 Precautions for safe handling

- Wear personal protection equipment
- Avoid contact with skin, eyes and clothing.

- Avoid breathing mist and vapours
- Do not eat, drink or smoke when using this product.
- See Section 8

7.2 Conditions for safe storage, including any incompatibilities

- Compatible Materials: stainless steel, polyethylene, paper
- Incompatible materials ; None in particular.
- Instructions as regards storage premises : Adequately ventilated premises.

7.3 Specific end use(s)

- See Section 1
- None in particular

SECTION 8 Exposure controls/personal protection

8.1 Control parameters

- No occupational exposure limits known.

8.1.1 DNEL/DMEL

Not applicable

8.1.2 PNEC

Not applicable

8.2 Exposure controls



Goggles



Suit



Gloves

- Hand Protection: Protective gloves e.g. PVC, Polyvinyl chloride
- Thermal hazard: None

8.3 Occupational exposure controls

8.4 Environmental exposure controls

- Use according to good practices of work.

SECTION 9 Physical and chemical properties

9.1 Information on basic physical and chemical properties

SECTION 9 Physical and chemical properties (....)

- Appearance: Amber limpid liquid at 30°C
- Odour: Typical
- pH: 5 - 7 sol. 5%
- Melting point/Range: N.d
- Boiling Point/Range: > 250°C
- Flammability: N.a
- Upper Explosive Limit: N.a
- Lower explosion limit: N.a
- Flashpoint: > 125°C
- Relative density: 1 g/ml at c.a. 20°C
- Solubility in water: Soluble in water

- Solubility in oil: n.d.
- Partician Coefficient: (n-octanol/water): N.d

- Autoignition Temperature n.a.°C
- Decomposition Temperature: > 200°C
- Explosive Properties: N.a
- Oxidising Properties: N.a

9.2 Other information

- None
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SECTION 10 Stability and reactivity

10.1 Reactivity

- Considered stable under normal conditions

10.2 Chemical stability

- Stable under normal conditions

10.3 Possibility of hazardous reactions

- None

10.4 Conditions to avoid

- Considered stable under normal conditions

10.5 Incompatible materials

- Avoid contact with oxidising substances

10.6 Hazardous Decomposition Products

- May generate irritant/toxic mists/gases
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SECTION 11 Toxicological information

11.1 Information on toxicological effects

SECTION 11 Toxicological information (....)

11.1.1 Sorbitan Monooleate 20 OE

LD50 (oral,rat) > 2000 mg/kg

Skin corrosion/irritation: Route: Skin, Species: Rabbit: Negative, Duration: 4h

Serious eye damage/irritation: Eye irritant - Rabbit - Negative

Respiratory sensitisation category Test: Skin sensitization - Route skin : Negative

11.2 Contact with eyes

- No information available

11.3 Contact with skin

- No information available

11.4 Ingestion

- No information available

11.5 Inhalation

- No information available

11.6 Carcinogenicity

- No information available

11.7 Mutagenicity

- No information available

11.8 Teratogenicity

- No information available

SECTION 12 Ecological information

12.1 Toxicity

- Degradability Easily degradable according to EC regulatory
- Chemical oxygen demand (COD) 2200 mg O₂/g
- CL50 - See below
- EC50 - See Below
- AOX: None
- Heavy Metals: None

12.1.1 Sorbitan Monooleate 20 OE

LC50 Species: Carassius Auratus - > 10 mg/kg (Duration h: 96)

EC50: Species: Daphnia > 10 mg/kg (Duration h: 48)

12.2 Persistence and degradability



SECTION 12 Ecological information (....)

- Biodegradation: Not persistent and biodegradable
- Test: Method OECD 301 - Duration: 28d > - %: 60 - Notes: Easily biodegradable

12.3 Bioaccumulation Potential

- Not applicable

12.4 Mobility in soil

- Not applicable

12.5 Results of PBT and vPvB assessment

- Not applicable

12.6 Other Adverse Effects

- None
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SECTION 13 Disposal considerations

13.1 Waste treatment methods

- The UK Environmental Protection (Duty of Care) Regulations (EP) and amendments should be noted (United Kingdom).
 - Disposal of packaging:
 - Waste key number:
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SECTION 14 Transport information

Not classified as hazardous for transport

14.1 UN Number

- UN No.: Not applicable

14.2 Proper Shipping Name

- Proper Shipping Name: Not applicable

14.3 Transport hazard class(es)

- Hazard Class: Not applicable

14.4 Packing group

- Packing Group: Not applicable

14.5 Environmental hazards

- Not Classified

14.6 Special precautions for user

- See Section 8

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC code

SECTION 14 Transport information (....)

- Not Classified
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SECTION 15 Regulatory information

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

- Dir. 67/548/EEC (Classification, packaging and labelling of dangerous substances.) Dir. 99/45/EEC (Classification, packaging and labelling of dangerous preparations.) Dir. 98/24/EC (Risk related to chemical agents at work). Dir 2000/39/EC (Occupational exposure limit values); Dir.2006/8/CE. Regulations (CE)n. 1907/2006 (REACH), Regulation (CE) n. 1272/2008 (CLP), Regulation (CE) n. 790/2009

Where applicable, refer to the following regulatory provisions:

Directive 2003/105/CE ('Activities linked to risks of serious accidents') and subsequent amendments.

Regulation (EC) nr 648/2004 (detergents)

1999/13/EC (VOC directive)

15.2 Chemical Safety Assessment

- No chemical safety assessment has been carried out.

SECTION 16 Other information

The data contained in this safety data sheet is based on our current knowledge and experience and describes the product only with regard to safety requirements. The data does not describe the products properties (product specification). The suitability of the product for any specific purpose should not be taken from the data contained in the safety data sheet. It is the responsibility of the recipient of the product to ensure that any proprietary rights and existing laws and legislation are observed.



Product Specification

Polysorbate P80

Description

Polysorbate P80 (Sorbitan Monooleate 20 OE)

<u>Characteristic Data</u>	<u>Values</u>
Appearance	Liquid at 30°C
% H ₂ O (K.F.)	3% max.
Acid Value	3 max. mg.KOH/gr
Hydroxyl value	65 – 80
Saponification value	45 – 55 mg.KOH/gr
Odour	light



Vegetarian & Vegan Suitability Statement

PRODUCT NAME: Polysorbate 80

MADAR Corporation Limited can confirm that the above listed product has not been tested in animals and does not contain dairy or any other animal product, by product or derivative and is therefore suitable for vegetarian and vegan use.

05/08/19