

CERTFICATE OF ANALYSIS

Product:	Polysorbate 80
Expiry Date:	August 2026
Batch No.:	4516906

test parameter			
Appearance at 30°C		Clear liquid	Conforms
Colour	GARDNER	Max. 8	3.5
Acid Value	mg KOH/g	Max. 2	1.14
Water Content	%	Max. 3	2.53
Saponification Value	mg KOH/g	45 – 55	51.49
Hydroxyl Value	mg KOH/g	65 – 80	70.98
pH (5% aqueous solution)		6 - 8	6.56
HLB Value		Approx 15	15

*LT: Less Than

Madar Corporation Limited makes the limited warranty that at the date of delivery this product will be free from defects in materials and workmanship.

No warranty of merchantability, fitness for any use, or any other warranty is expressed or to be implied, regarding the accuracy of this data. The results to be obtained from the use thereof, or the hazards connected with the use of this product.

Madar Corporation Limited. assumes no liability for any alleged ineffectiveness of the product or any injury or damage, direct or consequential, resulting from the use of this product unless such injury or damage is solely attributable to negligence on the part of Madar Corporation Limited.

The user of the product is solely responsible for compliance with all laws and regulations applying to the use of the products, including intellectual property rights of third parties.



ALLERGEN DECLERATION

Product: Polysorbate 80

Madar Corporation Limited certifies that the products Polysorbate 80 does not contain any allergens including but not limited to: peanuts, milk, tree nuts, eggs, soy, fish, mustard, celery, soybeans, wheat, seafood, seeds, cereals, lupine or molluscs.

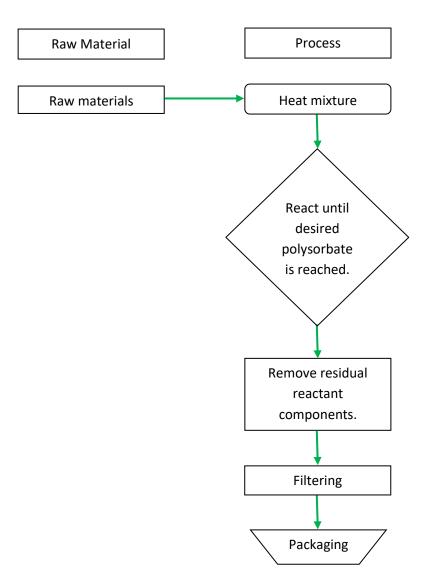
July 2021.



MANUFACTURING FLOW CHART

1.1 PRODUCT NAME: Polysorbate 80 Synonyms: -INCI name: Polyoxyethylene Sorbitan Mono-Oleate REACH Registered No. Exemption under Annex V. CAS No. 9005-65-6







GMO STATEMENT

Product: Polysorbate 80

Polysorbate 80 which is supplied by Madar Corporation Limited is produced from raw materials, using no materials of animal or vegetable origin. No genetically modified materials are used during the manufacturing process, therefore we would not expect them to be present in the final product.

Issue 19.08.21



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IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND COMPANY NAME 1. **1.1 PRODUCT NAME:** Polysorbate 80 Synonyms: Polyoxyethylene Sorbitan Mono-Oleate **REACH Registered No. EXEMPT.** Polymer CAS No. -EC No. -1.2 RELEVANT IDENTIFIED USES OF THE SUBSTANCE OR MIXTURE AND USES ADVISED AGAINST: Use of the substance/mixture: Surfactant **1.3 DETAILS OF THE SUPPLIER:** Madar Corporation Limited 19 - 20 Sandleheath Industrial Estate Fordingbridge SP6 1PA Tel. +44 (0)1425 655555 e-mail: technical@madarcorporation.co.uk

2. HAZARDS IDENTIFICATION 2.1. CLASSIFICATION OF THE SUBSTANCE OR MIXTURE: CLP:

- CLP: - Eye Irrit. 2 2.2 LABEL ELEMENTS GHS07



Signal words: Warning HAZARD STATEMENTS H319 - Causes serious eye irritation. PRECAUTIONARY STATEMENTS P280 - Wear protective gloves/protective clothing/eye protection/face protection. P264 - Wash hands and working surfaces thoroughly after handling. P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P337+P313 - If eye irritation persists: Get medical advice/attention. 2.3 OTHER HAZARDS 2.3.1: Endecrine Distructing Proporties:

- 2.3.1: Endocrine Distrupting Properties:

No further information available



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3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1. SUBSTANCES:

Polyoxyethylene Sorbitan Mono-Oleate CAS Number: 9005-66-6 EC Number: Content: 100 % Specific concentration limit: not applicable

4. FIRST AID MEASURES

4.1. DESCRIPTION OF FIRST AID MEASURES:

Inhilation:

Remove patient to fresh air ensuring your own safety whilst doing so move to fresh air in case of accidental inhalation of vapours.

Skin contact:

Wash off immediately with plenty of soap and water.

Eye contact:

Bathe the eye with running water for 15 minutes.

If swallowed:

Do not induce vomiting. Wash out mouth with water. Give one cup of water to drink every ten mintues.

4.2. MOST IMPORTANT SYMPTOMS AND EFFECTS, BOTH ACUTE AND DELAYED:

Contact with eyes:

May cause pain. May cause irritation.

Contact with skin:

May be mild irritation at site of contact.

Ingestion:

May cause soreness and redness of the mouth and throat.

Inhalation:

May be irritation of throat with a feeling of tightness in the chest.

4.3. INDICATION OF ANY IMMEDIATE MEDICAL ATTENTION AND SPECIAL TREATMENT NEEDED:

No further relevant information available.

5. FIRE FIGHTING MEASURES

5.1. EXTINGUISHING MEDIA:

Suitable extinguishing media:

In case of fire use water spray or fog, alcohol resistant foam, dry chemical or carbon dioxide.

5.2. SPECIAL HAZARDS ARISING FROM THE SUBSTANCE OR MIXTURE:

In combustion emits toxic fumes of carbon dioxide/ carbon monoxide.

5.3. ADVICE FOR FIREFIGHTERS:

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

6. ACCIDENTAL RELEASE MEASURES

6.1.PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES:

Personal precautions:

Mark out the contaminated area with signs and prevent access to unauthorised personnel. Turn leaking containers leak-side up to prevent the escape of liquid. See Section 8 for personal protection.

6.2. ENVIRONMENTAL PRECAUTIONS:

Do not allow to enter public sewers and watercourses. Contain the spillage using bunding.



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6.3. METHODS AND MATERIALS FOR CONTAINMENT AND CLEANING UP:

Methods for cleaning up:

Absorb into dry, earth or sand. Transfer to a closeable, labelled salvage container for disposal by an appropriate method. Wash the spillage site with large amount of water. **6.4. REFERENCE TO OTHER SECTIONS:**

Wear protective clothing as described in Section 8 of this safety data sheet. For waste disposal, see section 13.

7. HANDLING AND STORAGE

7.1. PRECAUTIONS FOR SAFE HANDLING: Usage precautions: Ensure adequate ventilation.
7.2.CONDITIONS FOR SAFE STORAGE, INCLUDING ANY INCOMPATIBILITIES: Store in a cool well-ventilated place. Keep in original container.
7.3. SPECIFIC END USES: The identified uses for this product are detailed in Section 1.2.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. CONTROL PARAMETERS

No exposure limit value known. **Occupational exposure limits:** No information available. **Ingredient comments:** No information available. **Biological limit values:** No information available. DNEL: No information available. DMEL: No information available. PNEC: No information available. **8.2. EXPOSURE CONTROLS:** Appropriate engineering controls: Engineering controls should be provided which maintain airborne concentrations below the relevant guidelines. **Personal protective equipment:** The following recommendations are made based on information available for the major chemical component. Eye/face protection:

Wear tightly fitting safety goggles/ faceshield.

Hand protection:

Wear chemical resistant gloves.

Other skin and body protection:

Wear protective clothing to minimize skin contact.



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Hygiene measures:

Good personal hygiene procedures should be implemented. Wash hands thoroughly after handling. Wash promptly if skin becomes contaminated. Remove contaminated clothing and protective equipment before entering eating areas. Remove contaminated clothing and wash the skin thoroughly with soap and water after work. Wash at the end of each work shift and before eating, smoking and using the toilet. Do not eat, drink or smoke when using this product. Eye wash facilities and emergency shower must be available when handling this product.

Respiratory protection:

If ventilation is insufficient wear dust mask or chemical respirator whichever is appropriate.

Thermal hazards:

No specific requirements are anticipated under normal conditions of use.

Environmental exposure controls:

Prevent entry to sewers and pubilc waters.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1. INFORMATION ON BASIC PHYSICAL AND CHEMICAL PROPERTIES:

Physical state:	Liquid
Colour:	Amber.
Odour:	Characteristic odour.
pH:	7
Melting point range °C:	< 0.
Boiling point range °C:	> 200.
Flash point °C:	> 150.
Vapour pressure:	No information available.
Vapour density:	No information available.
Density:	1.1
Particle characteristics:	No information available.
Auto-ignition temperature:	No information available.
Decomposition temperature:	No information available.
Kinematic Viscosity:	No information available.
Explosive properties:	No information available.

10. STABILITY AND REACTIVITY

10.1. REACTIVITY:

Stable under normal conditions.

10.2. CHEMICAL STABILITY:

Stable under normal conditions.

10.3. POSSIBILITY OF HAZARDOUS REACTIONS:

Hazardous reactions will not occur under normal transport or storage conditions.

10.4. CONDITIONS TO AVOID:

Heat.

10.5. INCOMPATIBLE MATERIALS:

Bases, Metals, Oxidizing Agents.

10.6. HAZARDOUS DECOMPOSITION PRODUCTS:

In combustion emits toxic fumes of carbon dioxide/ carbon monoxide.



11. TOXICOLOGICAL INFORMATION

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11.1. INFORMATION ON TOXICOLOGICAL EFFECTS: Acute toxicity: LD₅₀ (oral, mouse): 25000 mg/kg Serious eye damage/eye irritation: Eye Irrit 2 Skin corrosion/irritation: May be mild irritation at site of contact. Serious eye damage/irritation: May cause irritation. May cause pain. **Respiratory or skin sensitisation:** Not Classified. Germ cell mutagenicity: Not Classified. **Carcinogenicity:** Not Classified. **Reproductive toxicity:** Not Classified. Specific target organ toxicity - single exposure: Not Classified. Aspiration hazard: Not Classified. **11.2 INFORMATION ON OTHER HAZARDS:** No further relevant information available.

12. ECOLOGICAL INFORMATION

12.1. TOXICITY
No further relevant information available.
12.2. PERSISTENCE AND DEGRADABILITY: Readily biodegradable.
12.3. BIOACCUMULATIVE POTENTIAL: No further relevant information available.
12.4 Mobility in soil
No further relevant information available.
12.5. RESULTS OF PBT/vPvB ASSESSMENT: Not Classified
12.6. OTHER ADVERSE EFFECTS: No further relevant information available.
12.7 OTHER ADVERSE EFFECTS No further relevant information available.

13. DISPOSAL CONSIDERATIONS 13.1. WASTE TREATMENT METHODS:

Dispose of the product, packaging and any residuals in compliance with local and national regulations.

14. TRANSPORT INFORMATION

General The product is not covered by international regulations on the transport of dangerous goods (IMDG, IATA, ADR/RID). **14.1. UN number** Not applicable.



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14.2. UN proper shipping name

Not applicable.

14.3. Transport hazard class(es) No transport warning sign required.

14.4. Packing group

Not applicable.

14.5. Environmental hazards

Environmentally hazardous substance/marine pollutant

No.

14.6. Special precautions for user

Not applicable.

14.7. Transport in bulk according to Annex II of MARPOL and the IBC Code

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not applicable.

15. REGULATORY INFORMATION

15.1. SAFETY, HEALTH AND ENVIRONMENTAL REGULATIONS/LEGISLATION SPECIFIC FOR THE SUBSTANCE OR MIXTURE:

National regulations:

Control of Substances Hazardous to Health Regulations 2002 (as amended).

EH40/2005 Workplace exposure limits.

Health and Safety at Work etc. Act 1974 (as amended).

EU legislation:

Commission Directive 2000/39/EC of 8 June 2000 establishing a first list of indicative occupational exposure limit values in implementation of Council Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work (as amended).

Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures (as amended). Regulation (EC) No 648/2004 of the European Parliament and of the Council of 31 March 2004 on detergents (as amended).

Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) (as amended).

Commission Regulation (EU) No 2015/830 of 28 May 2015.

Directive 2012/18/EU of the European Parliament and of the Council of 4 July 2012 on the control of majoraccident hazards involving dangerous substances.

Guidance:

Workplace Exposure Limits EH40.

Health and environmental listings:

No information available.

Authorisations (Annex XIV Regulation 1907/2006):

No information available.

Restrictions (Annex XVII Regulation 1907/2006):

This product contain no substances (≥0.1 % w/w) of very high concern (SVHC)

biOrigins

POLYSORBATE 80

Technical Data

Appearance at 25°C	Clear amber liquid free from foreign matter
Saponification Value	45.0 – 55.0 mg.KOH/g
Acid Value	2.0 mg. KOH/g max.
Moles of EO	20
Solids Content	100%
Odour	Characteristic
HLB Value	15.0
Viscosity at 25°C (cP)	971
Specific Gravity at 20°C	1.10
Solubility in Water	Soluble
Pour Point	< 0°C
Flash Point Closed Cup	> 150°C
CAS No.	9005-65-6
EINECS No.	-
INCI Name	Sorbitan Mono Oleate Ethoxylate

The content of this data sheet is given in good faith and without warranty.

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DECLERATION AND CONFORMITY VEGAN INGREDIENT STATEMENT

Product: Polysorbate 80

Madar Corporation Limited declare that our product does not contain any animal product and is suitable for Vegans.

July 2021.