Safety Data Sheet

#90036549 · Full 16-section SDS

According to Regulation (EC) No 1907/2006
According to Regulation (EC) No 2020/878

Molekula Limited
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PRODUCT	CAS NUMBER	FORMULA	VERSION	REVISION DATE
POLYSORBATE 80- Plant origin	**9005-65-6**	**N/A**	**—**	**27 Nov 2024**

SECTION 1

Identification

1.1 Product identifier

Product name	Tween 80
CAS number	9005-65-6
EC / EINECS number	500-019-9
Chemical formula	N/A
Molecular weight	*Not applicable*
SMILES	CCCCCCCCC=CCCCCCCCC(=O)OCCOCC(C1C(C(CO1)OCCO)OCCO)OCCO

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

Research and development. Laboratory Chemicals. Manufacture of substances.
Not suitable for human consumption or veterinary purposes.

1.3 Details of the supplier of the safety data sheet

Molekula Limited
1 Millennium Way, Newton Aycliffe
Durham, DL5 6JW, United Kingdom
info@molekula.com · +44 (0) 3302 000333

1.4 Emergency telephone number

0344 892 0111 — National Poisons Information Service (NPIS) (United Kingdom — for healthcare professionals (via TOXBASE))

SECTION 2

Hazard identification

2.1 Classification of the substance or mixture

Skin Irrit. 2; H315
Eye Irrit. 2; H319
Aquatic Chronic 3; H412

2.2 Label elements

WARNING

CODE	HAZARD STATEMENT
H315	Causes skin irritation
H319	Causes serious eye irritation
H412	Harmful to aquatic life with long lasting effects

CODE	PRECAUTIONARY STATEMENT
P264	Wash thoroughly after handling
P273	Avoid release to the environment
P280	Wear protective gloves/protective clothing/eye protection/face protection
P305+351+338	IF IN EYES: Rinse with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing

2.3 Other hazards

This product does not contain any known or suspected Endocrine disruptors.
Does not meet PBT or vPvB criteria under REACH Annex XIII.

SECTION 3

Composition / information on ingredients

3.1 Substances

Name	Tween 80
CAS number	9005-65-6
EC number	500-019-9
Concentration / purity	No components need to be disclosed according to the applicable regulations.
Classification according to Regulation (EC) No 1272/2008	Skin Irrit. 2; H315 Eye Irrit. 2; H319 Aquatic Chronic 3; H412
Hazard statements	H315, H319, H412
Acute toxicity estimate (ATE)	None reported
Impurities / stabilising additives	*Not applicable*

SECTION 4

First-aid measures

4.1 Description of first aid measures

Inhalation	After inhalation: fresh air
Skin contact	IF ON SKIN: Wash with plenty of soap and water. Continue to rinse for at least 15 minutes. Get medical advice/attention if you feel unwell.
Eye contact	Remove contact lenses if present. Rinse eyes with water. Continue to rinse for at least 15 minutes and seek medical attention.
Ingestion	Rinse mouth. Get medical advice/attention if you feel unwell.

Get medical attention if any discomfort continues. Show this Safety Data Sheet (SDS) to medical personnel. First aiders/ medical personnel need to protect themselves.

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 Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5

Fire-fighting measures

5.1 Extinguishing media

Suitable extinguishing media	Foam, carbon dioxide, dry powder or water fog
Unsuitable extinguishing media	No limitation of extinguishing media given.

5.2 Special hazards arising from the substance or mixture

Combustible
Nature of decomposition products not known

5.3 Advice for firefighters

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

SECTION 6

Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Advice for non-emergency personnel: Avoid inhalation of dusts. Avoid substance contact. Ensure adequate ventilation. Evacuate the danger area, observe emergency procedures, consult an expert.

6.2 Environmental precautions

Avoid discharge into drains, water courses or onto the ground.

6.3 Methods and material for containment and cleaning up

Collect spillage with shovel, broom or the like and reuse, if possible. Dispose of large amounts of spillage/waste according to agreement with local authorities.

6.4 Reference to other sections

For specific precautions, see Section 8 and Section 13.

SECTION 7

Handling & storage

7.1 Precautions for safe handling

Observe good chemical hygiene practices. Keep away from food, drink and animal feeding stuffs. Wash contaminated skin thoroughly after handling. Do not eat, drink or smoke when using this product. Remove contaminated clothing and launder thoroughly before re-use.

7.2 Conditions for safe storage, including any incompatibilities

Storage temperature	Ambient
Conditions for safe storage (incompatibilities)	Store in a dry place. Store in a closed container.

7.3 Specific end use(s)

See Section 1.2.

SECTION 8

Exposure controls / personal protection

8.1 Control parameters

Occupational exposure limits (OEL / WEL)	None reported
DNEC/PNEC data	DNEL/DMEL: Not reported PNEC: Not reported

8.2 Exposure controls

Eye / face protection	Safety glasses Wear eye/face protection as recommended. All eye/face protection should comply with EN ISO 16321-1:2022.
Skin / hand protection	Gloves: Nitrile Rubber, 0.4mm (480 mins).
Respiratory protection	Dust mask (FFP2/FFP3) Keep self-contained breathing apparatus readily available for emergency use. Provide adequate ventilation. If ventilation is insufficient, suitable respiratory protection must be provided. Respiratory equipment: Reusable Air-Purifying Respirator (APR). Filter type: ABEK. Standard: EN 14387.
Other protection	Protective clothing
Environmental exposure controls	Do not allow to enter drains. Avoid aerosol formation.

SECTION 9

Physical & chemical properties

9.1 Information on basic physical and chemical properties

Appearance / physical state	Liquid DERIVED FROM: LITERATURE
Colour	Yellow DERIVED FROM: LITERATURE
Odour	Not known DERIVED FROM: LITERATURE
Melting / freezing point	*No data available*
Boiling point	*No data available*
Flammability	*Not applicable*
Lower and upper explosion limit	*No data available*
Flash point	113 °C DERIVED FROM: LITERATURE
Auto-ignition temperature	*No data available*
Decomposition temperature	*No data available*
pH	*No data available*
Acidity	Neutral DERIVED FROM: LITERATURE
Kinematic viscosity	*No data available*
Solubility	*No data available*
Partition coefficient n-octanol/water (log value)	*No data available*
Vapour pressure	<1.33 hPa DERIVED FROM: LITERATURE
Density (g/mL)	1.064 g/mL DERIVED FROM: LITERATURE
Relative vapour density	*No data available*
Particle characteristics	*No data available*

9.2 Other information

No data available

SECTION 10

Stability & reactivity

10.1 Reactivity

A range from approx. 15 Kelvin below the flash point is to be rated as critical.
Forms explosive mixtures with air on intense heating.

10.2 Chemical stability

Stable under the prescribed storage conditions

10.3 Possibility of hazardous reactions

Violent reactions possible with: Strong oxidising agents

10.4 Conditions to avoid

Strong heating.

10.5 Incompatible materials

Strong oxidising agents

10.6 Hazardous decomposition products

See section 5

SECTION 11

Toxicological information

11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity (LD50 / LC50)	*No data available*
Skin corrosion / irritation	Causes skin irritation
Eye corrosion / irritation	Causes serious eye irritation
Respiratory / skin sensitisation	*No data available*
Carcinogenicity	*No data available*
Mutagenicity	*No data available*
Reproductive toxicity	*No data available*
STOT (single / repeated exposure)	*No data available*
Aspiration hazard	*No data available*

11.2 Information on other hazards

Not considered an endocrine disruptor

SECTION 12

Ecological information

12.1 Toxicity

No data available

12.2 Persistence and degradability

Result: 52 % - Not readily biodegradable.

12.3 Bioaccumulative potential

No data available

12.4 Mobility in soil

No data available

12.5 Results of PBT and vPvB assessment

This substance contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

12.6 Endocrine disrupting properties

See Section 11.2.

12.7 Other adverse effects

No data available

SECTION 13

Disposal considerations

13.1 Waste treatment methods

Dispose of in accordance with local/national regulations

SECTION 14

Transport information

14.1 UN number or ID number

Not applicable

14.2 UN proper shipping name

Not applicable

14.3 Transport hazard class(es)

Not applicable

14.4 Packing group

Not applicable

14.5 Environmental hazards

Not applicable

14.6 Special precautions for user

Special precautions for user	*Not applicable*
Transport category	*Not applicable*
Tunnel code	*Not applicable*
Packing instruction (ADR)	*Not applicable*
Packing instruction (IMDG)	*Not applicable*

14.7 Maritime transport in bulk according to IMO instruments

No data available

SECTION 15

Regulatory information

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

Substance-specific regulations (e.g. licences)	*No data available*
REACH code	Y113
ECHA notification	*Not applicable*

15.2 Chemical safety assessment

No

SECTION 16

Other information

Revision notes / other information	This version (v10) was created on 12.10.2026 and replaces v1 (16.11.2022)- H412 added.

This Safety Data Sheet was generated automatically from the data Molekula holds against this product, in the 16-section GHS/CLP format. Fields shown as “No data available” carry no recorded value; fields shown as “Not applicable” were assessed as not relevant to this substance. For queries, contact Molekula at info@molekula.com.