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SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

Product: Polysorbate 20 (Tween 20)	**Revision date:** 2026-10-29	**Version:** 1.0	**Brand:** Richest

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

Product name	Polysorbate 20 (Tween 20)
Synonyms	Tween 20; Polyoxyethylene(20)sorbitan monolaurate; PS 20
CAS No.	9005-64-5
EC No.	500-018-3
Molecular formula	C58H114O26
Molecular weight	ca. 1227.5 g/mol
Relevant identified uses	Nonionic surfactant: emulsifier, solubilizer and wetting agent for food, cosmetic, pharmaceutical and industrial formulations.
Uses advised against	None
Company	Richest Group Ltd.
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SECTION 2: Hazards identification

GHS Classification	Not classified as hazardous according to Regulation (EC) No 1272/2008
Pictogram(s)	None
Signal word	None
Hazard statement(s)	None
Precautionary statement(s)	None

Other hazards	None known.

SECTION 3: Composition/information on ingredients

Component	Polysorbate 20
CAS No.	9005-64-5
EC No.	500-018-3
Classification	Not classified as hazardous
Concentration (%)	≤100 %

SECTION 4: First aid measures

If inhaled	If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician if symptoms occur.
In case of skin contact	Take off contaminated clothing. Wash off with soap and plenty of water. Consult a physician if irritation occurs.
In case of eye contact	Rinse eyes with plenty of water as a precaution. Remove contact lenses if present and easy to do. Consult a physician if irritation persists.
If swallowed	Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician if feeling unwell.
Most important symptoms and effects	May cause mild irritation on prolonged contact with skin or eyes.
Indication of any immediate medical attention	Treat symptomatically. Show this safety data sheet to the doctor in attendance.

SECTION 5: Firefighting measures

Suitable extinguishing media	Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
Unsuitable extinguishing media	None known.
Special hazards arising from the chemical	Carbon oxides may be formed in the event of fire.
Advice for firefighters	Wear self-contained breathing apparatus for firefighting if necessary.

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency	Avoid breathing vapours, mist, gas or dust. Use personal protective equipment. Ensure adequate ventilation.

procedures	
Environmental precautions	Do not let product enter drains. Avoid release to the environment.
Methods and materials for containment and cleaning up	Sweep up or absorb with inert material and place into a suitable, closed container for disposal.

SECTION 7: Handling and storage

Precautions for safe handling	Avoid contact with skin and eyes. Avoid formation of aerosols. Ensure adequate ventilation. Wash hands thoroughly after handling.
Conditions for safe storage, including any incompatibilities	Keep container tightly closed in a dry, cool and well-ventilated place. Keep away from heat and sources of ignition.

SECTION 8: Exposure controls/personal protection

Occupational exposure limit values	None established (no occupational exposure limit values known)
Biological limit values	No biological exposure index (BEI) established.
Appropriate engineering controls	Ensure adequate ventilation. Provide safety shower and eyewash station.
Eye/face protection	Tightly fitting safety goggles (EN 166).
Skin protection	Handle with chemical-resistant gloves.
Body protection	Wear protective work clothing.
Respiratory protection	Use suitable respirator when mists or aerosols are generated.
Thermal hazards	No specific thermal hazards under normal conditions of use.

SECTION 9: Physical and chemical properties

Physical state	Liquid (viscous, oily)
Colour	Pale yellow to yellow
Odour	Slight characteristic odour
Melting point / freezing point	Liquid at room temperature; pour point < 0 °C
Boiling point or initial boiling point and boiling range	Decomposes before boiling
Flammability	Combustible (high flash point)
Lower and upper explosion limit / flammability limit	Not applicable (non-flammable liquid)

Flash point	> 110 °C (closed cup)
Auto-ignition temperature	No data available
Decomposition temperature	No data available
pH	ca. 7 (aqueous solution)
Kinematic viscosity	ca. 200-400 mm2/s at 25 °C (viscous liquid)
Solubility	Soluble in water, ethanol, methanol and ethyl acetate; slightly soluble in liquid paraffin
Partition coefficient n-octanol/water	Not applicable (surface-active substance)
Vapour pressure	< 1.33 hPa at 20 °C
Density and/or relative density	1.09 - 1.12 g/cm3 at 25 °C
Relative vapour density	> 1 (Air = 1.0)
Particle characteristics	Not applicable (liquid)

SECTION 10: Stability and reactivity

Reactivity	No dangerous reactions known under normal conditions of use.
Chemical stability	Stable under recommended storage conditions.
Possibility of hazardous reactions	No hazardous reactions known.
Conditions to avoid	Heat, flames and sparks.
Incompatible materials	Strong oxidizing agents.
Hazardous decomposition products	Carbon oxides.

SECTION 11: Toxicological information

Acute toxicity - Oral / Inhalation / Dermal	LD50 Oral - Rat - 40,554 mg/kg (practically non-toxic)
Skin corrosion/irritation	Skin - Human: mild skin irritation - 3 d
Serious eye damage/irritation	Eyes - Rabbit - Mild eye irritation
Respiratory or skin sensitization	Not a skin sensitizer
Germ cell mutagenicity	Ames test negative
Carcinogenicity	No component of this product present at levels greater than or equal to 0.1 % is identified as a carcinogen by IARC, NTP or OSHA

Reproductive toxicity	No adverse effects reported; not classified
STOT - single exposure	Not classified
STOT - repeated exposure	Not classified
Aspiration hazard	Not classified (viscous liquid)

SECTION 12: Ecological information

Toxicity to fish / daphnia / algae	Practically non-toxic to aquatic organisms (LC50/EC50 > 100 mg/l, nominal); surface-active but readily biodegradable
Persistence and degradability	Readily biodegradable (OECD 301)
Bioaccumulative potential	Not expected to bioaccumulate (readily biodegradable; highly water soluble)
Mobility in soil	Highly mobile in soil (very soluble in water)
Other adverse effects	None known

SECTION 13: Disposal considerations

Product disposal methods	Offer surplus and non-recyclable product to a licensed disposal company. Dispose of in accordance with local regulations.
Contaminated packaging	Dispose of as unused product.

SECTION 14: Transport information

UN Number (ADR/RID, IMDG, IATA)	Not regulated as dangerous goods
UN Proper Shipping Name	Not regulated as dangerous goods
Transport hazard class(es)	Not regulated as dangerous goods
Packing group	Not applicable
Environmental hazards (Marine pollutant)	No
Special precautions for user	No special precautions required during transport.

SECTION 15: Regulatory information

Safety, health and environmental regulations specific for the product	EINECS: Listed; TSCA: Listed; IECSC: Listed; DSL: Listed.

SECTION 16: Other information	
Full text of H-Statements	None (not classified as hazardous)
Revision date	2026-10-29
Version	1.0

Abbreviations and acronyms: CAS: Chemical Abstracts Service; EC: European Commission; EINECS: European Inventory of Existing Commercial Chemical Substances; ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road; RID: Regulation concerning the International Carriage of Dangerous Goods by Rail; IMDG: International Maritime Dangerous Goods; IATA: International Air Transport Association; TWA: Time Weighted Average; STEL: Short Term Exposure Limit; LD50: Lethal Dose 50%; LC50: Lethal Concentration 50%; EC50: Effective Concentration 50%; PBT: Persistent, Bioaccumulative and Toxic; vPvB: very Persistent and very Bioaccumulative; SDS: Safety Data Sheet.

References: ECHA - European Chemicals Agency, https://echa.europa.eu/; IPCS - International Chemical Safety Cards (ICSC), http://www.ilo.org/; HSDB - Hazardous Substances Data Bank; eChemPortal - OECD Global Portal to Information on Chemical Substances; ERG - Emergency Response Guidebook by U.S. DOT.

Disclaimer: The information in this SDS is only applicable to the specified product and is provided in good faith. It is based on the knowledge available to Richest Group Ltd. at the date of issue and is intended to describe the product for the purposes of health, safety and environmental requirements only. It does not constitute any guarantee of the properties of the product. Richest Group Ltd. shall not be held liable for any damage resulting from handling or from contact with the above product.