Technical Data Sheet

Polysorbate 80 (Tween 80) | Formulation guide

1. Product overview

Nonionic surfactant, emulsifier and solubilizer for oil-in-water formulations.

2. Product identity

Trade name: MONOPOL TWMOE20 (TWEEN 80). Supplier: DONGNAM CHEMICAL.

INCI: Polysorbate 80; CAS: 9005-65-6 (general ingredient identity). Physical form: liquid.
Typical HLB: 15.0

3. Technical specifications

Property	Method	Specification	Batch result	Unit
Appearance	DNQC-000	Liquid	Liquid	-
Color	DNQC-001	Max. 8.0	4.1	Gardner
pH	DNQC-003	5.00-7.00	5.91	-
Moisture	DNQC-005	Max. 3.00	2.60	wt%
Hydroxyl value	DNQC-010b	65.0-80.0	78.9	mgKOH/g
Saponification value	DNQC-011	45.0-55.0	51.6	mgKOH/g
Acid value	DNQC-007a	Max. 2.20	1.07	mgKOH/g

Source

Supplier COA dated 12 Feb 2026; lot 26021283. PO MC26002240 (02/26).

Technical Data Sheet

Polysorbate 80 (Tween 80) | Formulation guide

4. Applications and suggested use levels

Fragrance solubilization in aqueous products: 0.5-5%; adjust to fragrance loading and clarity.

Creams and lotions: 0.5-5% as co-emulsifier. Shampoo and shower gel: 0.2-3% as solubilizer.

Ranges are general formulation starting points.

5. Formulation and compatibility

Dispersible/soluble in water; useful for dispersing oils in aqueous systems. Premix with fragrance or oil and add gradually to the aqueous phase.

Ethanol 99% and DPG: evaluate clarity and compatibility in the actual formulation.

Nonionic character generally supports compatibility with common surfactants. Check electrolyte tolerance, pH, viscosity and stability in the finished formulation.

6. Storage, packaging and safety

Store tightly closed in a cool, dry place, protected from excessive heat and light.

Source shipment packaging: 200 kg drums. Lot 26021283: manufactured 12 Feb 2026; expiry 11 Feb 2028.

Consult supplier SDS and regulatory documentation before commercial use.