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TECHNICAL DATA SHEET

1,2-Hexanediol • Cosmetic Grade

Product Name	1,2-Hexanediol	**Lot No.**	IO-HXD-261120
INCI Name	1,2-Hexanediol	**CAS No.**	6920-22-5
Molecular Formula	C6H14O2	**Molecular Weight**	118.17 g/mol
EC Number	230-029-6	**Date of Manufacture**	November 2026
Form	Clear colorless liquid	**Expiration Date**	November 2028
Recommended Use	0.5 – 2.0 %	**Origin**	United States (cosmetic grade)
Storage	Ambient, tightly closed, protect from moisture	**pH (5% aq.)**	5.5 – 7.5

DESCRIPTION

1,2-Hexanediol is a multifunctional aliphatic diol supplied as a clear, colorless liquid. It functions as a skin-conditioning agent, solvent, humectant and preservative booster. Fully miscible with water, it supports moisture retention, improves sensory feel and enhances the efficacy of traditional preservative systems. Suitable for leave-on and rinse-off formulations.

RECOMMENDED USE & INCORPORATION

Recommended use level: 0.5 – 2.0 % (typical range for humectancy and preservative boosting; higher levels may be used for solvent effect). Add to the water phase at any stage of production. Fully water-soluble and pH-independent (effective across pH 3–10). Compatible with most cosmetic ingredients including surfactants, oils, peptides and botanical extracts. Can be used alone or in combination with other diols (e.g. caprylyl glycol) and conventional preservatives.

TYPICAL PROPERTIES

Appearance	Clear colorless liquid
Purity (GC)	≥ 99.0 %
Molecular formula	C6H14O2
Density (20 °C)	0.945 – 0.960 g/cm³
Refractive index (20 °C)	1.435 – 1.450
Water content	≤ 0.5 %
Solubility	Fully miscible with water
Shelf life	24 months under recommended storage