

Nonyl Phenol Ethoxylate

Alkyl phenol ethoxylate surfactant, 4.5–40 moles EO

Product Description

Nonyl Phenol Ethoxylate is a non-ionic surfactant widely used in industrial cleaners, textile processing, emulsion polymerization and agrochemical formulations. Available in 4.5 to 40 moles EO grades.

Certificate of Analysis

HSN Code: 3402.13 CAS Number: 9016-45-9 Classification: Non-ionic Surfactant

Parameter	Specification	Test Method
Appearance	Clear to pale yellow liquid	Visual
HLB Value	4.5–16 (grade dependent)	Calculated
Active Content	≥ 99 %	Gravimetric
pH (1% solution)	5.5–7.5	USP <791>
Cloud Point	Varies by grade	IP 219
Viscosity	Grade dependent (cP at 25°C)	Brookfield
Hydroxyl Value	Grade dependent (mg KOH/g)	ASTM E1899
Heavy Metals	≤ 20 ppm	USP <231>

Physical Properties

Appearance: Clear to pale yellow liquid

Molecular Formula: $C_{10}H_{15}O_5$ (for 9 moles EO)

Molecular Weight: Grade dependent (MW: 440–1320 g/mol)

Solubility: Soluble in water (hydrophilic grades); soluble in organic solvents (lipophilic grades)

Melting Point: N/A (liquid at room temperature)

Packing: 200 kg HDPE drums; 50 kg carboys; bulk tankers available

Storage: Store in a cool, dry, well-ventilated area. Avoid direct sunlight. Temperature: 10–35°C.

Safety & Handling

PPE: Chemical-resistant gloves, safety goggles, face shield, lab coat

Hazards:

- Irritating to eyes and skin
- Environmental hazard — harmful to aquatic life
- Do not ingest