

HD-105-PEI Polyethylenimine

TECHNICAL DATA SHEET

Document No.	Version	Issue date	Revision date
ZY061-TDS-EN	V2.0	2019-01-04	2026-02-11

01 Product overview

HD-105-PEI Polyethylenimine is supplied as polymer available in multiple molecular-weight grades. It is intended for the applications and performance ranges described in this document.

02 Basic information

Property	Value
Product name	HD-105-PEI Polyethylenimine
Short name	Polyethylenimine (PEI)
CAS number	9002-98-6
EC number	618-346-1
Molecular formula	(C ₂ H ₅ N) _n
Molecular weight	600-100,000 g/mol, multiple grades
Appearance	Colorless to pale-yellow transparent liquid

03 Product features

- High adhesion and adsorption through amine functionality
- Strong cationic character in water
- Primary and secondary amines react readily with epoxides, aldehydes, isocyanates and acidic gases

04 Typical specifications

Property	Specification	Method / remarks
Appearance	Colorless to pale-yellow transparent liquid	All grades
pH (1:20, 25 C)	10.0-12.0	All grades
Molecular weight	600-100,000 g/mol	Multiple grades
Solids	30-98%	Grade dependent
Solubility	Soluble in water, methanol, ethanol, dichloromethane and DMF; insoluble in hexane, toluene and ether	-

05 Recommended applications

- Wet-strength improvement in paper
- Adhesion promoter, crosslinker and modifier
- Dispersant for coatings and inks
- Flocculant and adsorbent for water treatment
- CO₂ and acid-gas capture on porous supports
- Personal-care conditioning, biotechnology transfection and petroleum demulsification

06 Packaging

50 g, 100 g, 500 g and 1 kg fluorinated bottles; 5 kg, 25 kg and 200 kg plastic drums; 1,000 kg IBC. Custom packaging available.

07 Storage and handling

Store sealed in a cool, dry, well-ventilated place away from light, fire and heat. Store at 5-35 C. Shelf life: 24 months. Reseal promptly after opening.

08 Disclaimer

This information is provided in good faith based on current knowledge. Conditions and methods of use are beyond the supplier's control. The user is responsible for evaluating the product for the intended application and required performance. For reference only. Final requirements are subject to the executed contract and current product documentation.

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