



## Dow Industrial Solutions

# Solvent for Hardeners in Waterborne Polyurethane Systems

## Aprotic Glycol Diether with Active Solvency & Formulating Versatility

### PROGLYDE™ DMM Glycol Diether

For waterborne polyurethane (PU) systems, PROGLYDE™ DMM Glycol Diether is unique among typical propylene oxide-based solvents in that it is aprotic (no hydroxyl functionality). As a result, it is relatively inert and can be used in proton-sensitive systems such as water-based PU coatings. PROGLYDE™ DMM Glycol Diether can also be used to replace NMP (N-Methyl-2-pyrrolidone) in polyurethane dispersion (PUD) production. And with its excellent stability, solvency, and coupling performance, PROGLYDE™ DMM Glycol Diether provides excellent compatibility with a wide range of agricultural formulations and cleaning products.

#### Key Features:

- Aprotic solvent, no hydroxyl group, and excellent water stability
- Effective viscosity reduction as thinner for isocyanate prepolymers which provides easy handling
- High solvent solubility in water facilitates dispersion of the prepolymer in water
- Acts as a coalescent in the coating formulation for MFFT reduction
- Good affinity with many polymers
- Significant water solubility

#### Typical Physical Properties\*

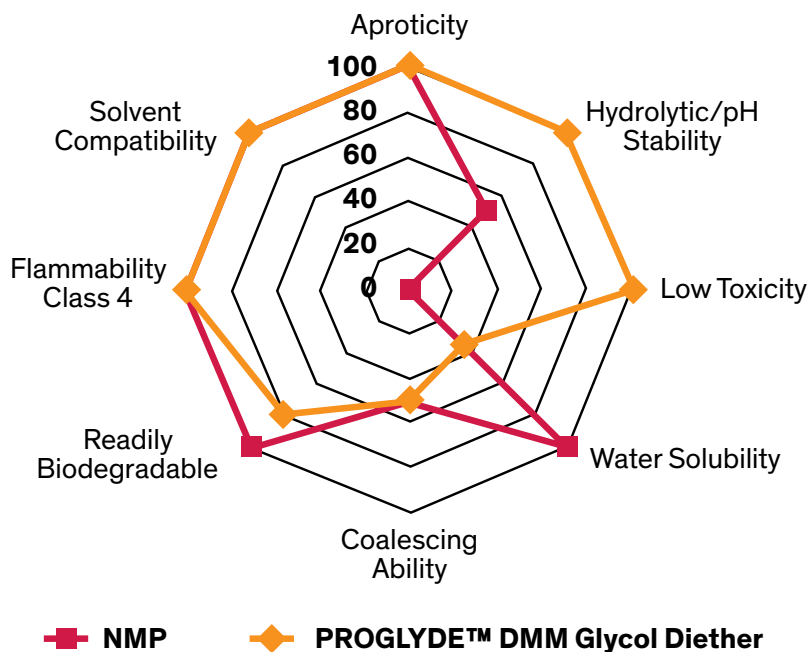
Property	Value
Molecular Weight (g/mol)	162.23
Boiling Point @ 760 mmHg	175°C
Viscosity, cP at 25°C	1.0
Surface Tension @ 25°C	26.3 dynes/cm
Evaporation Rate (n-butyl acetate = 100)	13
<b>Solubility, wt% at 25°C</b>	
Solvent in Water	35 wt%
Water in Solvent	4.5 wt%
<b>Hansen Solubility Parameters (joules/cm<sup>3</sup>)<sup>1/2</sup></b>	
Δd (Dispersion)	14.9
Δp (Polar)	2.1
Δh (Hydrogen Bonding)	3.8

\*These are typical properties, not to be construed as specifications.



## PROGLYDE™ DMM Glycol Diether as NMP Replacement

- Delivers an improved toxicity profile, with comparable biodegradability
- Exhibits increased hydrolytic/pH stability
- Provides comparable aproticity, coalescing ability, flammability, and solvent compatibility



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