COVATION BIO|PDO
susterra®

Performance comes naturally with Susterra® propanediol

A 100% plant-based, petroleum-free diol

We believe that major strides in innovation can leave smaller environmental footprints.

From performance polymers to coatings, binders, polyurethanes and bio-solvents, our 100% bio-based Susterra® PDO continues to unlock the power of nature to deliver sustainable solutions that never sacrifice performance.

Plant-based performance polymers

Susterra® propanediol (1,3-propanediol or PDO) is petroleum-free and offers high-performing, sustainable solutions for a wide range of polyurethane applications. Plus, Susterra® PDO is renewably sourced and generates up to 48% less greenhouse gas emissions cradle-to-gate compared to 1,4-butanediol (BDO), a common petrochemical-sourced alternative.

Susterra® PDO offers a wide range of applications in both industrial direct-to-metal and wood coatings.

Regeneratively farmed dent corn

Susterra® PDO benefits from feedstock that is certified by the USDA BioPreferred® program as a 100% bio-based ingredient. This feedstock uses 100% responsible, regenerative-farmed dent corn, applying several conservation practices.

Applications	Functions/Benefits
Powder PU coatings	NPG replacement with PDO for performance enhancement • Improves flexibility & impact resistance • Reduces viscosity
PU coatings	Glycol choice for polyol or chain extender (curative) • Polyester/polyester polyols: flexibility, processing time & energy, demolding times and abrasion • Chain extender: transparency, flexibility, rebound
Water-based architectural coatings	Co-solvent • PG replacement for freeze protection & open time • LVP-VOC (0.02 mmHg @ 25°C) • Improves tint strength in conventional latex formulations
Water-based industrial coatings	Co-solvent • Improves chemical and corrosion resistance • Improves mechanical properties: flexibility, resistance to deformation (Young's modulus) • Improves adhesion and impact resistance properties
Inks	Monomer, solvent • Humectant (PG/GLY replacement) • Polyester binder (polyol) • Dry performance
UV coatings	Monomer (PU) • Grain enhancement (PU-A) • Reduces solvents • Gloss
Wood coatings	Co-solvent • Freeze-thaw protection & open time • Flexibility • Prolongs durability due to higher initial elastic nature
Unsaturated polyester resins (UPR)	Monomer • Glycol choice for performance & bio-content • Lowers heat deflection temperature and compression strength • Flexibility (elongation) and tensile stress

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For additional information or samples, please visit CovationBioPDO.com

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