

Polyurethane Composition

Polyurethane refers to coatings or materials made with isocyanate compounds containing the isocyanate (NCO) group. The number of isocyanate groups distinguish the chemicals as mono-isocyanate (one group), diisocyanate (two groups) or poly-isocyanate (three or more groups).

In a two-component system, the diisocyanate reacts with a resin having a reactive hydrogen. The coating that results from this reaction is the foundation of the basic fundamental key performance properties of polyurethanes: durability, corrosion and chemical resistance.

100% Solids

Rhino Linings USA's formulations are all 100% solids polyurethane coating systems, which means they are formed when an isocyanate solution and a polyol solution are combined, producing a rapid and exothermic chemical polymerization reaction.

- No solvents (VOCs) are used to dissolve, carry or reduce the coating
- The resin converts to a solid after mixing with isocyanate
- Viscosity of the lining is determined by selection and design of the resin, not by solvents

Specialty additives may also be added to the resin, including:

- UV stabilizers to provide gloss retention
- Surfactants
- Molecular scavengers to inhibit moisture contamination
- Anti-oxidants to reduce oxidation
- Anti-foaming agents