



Terachem® 53-2371 Aluminum Oxide Nano-Dispersion for Polyaspartics

Additive for Improving Mar and Scratch Resistance

TYPICAL CHARACTERISTICS

Appearance	Grayish Dispersion
Weight Per Gallon, Lbs	12.5 ± 0.1
Flash Point, °C (P-M)	145
Equivalent Weight	500 ± 3
Non-Volatile by Weight, %	100 ± 0.1

COMPATIBILITY

Terachem® 53-2371 is a proprietary, formulated dispersion of nano-aluminum oxide that can improve the mar and scratch resistance of polyaspartic coatings. Terachem® 53-2371 is blended into the polyaspartic amine component, Part A. The compatibility of Terachem® 53-2371 with various ingredients in the formulation must be evaluated and tested before use.

APPLICATIONS

Terachem® 53-2371 is specifically designed for use in 2K polyaspartic coatings. When incorporated into a polyaspartic coating formulation, Terachem® 53-2371 acts as the delivery system for nano-aluminum oxide. Levels of 10-20% by weight for the product based on total resin solids have been achieved in many systems without visible effect on either clarity or gloss.

The coatings formulator has choices in the selection of the polyaspartic amine as well as other ingredients in the formulation. Factors such as loading level, film thickness, gloss, and the type of wear or mar resistance expected in the coating must be considered and evaluated before commercial use. Because of its uniqueness, Terachem® 53-2371 offers the formulator the opportunity to improve resistance to mar and scratch at very high loadings with minimal effect on gloss, clarity, shade, and viscosity in systems tested.

Terachem® 53-2371 in properly formulated polyaspartic coatings systems can be useful for a variety of applications, including uses on wood, concrete, composites, and metal. Terachem® 53-2371 can also reduce the quantity of both resin and hardener in the polyaspartic formulation, resulting in a corresponding reduction in raw material cost of the more expensive ingredients at about an equivalent level of performance.

FEATURES

Ready-to-use dispersion

Excellent performance for resistance to mar and scratch

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No significant effect on clarity, gloss or shade at up to 12% on the polyaspartic side
 Can improve hardness and toughness
 No appreciable effect on viscosity up to 12% by weight on the polyaspartic side
 No effect on recoatability seen at relatively high levels of use

PROUDUCT USES (For professional use only. Not intended for retail sales.)

The formulator should determine by ladder studies the level of Terachem® 53-2371 that is most suitable and effective by thorough testing and evaluation, in your laboratory and later in field trials.

OTHER PFLAUMER PRODUCTS FOR THE FORMULATOR

Pflaumer offers other products for formulating 2K coatings:

Terachem ® 53-Colorants	37 Ready-to-use pigment dispersions for 2K polyurethanes and polyaspartics, including color packs for on-site use
Teracure ® Aliphatic Polyisocyanates	Complete line of HDI-based trimer isocyanates
Teraspartic ®Polyaspartic Amines	For slow, medium, and fast curing
Terachem ®53-2242	Anti-sag additive for 2K polyaspartics
Terachem ®53-2384	Aluminum Oxide Nano-Dispersion for 2K polyaspartics
Tallicin ®1500	Flow and leveling modifier
Tallicin ®3000	Pot life extender for trimer-type isocyanates used in 2K polyurethanes
Tallicin ®4000	Bubble-release, agent and flow/leveling modifier for high-solids polyurethanes
Tallicin ® 4040	Bubble-release, flow and leveling modifier for solvent-free polyaspartics and polyurethanes
Tallicin ®4600	Stabilized Tin Catalyst for Polyurethanes

SAFETY, STORAGE, AND HANDLING

Consult MSDS before use. Store Terachem® 53-2371 in tightly sealed containers. Prevent contact with moisture and excess humidity. Once opened, any remaining Terachem® 53-2371 in the container is best stored under dry nitrogen blanketing. Store, transfer, and handle under a nitrogen blanket. Replace damaged gaskets on drums or totes. Keep storage temperatures at 0°C - 40°C (32°F - 104°F).

Shelf life of Terachem® 53-2371 is 6 months from date product is shipped by Pflaumer and then maintained in original closed containers and stored in proper storage conditions at 25°C (75°F). If repackaging, use containers that will prevent moisture contamination.

CONTAINER SIZES

5 Gallon Pail (55 Lb/25.5 Kg)
 55 Gallon Drum (650 Lb/306 Kg)

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