

Technical Data Sheet

Secondary Insulation

ELAN-Plus™ BS-217 Diluent

(Vinyl Toluene Monomer)

ELAN-Plus™ BS-217 Diluent

Product Description

ELAN-Plus™ BS-217 is a reactive monomer based on a blend of m- and p-methyl styrene, commonly called vinyl toluene. It contains a low level of inhibitor to prevent premature polymerization.

Areas of Application

Co-reactant and viscosity adjuster for unsaturated polyester resins

Features and Benefits

- Inhibited for room temperature stability
- Lower vapor pressure than styrene
- Higher flash point than styrene

Instructions for Use

ELAN-Plus™ BS-217 should be added at room temperature to vinyl toluene-based unsaturated polyester resins, either to adjust resin viscosity or to compensate for evaporative losses.

See ELANTAS PDG Technical Bulletin TI-4001 for resin tank maintenance instructions

Transportation / Storage

Store below 25°C / 77°F in a dry, controlled environment, out of direct sunlight. This material should be suitable for use stored under these conditions in the original sealed containers for six (6) months from the date of shipment.

Keep containers tightly sealed to minimize evaporation. Refrigeration is recommended for long term storage

Health / Safety

ELAN-Plus™ BS-217 is a reactive material that may undergo hazardous polymerization with exposure to excessive heat.

Refer to the Material Safety Data Sheet for additional storage and handling information.

Typical Properties of Material as Supplied

Property	Conditions	Value	Units
Appearance		water-white	
Weight per Gallon	25°C / 77°F	7.3 – 7.6	pounds
Flash Point	ASTM D93	53 127	°C °F
Boiling Point		168 334	°C °F
Vapor Pressure	20°C / 68°F	1.1	Torr
Vapor Density	Relative to air	4.1	
Volatile Organic Content	See “Air Emissions” below		

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Air Emissions from Reactive Diluents

ELAN-Plus™ BS-217 Diluent is a reactive monomer. If allowed to evaporate in its original form, it has a VOC equal to its density, approximately 7.45 pounds/gallon. In its intended use, however, it is a co-reactant with an unsaturated polyester where it is converted in the presence of a peroxide catalyst to a solid resin. In this application considerably less VOCs are released.

When a typical unsaturated polyester resin containing ELAN-Plus™ BS-217 Diluent is tested per ASTM D6053, approximately 60% of the diluent is released to the air. This equates to an effective VOC of 4.5 pounds/gallon for the diluent component. As film thickness increases, the VOC continues to decrease. In a closed mold, all of the diluent reacts to form a solid resin with essentially no air emissions.

Actual air emissions of ELAN-Plus™ BS-217 Diluent cannot be calculated, therefore, without taking into account how it is used.

The above properties are typical values and are not intended for specification use.

ELANTAS PDG, Inc. warrants the chemical composition of its products within stated tolerances, but does not guarantee that a product will be appropriate for any particular application. Any recommendation, performance of tests or suggestion is offered merely as a guide and is not a substitute for a thorough evaluation by the user. No representative of ELANTAS PDG, Inc. has the authority to offer a warranty that a product will perform satisfactorily in manufacturing a product and no such representation should be relied upon.