PLASTICS AND RUBBER

Plastic and composites additives from Dow

Product selection guide



Product	Description	Functionality	Thermoplastic									Thermosets						Fiber Glass Treatment		Polymer Modification	Surface Treatment	Application Information/Benefit
			Filler dispersion	Reinforcement coupling	Adhesion promotion	Crosslinking	Thermoplastic surface modification	Flame retardant	Mechanical property improvement	Processing aid	Optical property management	Reinforce glass composites	Processing aid for flow improvement	Stress relief	Reinforcement coupling	Adhesion promotion	Mechanical property improvement	Hydrophobization	Surface modification	Polymer modification	Adhesion promotion-primer	
XIAMETER™ OFS-6011 Silane	Aminopropyltriethoxysilane $H_2NC_3H_6$-$Si(OC_2H_5)_3$	Amino/ Ethoxysilane										●										Coupling agent for thermoset resins with glass or mineral fillers
XIAMETER™ OFS-6020 Silane	Aminoethylaminopropyl-trimethoxysilane $H_2NC_2H_4NHC_3H_6$-$Si(OCH_3)_3$	Amino/ Methoxysilane		●								●									●	Coupling agent for many thermoset and thermoplastic resins with glass or mineral fillers
XIAMETER™ OFS-6030 Silane	Methacryloxypropyl-trimethoxysilane $H_2C=CH(CH_3)C(O)OC_3H_6$-$Si(OCH_3)_3$	Methacryl/ Methoxysilane		●								●			●							Coupling agent for many thermoset and thermoplastic resins with glass or mineral fillers
XIAMETER™ OFS-6518 Silane	Vinyltriethoxysilane $H_2C=CH$-$Si(OC_2H_5)_3$	Vinyl/ Ethoxysilane				●														●		Crosslinker for polyethyene polymers and copolymers
XIAMETER™ OFS-6032 Silane	Vinylbenzylaminoethylaminopropyltrimethoxysilane ($H_2C=CHC_6H_4$-CH_2-$NHC_2H_4NHC_3H_6$-$Si(OCH_3)_3$)•HCl 40% in methanol	Amino/Vinyl/ Methoxysilane	●	●	●							●			●	●			●		●	Coupling agent for many resin systems; especially useful for fiberglass-reinforced printed circuit boards; improved adhesion of organic polymer to inorganic substrate or filler; improved wet and dry physical properties of composite; improved mixing and compatibility of filled systems; compatible with epoxies, polyolefins polymer types
DOWSIL™ Z-6269 Silane	Cationic vinylbenzyl and amino functional methoxy-silane 40% active in methanol Higher active purity version	Amino/Vinyl/ Methoxysilane	●	●	●							●			●	●			●		●	Coupling agent for many resin systems; especially useful for fiberglass-reinforced printed circuit board; improved adhesion of organic polymer to inorganic substrate or filler; improved wet and dry physical properties of composite; improved mixing and compatibility of filled systems; compatible with epoxies for printed circuit boards (PCBs), polyolefins, most polymer types
DOWSIL™ Z-6132 Silane	Hydrolyzed version of XIAMETER™ OFS-6032 Silane 37% solids in methanol	Amino/Vinyl/ Methoxysilane										●							●			Similar to XIAMETER™ OFS-6032 Silane, but prehydrolyzed, which may improve customer productivity; compatible with epoxies for PCBs
XIAMETER™ OFS-6224 Silane	Vinylbenzylaminoethylaminopropyltrimethoxy silane ($H_2C=CHC_6H_4$-CH_2-$NHC_2H_4NHC_3H_6$-$Si(OCH_3)_3$) Partially hydrolyzed at 33% in methanol Low chloride	Amino/Vinyl/ Methoxysilane										●							●			Similar to XIAMETER™ OFS-6032 Silane, but prehydrolyzed with reduced Cl content
DOWSIL™ 11-100 Additive	Oligomeric Siloxane	Methoxy	●					●														Improve LOI value for low smoke halogen free wire and cable material and improve dispersion of inorganic fillers, such as ATH/ MDH, etc., into organic polymers such as resins and plastics, and rubber; will transform hydrophilic inorganic powders, fillers, or substrates to that of hydrophobic
DOWSIL™ EP-5518 Powder	Elastomeric, fine, soft powder Particle size approximately 3 micron	Methyl												●								Component of Epoxy Molded Compound (EMC), stress relief additive
DOWSIL™ TREFIL E-606 Silicone Powder	Elastomeric, hard, powder Particle size approximately 2 micron	Methyl												●								Component of EMC, stress relief additive

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DOWSIL™ EP-2601 Powder	Elastomeric, epoxy functional, fine, powder Particle size approximately 2 micron	Epoxy												●								Component of EMC, stress relief additive
DOWSIL™ EP-2720 Powder	Elastomeric, methacryl functional, fine, powder Particle size approximately 2 micron	Methacryl												●								Component of EMC, stress relief additive
DOWSIL™ EP-5500 Powder	Si elastomeric powder	Methyl												●								Component of EMC, stress relief additive
DOWSIL™ EP-2600 Powder	Si elastomeric powder Smaller particle size than DOWSIL™ EP-5500 Powder	Methyl												●								Component of EMC, stress relief additive
DOWSIL™ 30-424 Additive	Elastomeric, methacryl functional, fine, powder Particle size approximately 2 micron	Methacryl									●											Provides light diffusion property in LED or LCD application
XIAMETER™ OFS-6040 Silane	Glycidoxypropyltrimethoxysilane $CH_2(O)\ CHCH_2OC_3H_6\text{-}Si(OCH_3)_3$	Epoxy/ Methoxysilane			●							●			●								Used for silica treatment for EMC application
XIAMETER™ OFS-6062 Silane	3-Mercaptopropyltrimethoxysilane $HS(CH_2)_3Si(OCH_3)_3$	Mercapto/ Methoxysilane		●	●							●				●							Coupling agent to improve the adhesion of sulfur-cured elastomers to inorganic fillers, fiberglass and surfaces; treated fillers compatible with epoxy, polysulfide, EPDM, natural rubber, SBR, nitrile rubber
DOWSIL™ Z-6883 Silane	Phenylaminopropyl trimethoxysilane $PhNHC_3H_6Si(OCH_3)_3$	Phenyl/Amino/ Methoxysilane													●	●							Adhesion promoter for EMC; improved adhesion between metal and resin, and inorganic fillers and resin
DOWSIL™ Z-6137 Silane	Aminoethylaminopropylsilane triol homopolymer $H_2NC_2H_4NHC_3H_6\text{-}Si(OH)_3$ in water 22% actives Low methanol content	Amino/Silanol			●														●				Adhesion promoter; coupling agent; resin additive; improves chemical bonding of resins to inorganic
DOWSIL™ Z-6121 Silane	Aminoethylaminopropyltrimethoxysilane $H_2NC_2H_4NHC_3H_6\text{-}Si(OCH_3)_3$ 50% active in n-butanol/methanol	Amino/ Alkoxysilane			●																●	Improves chemical bonding of resins to inorganic material
DOWSIL™ Z-6701 Silane	Methyldimethoxysilane $CH_3Si(H)(OCH_3)_2$	Methyl/ Hydrogen/ Methoxysilane				●														●			Reactive in hydrosilation to form methoxysilyl functional materials; polymer modification for adhesives and sealants, etc.

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XIAMETER™ OFX-5084 FLUID	Methyl hydrogen Methyloctyl siloxane Trimethylsilyl terminated	Methyl/Octyl/ Hydrogen Siloxane				●				●								●				Crosslinker for thermoplastic elastomers; hydrophobe for inorganic materials
DOWSIL™ AY 42-119	Epoxy functional resin	Epoxy/Phenyl												●		●						Component of EMC; imparts flexibility/stress relief and flame retardancy; improves adhesion to metal; partially replaces epoxy resin
DOWSIL™ SF 8421 EG FLUID	Epoxy and polyether modified dimethylsiloxane	Epoxy/ Polyether											●	●								Component of EMC for stress relief, flowability; partially replaces epoxy resin
DOWSIL™ TREFIL F-202 Silicone Powder	100% active, free-flowing siloxane powders	Methyl					●	●		●												Compliant with FDA 177.2600
XIAMETER™ MEM-0075 Emulsion	Emulsion of siloxane with silicon hydride functionality (SiH)	Methyl/ Hydrogen/ Silicone Emulsion																●	●			Good water repellency for inorganic materials such as glass compared to standard silicone emulsions
DOWSIL™ 2-7887 Emulsion	50% active Reactive methyl hydrogen/ resin emulsion	Methyl/Hydrogen/ Silicone Resin Emulsion	●							●												For aqueous-based application systems for inorganic materials such as fillers and flame retardants to aid dispersion and composite flowability
XIAMETER™ MEM-1581 Emulsion	OH-functional polydimethylsiloxane emulsion 40% active	Hydroxyl/PDMS																●	●			Developed to give greater degree of hydrophobicity to glass and mineral wool insulation products than standard silicone emulsions; compatible with water borne phenolic resin formulations; retains hydrophobing properties after processing at high temperatures
DOWSIL™ 2-1251 Masonry Water Repellent Emulsion	Silane/siloxane resin emulsion	Methyl/Octyl/ Hydrogen/ Silicone Resin Emulsion																●	●			Improves hydrophobicity in aqueous based application system for inorganic material like glass fiber

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