

Silicones Simplified

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XIAMETER® brand Silanes Selection Guide

Organic Functionality	Product	Description	Fiberglass and Composites				Rubber Compounding				Plastic Compounding				Polymer Manufacturing		Mineral and Filler Treatment		Adhesives and Sealants	
			Fiberglass Insulation	Fiberglass Reinforcement	Mineral Reinforcement	Foundry Resins	Tires	General Rubber Goods	Wire and Cable	Filler Dispersing Aids	Crosslinkers for PE	Coupling Agents	Filler Dispersing Aids	Wire and Cable	Comonomers	Organoreactive Modifiers	Coupling Agents	Dispersing Aids	Adhesives	Sealants
Alkyl	XIAMETER® OFS-0772 Siliconate	Sodium methyl silicate	✓														✓			
Alkyl	XIAMETER® OFS-0777 Siliconate	Potassium methyl silicate	✓														✓			
Alkyl	XIAMETER® OFS-1579 Silane	Methyl and ethyl triacetoxysilane																✓	✓	
Alkyl	XIAMETER® OFS-2306 Silane	i-Butyltrimethoxysilane ((CH ₃) ₂ CH-Si(OCH ₃) ₂); hydrophobing and dispersing agent	✓						✓					✓			✓			
Alkyl	XIAMETER® OFS-6070 Silane	Methyltrimethoxysilane CH ₃ -Si(OCH ₃) ₂ ; hydrophobing and dispersing agent	✓														✓		✓	
Alkyl	XIAMETER® PMX-6079 Fluid	Hexamethyldisilazane (Me ₂ Si) ₂ NH; hydrophobing agent for glass surfaces and inorganic fillers		✓	✓															
Alkyl	XIAMETER® OFS-6341 Silane	n-Octyltriethoxysilane (nOTES, C ₈ H ₁₇ -Si(OC ₂ H ₅) ₂); effective hydrophobing and dispersing agent with long alkyl chain	✓						✓								✓			
Alkyl	XIAMETER® OFS-6366 Silane	Methyltrimethoxysilane; high purity	✓														✓		✓	
Alkyl	XIAMETER® OFS-6370 Silane	Methyltriethoxysilane	✓														✓		✓	
Alkyl	XIAMETER® OFS-6778 Siliconate ¹	Potassium methyl silicate	✓														✓			
Amino	XIAMETER® OFS-6020 Silane	Aminoethylaminopropyltrimethoxysilane H ₂ NC ₂ H ₄ NHC ₃ H ₆ -Si(OCH ₃) ₂ ; coupling agent for many thermoset and thermoplastic resins with glass or mineral fillers	✓	✓	✓	✓					✓						✓		✓	
Chloro	XIAMETER® OFS-6076 Silane	Chloropropyltrimethoxysilane ClC ₃ H ₆ -Si(OCH ₃) ₂ ; coupling agent, chemical reactant for making other methoxysilanes		✓	✓			✓	✓								✓			
Epoxy	XIAMETER® OFS-6040 Silane	Glycidoxypropyltrimethoxysilane CH ₂ (O)CHCH ₂ OC ₃ H ₆ -Si(OCH ₃) ₂ ; coupling agent for many thermoset resins with glass or mineral fillers	✓	✓	✓												✓		✓	
Epoxy	XIAMETER® OFS-6106 Silane	Mixture of Glycidoxypropyltrimethoxysilane (XIAMETER® OFS-6040 Silane) with a melamine resin; general-purpose coupling agent for thermoset resins		✓																
Methacrylate	XIAMETER® OFS-6030 Silane	Methacryloxypropyltrimethoxysilane H ₂ C=CH(CH ₂)C(O)OC ₃ H ₆ -Si(OCH ₃) ₂ ; coupling agent for unsaturated resin systems		✓	✓														✓	
Phenyl	XIAMETER® OFS-6124 Silane	Phenyltrimethoxysilane (C ₆ H ₅ -Si(OCH ₃) ₂); hydrophobing agent and high-temperature additive for other coupling agents		✓	✓												✓			
Sulfur	XIAMETER® OFS-6920 Silane	Bis-triethoxysilylpropylsulfidodisilane (TESPD); coupling agent for silica-filled rubber						✓	✓											
Sulfur	XIAMETER® OFS-6925 Silane	Bis-triethoxysilylpropylsulfidodisilane (TESPD); 50% on carbon black; coupling agent for silica-filled rubber						✓	✓											
Sulfur	XIAMETER® OFS-6940 Silane	Bis-triethoxysilylpropyltetrasulfidodisilane (TESPT); coupling agent for silica-filled rubber						✓	✓											
Sulfur	XIAMETER® OFS-6945 Silane	Bis-triethoxysilylpropyltetrasulfidodisilane (TESPT); 50% on carbon black; coupling agent for silica-filled rubber						✓	✓											
Vinyl	XIAMETER® OFS-6300 Silane	Vinyltrimethoxysilane (H ₂ C=CH-Si(OCH ₃) ₂); coupling agent for mineral-filled rubber; crosslinker		✓	✓					✓	✓	✓	✓	✓	✓	✓	✓		✓	
Vinyl	XIAMETER® OFS-6518 Silane	Vinyltriethoxysilane (H ₂ C=CH-Si(OC ₂ H ₅) ₂); coupling agent for mineral-filled rubber; crosslinker		✓	✓					✓	✓	✓	✓	✓	✓	✓	✓		✓	
None	XIAMETER® OFS-6697 Silane	Tetraethoxysilane (TEOS, Si(OC ₂ H ₅) ₄); diluent for zinc-rich primers; additive for other coupling agents																		

¹Available only in Asia.

Product	Organic Reactivity or Alkyl Type	Inorganic (Alkoxy) Reactivity	Uses	Benefits	Market	Resin System Compatibility	Percent Actives	Molecular Weight	CAS #
XIAMETER® OFS-0772 Silicate	Methyl	Silanol	Hydrophobing	Hydrophobic finish	Glass fiber; filler treatment	—	30%	—	16589-43-8
XIAMETER® OFS-0777 Silicate	Methyl	Silanol	Hydrophobing	Hydrophobic finish	Glass fiber; filler treatment	—	40%	—	31795-24-1
XIAMETER® OFS-1579 Silane	Methyl and Ethyl	Acetoxy	Crosslinking	As a crosslinker for acetoxy-cured silicone RTVs	Adhesives and sealants	—	—	—	4253-34-3 17689-77-9
XIAMETER® OFS-2306 Silane	i-Butyl	Methoxy	Hydrophobing; filler dispersion	Hydrophobing surfaces and particles; improving dispersion of minerals in organic materials	Fiberglass insulation; mineral fillers; rubber	—	96%	178	18395-30-7
XIAMETER® OFS-6070 Silane	Methyl	Methoxy	Hydrophobing	Improved hydrophobicity of fillers and fibers; improved filler/fiber dispersibility in organic polymers	Fiberglass; filler treatment	—	95%	136	1185-55-3
XIAMETER® PMX-6079 Fluid	Trimethylsilyl	Amino	Silylating agent; hydrophobing	—	—	—	96%	161	999-97-3
XIAMETER® OFS-6341 Silane	n-Octyl	Ethoxy	Hydrophobing; dispersing agent	Improved hydrophobicity of fillers and fibers; improved filler/fiber dispersibility in organic polymers	Fiberglass; filler treatment	—	98%	276	2943-75-1
XIAMETER® OFS-6366 Silane	Methyl	Methoxy	Hydrophobing	Improved hydrophobicity of fillers and fibers; improved filler/fiber dispersibility in organic polymers	—	—	≥99.5%	136	1185-55-3
XIAMETER® OFS-6370 Silane	Methyl	Ethoxy	Hydrophobing	Improved hydrophobicity of fillers and fibers; improved filler/fiber dispersibility in organic polymers	—	—	≥97%	178	2031-67-6
XIAMETER® OFS-6778 Silicate ¹	Methyl	Silanol	Hydrophobing	Hydrophobic finish	Glass fiber; filler treatment	—	40%	—	31795-24-1
XIAMETER® OFS-6020 Silane	Amino	Methoxy	Coupling; adhesion promotion; crosslinking	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	Fiberglass; fillers; coatings; adhesives; sealants; foundry; rubber; plastic; resin	Acrylic; nylon; epoxy; phenolic; PVC; urethane; melamine; nitrile	100%	222	1760-24-3
XIAMETER® OFS-6076 Silane	Chloro	Methoxy	—	—	—	Urethanes; epoxy; nylon; phenolic; polyolefin	97%	198.5	2530-87-2
XIAMETER® OFS-6040 Silane	Epoxy	Methoxy	Coupling; adhesion promotion	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	Fiberglass; filler treatment	Epoxy; PBT; urethane; acrylic; polysulphide	>98.5%	234	2530-83-8
XIAMETER® OFS-6106 Silane	Epoxy	Methoxy	Coupling; adhesion promotion	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	Fiberglass; filler treatment	Epoxy; urethane; phenolic; PEEK; polyester	100%	—	2530-83-8
XIAMETER® OFS-6030 Silane	Methacryl	Methoxy	Coupling; adhesion promotion	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	Fiberglass; glass fabric for printed circuit boards; filler treatment	Unsaturated polyester; acrylic; EVA; polyolefin	98%	249	2530-85-0
XIAMETER® OFS-6124 Silane	Phenyl	Methoxy	Improve silane thermal stability	Improve thermal stability of silane mixture	Fiberglass; fillers	—	94%	198	2996-92-1
XIAMETER® OFS-6920 Silane	Sulfido	Ethoxy	Coupling; adhesion promotion	Improved properties of silica-filled tire rubber; improved processability versus XIAMETER® OFS-6940 Silane	Tire; filler treatment	Organic rubber	100%	474	56706-10-6
XIAMETER® OFS-6925 Silane	Sulfido	Ethoxy	Coupling; adhesion promotion	Improved properties of silica-filled tire rubber; improved processability versus XIAMETER® OFS-6945 Silane	Tire; filler treatment	Organic rubber	50%	474	56706-10-6

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continued

Product	Organic Reactivity or Alkyl Type	Inorganic (Alkoxy) Reactivity	Uses	Benefits	Market	Resin System Compatibility	Percent Actives	Molecular Weight	CAS #
XIAMETER® OFS-6940 Silane	Sulfido	Ethoxy	Coupling; adhesion promotion	Improved properties of silica-filled tire rubber	Tire; filler treatment	Organic rubber	100%	538	40372-72-3
XIAMETER® OFS-6945 Silane	Sulfido	Ethoxy	Coupling; adhesion promotion	Improved properties of silica-filled tire rubber; dry powder for easier handling	Tire; filler treatment	Organic rubber	50%	538	40372-72-3
XIAMETER® OFS-6300 Silane	Vinyl	Methoxy	Coupling; adhesion promotion; polymer modification; crosslinking; water scavenging	Improved adhesion of organic polymer to inorganic substrate or filler; improved wet and dry physical properties of glass fiber-filled composite; improved mixing and compatibility of filled systems	Fiberglass; filler treatment; rubber; plastics; sealants	Graft to polyethylene for moisture crosslinking; EPBM; SBR; polyolefin	99%	148	2768-02-7
XIAMETER® OFS-6518 Silane	Vinyl	Ethoxy	Coupling; adhesion promotion; polymer modification; crosslinking; water scavenging	Improved adhesion of organic polymer to inorganic substrate or filler; improved wet and dry physical properties of glass fiber-filled composite; improved mixing and compatibility of filled systems	Fiberglass; filler treatment; rubber; plastics; sealants	Graft to polyethylene for moisture crosslinking; EPBM; SBR; polyolefin	95%	190	78-08-0
XIAMETER® OFS-6697 Silane	None	Ethoxy	Polymerization of silicone resins for use in paints and other surface modification applications; intermediate for sol-gel process	Pure grade; inorganic binder; UV stable; can be used as a crosslinker; used for sol-gel processes in combination with other alkylsilanes			>99%	208	78-10-4

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Visit xiameter.com to learn more about the many product options available to you from the XIAMETER® brand.

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