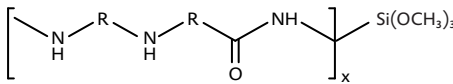
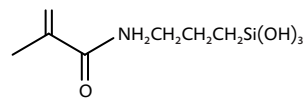
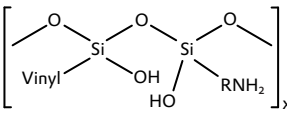


Evonik Silane Products for Glass Fibers

CHEMICAL STRUCTURES AND TYPICAL PROPERTIES

Product name	Chemical name	Formula	Formula molecular weight
AMINO			
Dynasylan® AMEO	Gamma-aminopropyltriethoxysilane	$\text{NH}_2\text{CH}_2\text{CH}_2\text{CH}_2\text{Si}(\text{OCH}_2\text{CH}_3)_3$	221
Dynasylan® SIVO 214	Confidential aminosilane	Improved AMEO	251
Dynasylan® AMMO	Gamma-aminopropyltrimethoxysilane	$\text{NH}_2\text{CH}_2\text{CH}_2\text{CH}_2\text{Si}(\text{OCH}_3)_3$	179
Dynasylan® 1122	Bis-(triethoxysilylpropyl)amine	$\text{NH}[\text{CH}_2\text{CH}_2\text{CH}_2\text{Si}(\text{OCH}_2\text{CH}_3)_3]_2$	426
Dynasylan® 1124	Bis-(trimethoxysilylpropyl)amine	$\text{NH}[\text{CH}_2\text{CH}_2\text{CH}_2\text{Si}(\text{OCH}_3)_3]_2$	342
Dynasylan® DAMO	N-beta-(Aminoethyl)-gamma-aminopropyltrimethoxysilane	$\text{NH}_2\text{CH}_2\text{CH}_2\text{NHCH}_2\text{CH}_2\text{CH}_2\text{Si}(\text{OCH}_3)_3$	222
Dynasylan® DAMO-T	N-beta-(Aminoethyl)-gamma-aminopropyltrimethoxysilane (tech)	$\text{NH}_2\text{CH}_2\text{CH}_2\text{NHCH}_2\text{CH}_2\text{CH}_2\text{Si}(\text{OCH}_3)_3$	222
Dynasylan® TRIAMO	Triaminofunctional silane	$\text{NH}_2\text{CH}_2\text{CH}_2\text{NHCH}_2\text{CH}_2\text{NHCH}_2\text{CH}_2\text{CH}_2\text{Si}(\text{OCH}_3)_3$	265
Dynasylan® 1161 EQ	Benzylamino-silane (50 % in MeOH)	$\text{PhCH}_2\text{NHCH}_2\text{CH}_2\text{NH}_2(\text{Cl})\text{CH}_2\text{CH}_2\text{CH}_2\text{Si}(\text{OCH}_3)_3$	347
VPS 2961	Benzylamino-silane (60 % in water)	$\text{PhCH}_2\text{NHCH}_2\text{CH}_2\text{NH}_2(\text{Cl})\text{CH}_2\text{CH}_2\text{CH}_2\text{Si}(\text{OH})_x$	oligomer
VPS 1178	Vinylbenzylamino-silane (42 % ~in MeOH)	$\text{CH}_2=\text{CHPhCH}_2\text{NHCH}_2\text{CH}_2\text{NH}_2(\text{Cl})\text{CH}_2\text{CH}_2\text{CH}_2\text{Si}(\text{OCH}_3)_3$	373
VPS 2978	Vinylbenzylamino-silane (40 % in water)	$\text{CH}_2=\text{CHPhCH}_2\text{NHCH}_2\text{CH}_2\text{NH}_2(\text{Cl})\text{CH}_2\text{CH}_2\text{CH}_2\text{Si}(\text{OH})_x$	oligomer
VPS 2996A	Polyazamide silane (53 % in MeOH)		oligomer
VPS 2975	Quaternary amine silane (48 % in water)	$\text{RN}(\text{CH}_3)_2\text{CH}_2\text{CH}_2\text{CH}_2\text{Si}(\text{OH})_x$	oligomer
VPS 2990	Methacrylamido-silane (40 % in water)		oligomer
HS 1151	Gamma-aminopropylsilanol (40 % in water)	$\text{NH}_2\text{CH}_2\text{CH}_2\text{CH}_2\text{Si}(\text{OH})_x$	oligomer
HS 1153	Gamma-aminopropylsilanol (88 % in water)	$\text{NH}_2\text{CH}_2\text{CH}_2\text{CH}_2\text{Si}(\text{OH})_x$	oligomer
Dynasylan® 2907	Vinyl-aminoalkylsilanol (60 % in water)		oligomer
VPS 1208	Unique aminosilane / organic ester composition	Primary amine	222
HS 2775	Triaminofunctional silanol (40 % in water)	$\text{NH}_2\text{CH}_2\text{CH}_2\text{NHCH}_2\text{CH}_2\text{NHCH}_2\text{CH}_2\text{CH}_2\text{Si}(\text{OH})_x$	oligomer

Evonik Silane Products for Glass Fibers

Product name	Chemical name	Formula	Formula molecular weight
UREIDO			
VPS 2101	3-ureidopropyltrimethoxysilane		222
Dynasylan® 2201 EQ	3-ureidopropyltriethoxysilane 50 % in methanol		264
VPS 2202	3-ureidopropyltriethoxysilane with 10 % EtOH		274
EPOXY			
Dynasylan® GLYMO	Gamma-glycidoxypropyl-trimethoxysilane		236
Dynasylan® GLYEO	Gamma-glycidoxypropyl-triethoxysilane		278
METHACRYLOXY			
Dynasylan® MEMO	Gamma-methacryloxypropyl-trimethoxysilane	$\text{CH}_2=\text{C}(\text{CH}_3)\text{CO}_2\text{CH}_2\text{CH}_2\text{CH}_2\text{Si}(\text{OCH}_3)_3$	248
MEEO	Gamma-methacryloxypropyl-triethoxysilane	$\text{CH}_2=\text{C}(\text{CH}_3)\text{CO}_2\text{CH}_2\text{CH}_2\text{CH}_2\text{Si}(\text{OCH}_2\text{CH}_3)_3$	290
VINYL			
Dynasylan® VTMO	Vinyltrimethoxysilane	$\text{CH}_2=\text{CHSi}(\text{OCH}_3)_3$	148
Dynasylan® VTEO	Vinyltriethoxysilane	$\text{CH}_2=\text{CHSi}(\text{OCH}_2\text{CH}_3)_3$	190
ALKYL SILANE			
Dynasylan® SIVO 850	Oligomeric alkyl silane (50 % in water)		oligomer
SILANE POLYETHER			
Dynasylan® 4148	Polyether functional trimethoxysilane	$\text{MeO}(\text{CH}_2\text{CH}_2\text{O})_x\text{Si}(\text{OCH}_3)_3$	< 500

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