

Specialty Silicone Raw Materials



AB SPECIALTY SILICONES • RAW MATERIAL SOLUTIONS

WAUKEGAN, IL • WWW.ANDISIL.COM

ABOUT AB

AB SPECIALTY SILICONES is a US Manufacturer and Worldwide Distributor of specialty silicone chemicals. With customer focus at the forefront, our goal is to be the one source for all of your silicone raw material needs – providing the highest quality materials, service and technical expertise available.

Our core brand is Andisil[®], representing high quality materials and encompassing a broad product catalog serving many industries: Personal Care, Roof Coatings, Chemical Manufacturing, Dental & Medical, Mold Making, Electronic Encapsulation, Adhesives & Sealants, Coatings, Gypsum, Mineral & Fiber Treatment, Pulp Manufacturing, Pressroom et al.

At the heart of our company is our vision -Enthusiasm & Innovation Create Success. Our team works hard to let our customers know how important they are. Present us with your needs, and we will figure out the possibilities.

- » Product Quality.
- » Customer Service.
- » Technical Expertise.



US Manufacturer Headquartered in Waukegan, Illinois



IL-Based Warehousing

Ò

- Over 200,000 Sq Ft of warehouse space
- Results in minimal lead times

TABLE OF CONTENTS

Antifoams & Defoamers

Emulsions	.4
Compounds	.5
Concentrates	.5
Powders	.6
Performance Modifiers	.6

Catalysts

Platinum Catalyst7
Tin Catalyst7
Specialty Catalyst7

Crosslinkers

Pendant	8
Hybrid	8
Specialty	9
Chain Extenders	9
Oximes	9

Cyclic Siloxanes & Volatile Fluids

Cyclic Siloxanes10)
Volatile Fluids10)

Emulsions

Silicone Emulsions	11
Specialty Emulsions	12
Hybrid Emulsions	12
J · · · · · ·	

Fluoros

Fluoro Silicone1	3
Fluoro Cyclics1	3

Methyl Hydrogen Fluid

Methyl Phenyl Silicones

Methyl Phenyl Fluids	14
Methyl Phenyl Polymers	15
Methyl Phenyl Resins	15

One Part RTV Materials

Oximes Silane Crosslinkers	9
Silanol Fluids1	6
Tin Catalyst	7

Reactive Silanol Polymers

Silanes

Acetoxy	17
Alkoxy	17
Amino	18
Chloro	18
Ероху	19
Ethyl	19
Methacryloxy	19
Phenyl	19
Sulfur	20
Ureido	20
Ероху	20

Silica

Fumed Silica	21
--------------	----

Silicone Masterbatch

Silica Filled Vinyl Polymers21

Silicone Gums & Bases

Silicone Gum	.22
Bases	.22

Silicone Fluids / Dimethicones

Low Viscosity Fluids	.10
Silicone Fluids	.23

Silicone Polyethers

Two Part RTV Materials

Platinum Catalyst	7
Pendant Crosslinkers	8
Hybrid Crosslinkers	8
Chain Extenders	9
Vinyl Polymers	26
Vinyl Resins	27

Vinyl Silicones

Vinyl Polymers	26
Vinyl Resins	27
Specialty Vinyl Polymers	27

Miscellaneous

Divinyltetramethyldisiloxane	27
HMDZ	21
Methyl Vinyl Cyclics	27



Antifoams & Defoamers

Silicone antifoam and defoamer solutions provide various foam control and prevention options for industrial applications where aggressive foaming occurs. Our silicone antifoams and defoamers offer:

- Knockdown resistance
- Improved persistence and drainage
- Cost efficient solutions
- Ease of use
- Food & Kosher grades available

Antifoam Emulsions

Designed as highly efficient, ready-to-use and easily dispersible foam control options for aqueous systems including food & kosher grade applications (FGK).

PRODUCT	% ACTIVE	VISCOSITY	INDUSTRIES	BENEFITS
Andifoam DF 210	10.0	2,000 cP	General	General Easy to use
Andifoam DF 220	20.0	2,000 cP	manufacturing	Effective in hot and cold systems
Andifoam DF 230	30.0	3,000 cP		
Andifoam DF 210FGK*	10.0	1,900 cP	.,900 cP .,500 cP 2,000 cP • Secondary food contact • Compliant FDA Regulations 21 CFR 173. • 21 CFR 176.170 and 21 CFR 176.180 • Kosher Grade	• Compliant FDA Regulations 21 CFR 173.340,
Andifoam DF 220FGK*	20.0	1,500 cP		Kosher Grade
Andifoam DF 230FGK*	30.0	2,000 cP		
Andifoam DF 430	30.0	8,000 cP	 General manufacturing Latex manufacturing Waste water treatment Oil & Gas Distillation systems Industrial cleaners 	 Quick knockdown Antifoaming in aqueous systems of extreme pH Excellent long-term antifoaming performance, even in alkaline solutions De-aeration
Andifoam DF 3050	50.0	2,500 cP	 Textile applications including beck and jet dyeing 	 Highly efficient antifoam at low concentration levels (25-50ppm) Sustained foam control throughout the dye cycle Stable at high shear

• Stability to a wide range of pH and temperature conditions

* Food & Kosher Grade



100% Active silica-filled polydimethylsiloxane antifoam compounds formulated for use in applications where aggressive foaming occurs.

Compounds	aggressive	foaming occurs	•	
PRODUCT	% ACTIVE	VISCOSITY	INDUSTRIES	BENEFITS
Andifoam DFA 100M FGK*	100.0	2,500 cP	 Pesticide production Syrup processes Edible oil manufacturing 	 Compliant FDA Regulations 21 CFR 173.340, 21 CFR 176.170 and 21 CFR 176.180 Kosher Grade
Andifoam DFA 400	100.0	2700 cP	 Resin manufacturing 	EconomicalEasy to use
High Viscosity	Outstandin	g foam control a	at low usage levels com	npared to conventional mineral-based antifoams.
Andifoam DFA 3000	100.0		• High persistence,	branched antifoam compound for high shear applications
Andifoam DFA 3300	100.0	45,000 cP	 Good persistence; 	recommended for softwood black liquors
Andifoam DFA 3400	100.0	40,000 cP	Excellent foam kn	ockdown and persistence; improved drainage
Andifoam DFA 3500	100.0	30,000 cP	 Very good foam kr and softwood blace 	nockdown and persistence; recommended for both hardwood ck liquors
Andifoam DFA 3600	100.0	35,000 cP	 Easy to emulsify; v all foaming enviro 	very good foam knockdown and persistence; recommended for nments
Andifoam DFA 8000	100.0		 Easy to emulsify; I applications when 	nigh persistence, modified silicone antifoam compound for e compatibility is critical
Antifoam Concentrates	100% active, emulsifiable and self-dispersing antifoam concentrates composed of a blend of silicone glycol, polydimethylsiloxanes and silica offer outstanding persistence at a fraction of the usage levels required when using conventional mineral oil-based antifoams. These pour-able concentrates are particularly useful in processes where high dosing accuracy is desired.			
PRODUCT	% ACTIVE	VISCOSITY	INDUSTRIES	BENEFITS
Andifoam DFC 3100 Andifoam DFC 3200	100.0 100.0	15,000 cP 25,000 cP	 Kraft and sulfite process stock washing Chemical 	 Cost effective Outstanding foam control and process aid Improved pulp drainage Reduced soda losses and steam consumption

Antifoam

- manufacturing
- Formulated with materials that conform to FDA Regulation 21 CFR 176.170, 176.180 and 176.210





Antifoams & Defoamers

Antifoam Powders 100% Active silica-filled polydimethylsiloxane antifoam compounds formulated for use in applications where aggressive foaming occurs. Active at low addition levels

PRODUCT	% ACTIVE	INDUSTRIES	BENEFITS
Andifoam DFG 4010	10.0	 Industrial cleaners In-wash foam-control for laundry powder detergents 	 No performance loss on storage under warm and humid conditions in the detergent powder Free-flowing, non-caking granules, easy to incorporate by dry-mixing 100% detergent active components Suitable for a wide range of surfactants, over a wide range of pH and washing temperatures Performance not dependent on water hardness
Andifoam DFG 4120	20.0	 Biotechnology applications Ultra-filtration systems Food grade applications Brewing / Fermentation Waste Water Treatment Fertilizer 	 FDA-permitted for many food uses Powdered form allows for convenient weighing and measuring; easy storage For foam control in various applications without reducing yield or interfering with bacterial growth

Performance Modifiers

EO / PO containing siloxylated polyethers used as performance modifiers for antifoams.

PRODUCT	HLB	VISCOSITY	INDUSTRIES	BENEFITS
Andisil [®] SP 5100	5.7	2,300 cSt	 Pulp & paper Coatings PU Foam 	 Used for compatibilizing MDI with water Additive to provide slip & mar resistance Surfactant used in preparation of flexible PU foam
Andisil [®] SP 5300	6.7	360 cSt	 Pulp & paper General Purpose 	 Stabilizes emulsions in various media ex. alcohols Preparation of oil in water (O/W) or silicone in water emulsions Soluble in ethanol; water dispersible Knockdown & persistence booster for antifoams Stability booster for antifoam emulsions
Andisil [®] SP 5200	3.4	17,000 cSt	Pulp & paper	Drainage / De-aerator booster for pulp antifoams
Andisil [®] SP 5500	6.3	4,450 cSt	General Purpose	Knockdown booster for antifoamsStability booster for antifoam emulsionsWater soluble



Catalysts

Used to cure two part RTV formulations. These catalysts are available with varying platinum contents and diluents. Customized platinum content and vinyl polymer viscosity are also available.

	also avallable.		
ТҮРЕ	% PT	DILUENT	
Karstedt	20.00%	VTS	
Karstedt	1 - 3.25%	200, 500, 1000 cSt vinyl polymer	
Ashby's Catalyst	2%	Vinyl Cyclic	
Tip Catalyst	High activity liquid ca	talysts used in the condensation cure of silicones, and the synthe-	

sis of polyurethanes & esters.

Tin Catalyst

NAME	DESCRIPTION	CAS#
Andisil® TL 10	Dibutyltin dilaurate	77-58-7
Andisil® TL 28	Dimethyltin dineodecanoate	68928-76-7

Specialty Catalyst

Specially formulated to cure formulations with a high phenyl content or refractive index.

NAME	% PT	DESCRIPTION
Andisil [®] 782 Catalyst	2.25	For use with high phenyl content (> 35% by wt) Si polymers
Andisil [®] 785 Catalyst	0.5	For use in high RI formulations

Markets & Applications

- Dental & Medical
- Electronic Encapsulation
- Mold Making
- Roof Coatings
- Rubber Manufacturing
- One Part RTVs
- Two Part RTVs



Crosslinkers

Pendant Crosslinkers Pendant crosslinkers have random pendant silicon-hydride functionality and are trimethylsiloxy-terminated.

NAME	DESCRIPTION	SIH CONTENT	VISCOSITY
Andisil® XL 1B	SiH Functional	0.95 mmole/gm	100 cSt
Andisil [®] XL 10	SiH Functional	7.55 mmole/gm	45 cSt
Andisil [®] XL 11	SiH Functional	4.35 mmole/gm	45 cSt
Andisil [®] XL 12	SiH Functional	1.10 mmole/gm	500 cSt
Andisil [®] XL 13	SiH Functional	3.80 mmole/gm	100 cSt
Andisil® XL 17	SiH Functional	1.95 mmole/gm	50 cSt

Hybrid Crosslinkers

Hybrid Crosslinkers have both pendant and terminal silicon-hydride functionality.

NAME	DESCRIPTION	SiH CONTENT	VISCOSITY
Andisil [®] XL 1340*	SiH Functional	3.0 mmole/gm	50 cSt
Andisil® XL 1341*	SiH Functional	4.2 mmole/gm	40 cSt
Andisil [®] XL 1342*	SiH Functional	8.6 mmole/gm	50 cSt

* Random Pendant & Terminal Functional

Markets & Applications

- Adhesives & Sealants
- Dental & Medical
- Electronic Encapsulation
- Mold Making
- Roof Coatings
- Rubber Manufacturing
- One Part RTVs
- Two Part RTVs



Crosslinkers

Specialty Crosslinkers Specialty Crosslinkers are used with high phenyl containing polymers (>13 mole % phenyl).

NAME	DESCRIPTION	SIH CONTENT	VISCOSITY
Andisil [®] XL 2450	SiH Functional	3.00 mmoles/gm	400 cSt
Andisil [®] XL 2460	SiH Functional	3.85 mmoles/gm	350 cSt
Andisil [®] XL 245 PT	SiH Functional	8.50 mmoles/gm	2.5 cSt

Chain Extenders

Chain Extenders have terminal silicon-hydride functionality.

NAME	DESCRIPTION	SiH CONTENT	VISCOSITY
Andisil [®] CE-4	Terminal SiH Functional	2.90 mmole/gm	4 cSt
Andisil [®] CE-13	Terminal SiH Functional	1.60 mmole/gm	14 cSt
Andisil [®] CE-500	Terminal SiH Functional	0.16 mmole/gm	500 cSt

Oxime Crosslinkers

Oxime crosslinkers are liquid raw materials for neutral condensation curing silicone sealants.

NAME	DESCRIPTION	CAS #
Andisil [®] MOS	Methyl tris(MEKO)silane	22984-54-9
Andisil [®] POS	Phenyl tris(MEKO)silane	34036-80-1
Andisil [®] VOS	Vinyl tris(MEKO)silane	2224-33-1
Andisil [®] TT 5050	Tetrakis(MEKO)silane in Toluene	
Andisil [®] MT 9010	90% MOS/10% TOS	
Andisil [®] VT 6535	65% VOS/35% TOS	



Cyclic Siloxanes & Volatile Fluids

Cyclics & Volatile Fluids are nonreactive silicone fluids used in many different industrial formulations for their:

Low surface tension – excellent spreadability and defoaming properties

Varying evaporation rates

As carriers for other raw materials including other silicones and oils

Solubility with a wide array of oils, waxes, and other raw materials

Exempt from VOC regulations, these products are useful for reducing the overall VOC concentration of a formulation when replacing / diluting VOC solvents

Markets & Applications

- Adhesives & Sealants
- Car Care
- Personal Care
- Roof Coatings
- Rubber Manufacturing

Cyclic Siloxanes

NAME	INCI NAME	VISCOSITY	D4%	D5%	D6%
Andisil [®] D4	Cyclotetrasiloxane	2 cSt	99		
Andisil [®] D5	Cyclopentasiloxane	4 cSt		96	
Andisil® D6	Cyclohexasiloxane	6 cSt			94
Andisil [®] D45	Cyclotetrasiloxane (and) Cyclopentasiloxane	4 cSt	70	30	
Andisil [®] D56	Cylcopentasiloxane (and) Cyclohexasiloxane	5 cSt		65	35

Volatile Fluids

NAME	INCI NAME	VISCOSITY
Andisil [®] SF 0.65	Disiloxane	0.65 cSt
Andisil [®] SF 1	Trisiloxane	1 cSt
Andisil [®] SF 1.5	Dimethicone	1.5 cSt
Andisil [®] SF 2	Dimethicone	2 cSt
Andisil [®] SF 3.5	Dimethicone	3.5 cSt



Emulsions

Silicone emulsions have various uses over a myriad of industries. They are easy to use and efficient carriers of desired silicone properties throughout formulations with high water content. Some of the many benefits of silicone emulsions are:

- Lubricity
- Shine/gloss
- Low surface tension
- Ease of formulation

Markets & Applications

- Food & Beverage Manufacturing
- Mineral & Fiber Treatment
- Personal Care
- Pressroom

Silicone Emulsions

NAME	% ACTIVE	VISCOSITY
Andisil [®] EM 100C	50	Emulsion of 100 cSt fluid
Andisil [®] EM 350 *†	35	Emulsion of 350 cSt fluid
Andisil [®] EM 350C *	60	Emulsion of 350 cSt fluid
Andisil [®] EM 1,000	35	Emulsion of 1,000 cSt fluid
Andisil [®] EM 1,000C	60	Emulsion of 1,000 cSt fluid
Andisil [®] EM 10,000	35	Emulsion of 10,000 cSt fluid
Andisil [®] EM 10,000C	50	Emulsion of 10,000 cSt fluid
Andisil® EM 10,000XC †	60	Emulsion of 10,000 cSt fluid
Andisil [®] EM 12,500	35	Emulsion of 12,500 cSt fluid
Andisil [®] EM 12,500C	50	Emulsion of 12,500 cSt fluid
Andisil [®] EM 60,000C	50	Emulsion of 60,000 cSt fluid
* Food & Kosher Grade + Food Packaging	Grade available	



Emulsions

Silicone emulsions have various uses over a myriad of industries. They are easy to use and efficient carriers of desired silicone properties throughout formulations with high water content. Some of the many benefits of silicone emulsions are:

- Lubricity
- Shine/gloss
- Release agent

Specialty Emulsions

- Low surface tension
- Ease of formulation

Markets & Applications

- Mineral & Fiber Treatment
- Personal Care
- Pressroom

Silicone Emulsions are non-flammable, non-toxic, nonionic emulsions of various viscosities

NAME	DESCRIPTION
AMODIMETHICONE EMULSIONS	
Andisil [®] EM 39	INCI: Amodimethicone (and) Trideceth-12 (and) Cetrimonium Chloride
Andisil® EM 49	INCI: Amodimethicone (and) Cetrimonium Chloride (and) Trideceth-12
CONSTRUCTION EMULSIONS	
Andisil [®] EM 7060	Concentrated emulsion of silanol functional fluid used as a release agent for plastic, asphalt, metals and shell core materials.
Hybrid Emulsions	Hybrid emulsions are silicone emulsions with anti-stat agents and conductivity additives – also called web conditioners – for use on high speed web printing presses. They are cost effective alternatives to conventional silicone emulsions.
NAME	DESCRIPTION
Andisil [®] WC 26	An optimal performing hybrid silicone solution, equivalent to a 60% pure silicone emulsion, that contains anti-stat agents and conductivity additives for use on high speed web printing presses.
Andisil [®] WC 18	A high performing hybrid silicone solution, equivalent to a 35% pure silicone emulsion, contains anti-stat agents and conductivity additives for use on web offset presses.
Andisil [®] WC 40	A high performing hybrid silicone solution that has 40% silicone content for use on web offset presses. Available with anti-stat agents and/or conductivity additives.
Andisil [®] EM 6008	A high performing hybrid silicone solution that contains extra anti-stat agents and conductivity additives for use on web offset presses.

of polydimethylsiloxane fluids.





Fluoros

Fluorosilicones offer a variety of industries many benefits including:

- Good high and low temperature stability
- Fuel, oil, and solvent resistant
- Electrical insulation
- Resistance to ultraviolet (UV) light
- Excellent durability and lubricity

Fluoro Silicone

Markets & Applications

- Coatings
- Lubricants & Greases
- Personal Care
- Rubber Manufacturing

NAME	DESCRIPTION	VISCOSITY	HYDRIDE %	REFRACTIVE INDEX
Andisil [®] FS 105	Trifluoropropyl Dimethicone	100 cSt		1.4
Andisil [®] FS 1,000	100% Active Fluorosilicone Oil	1,000 cSt	-	1.381
Andisil [®] FSXL 4505	Hydrogen Trifluoropropyl Dimethicone	450 cSt	0.48	1.401

Methyl Hydrogen Fluid

Methyl hydrogen fluids are methyl hydrogen polysiloxanes end-capped with trimethyl siloxy groups. Methyl hydrogen fluids are primarily used to treat powders to keep them dry, as an anti-caking material and are also highly water repellent.

Markets & Applications

- Gypsum
- Mineral & Fiber Treatment

Methyl Hydrogen Fluid

NAME	DESCRIPTION
Andisil [®] MH 20	Methyl Hydrogen Polysiloxane
Andisil [®] MH 30	Methyl Hydrogen Polysiloxane



Methyl Phenyl Silicones

Methyl Phenyl silicones are specialty products that have varying refractive index values that increase with phenyl concentration. The presence of phenyl offers many enhancements to formulations:

- Oxidation resistance
- Thermal stability
- Shear resistance
- Optical clarity
- Radiation resistance
- Extreme temperature resistance

Markets & Applications

- Electronic Encapsulation
- High & Low Temperature Sealants
- Personal Care
- Refractive Index Matching

Methyl Phenyl Fluids

Trimethylsiloxyterminated dimethyl diphenyl polysiloxanes that are available with various phenyl contents and viscosities. These fluids are most often used in high and low temperature applications to enhance temperature stability. Low temperature flexibility can be improved with phenyl contents of 3-8 mole %. Higher phenyl contents improve high temperature thermal stability.

NAME	PHENYL CONTENT	REFRACTIVE INDEX	VISCOSITY
Andisil [®] SF 1208	4.2 Mole%	1.4215	80 cSt
Andisil [®] SF 1221	4.2 Mole%	1.4230	160 cSt
Andisil [®] SF 1222 CV	7.6 Mole%	1.4360	225 cSt
Andisil [®] SF 1223	11.0 Mole%	1.4560	225 cSt
Andisil [®] SF 1230	13.0 Mole%	1.4630	13,000 cSt
Andisil [®] SF 1243 CV	23.0 Mole%	1.4900	175 cSt
Andisil [®] SF 1443 CV	23.0 Mole%	1.4950	380 cSt

+ Low volatility



Methyl Phenyl Polymers

Vinyl-terminated dimethyl diphenyl polysiloxanes that are available with various phenyl contents and viscosities. Phenyl contents of 3-8 mole % optimize low temperature characteristics. The higher phenyl content materials can be used for index matching which improves clarity. All of these polymers are used in addition curing formulations in which a platinum catalyst and silicon-hydride crosslinker are present.

NAME PHENYL CONTENT **REFRACTIVE INDEX** Andisil® SF 1421 3.0 Mole% 1.4150 1,100 cSt Andisil® SF 2421 CV ** 3.0 Mole% 1.4185 1,100 cSt Andisil® SF 1721 7.0 Mole% 1.4240 7.000 cSt Andisil® SF 2430 CV ** 1.4635 1,550 cSt 13.0 Mole% Andisil® SF 9530 CV ** 13.0 Mole% 1.4635 10.000 cSt Andisil® SF 2450 CV ** 29.0 Mole% 1.5165 625 cSt Andisil® SF 6550 CV ** 29.0 Mole% 1.5165 7,000 cSt Andisil® SF 2465 CV ** 42.0 Mole% 1.5400 2,500 cSt Andisil® SF 4565 CV ** 42.0 Mole% 1.5400 4,500 cSt ** Controlled Volatility Additives for the improvement of mechanical properties in high phenyl containing systems The mechanical properties of the unfilled RTV are rather poor, therefore the properties are improved with the **Methyl Phenyl Resins** addition of appropriate fillers i.e. carbon black, fumed or precipitated silica and other fillers well known to formulators with expertise in compounding silicones. NAME DESCRIPTION **REFRACTIVE INDEX** Andisil® MVT 152 Additive for high phenyl containing systems 1.5290 Andisil® MVT 154 1.5470

Additive for high phenyl containing systems



Reactive Silanol Polymers

Reactive silicone polymers are a series of silanol functional fluids with various viscosities and silanol contents. Reactive silicone polymers are useful in the treatment of fillers and as Anti-Structuring additives in high consistency silicone rubber and silicone Room Temperature Vulcanizing (RTV) formulations. The low viscosity grades can be used as reactive diluents for high viscosity polymers to adjust the overall viscosity of the formulation. Andisil® OH reactive silicone polymers are pure and do not contain any plasticizers or additives.

Markets & Applications

- Adhesives & Sealants
- One Part RTVs
- Roof Coatings
- Rubber Manufacturing

Silanol Fluids

NAME	DESCRIPTION	VISCOSITY	CAS#
Andisil [®] OH 30	Low viscosity 6% silanol fluid	30 cSt	70131-67-8
Andisil [®] OH 40	Low viscosity 3.5% silanol fluid	40 cSt	70131-67-8
Andisil [®] OH 70	Low viscosity 1.25% silanol fluid	70 cSt	70131-67-8
Andisil [®] OH 750	Silanol terminated	750 cP	70131-67-8
Andisil® OH 1,000	Silanol terminated	1,000 cP	70131-67-8
Andisil [®] OH 2,000	Silanol terminated	2,000 cP	70131-67-8
Andisil® OH 3,500	Silanol terminated	3,500 cP	70131-67-8
Andisil® OH 4,000	Silanol terminated	4,000 cP	70131-67-8
Andisil [®] OH 6,000	Silanol terminated	6,000 cP	70131-67-8
Andisil® OH 14,000	Silanol terminated	14,000 cP	70131-67-8
Andisil® OH 20,000	Silanol terminated	20,000 cP	70131-67-8
Andisil [®] OH 50,000	Silanol terminated	50,000 cP	70131-67-8
Andisil [®] OH 80,000	Silanol terminated	80,000 cP	70131-67-8
Andisil® OH 300,000	Silanol terminated	300,000 cP	70131-67-8
Andisil [®] MOH 100	Monofunctional Silanol Polymer	100 cSt	
Andisil [®] MOH 1,000	Monofunctional Silanol Polymer	1,000 cSt	
Andisil [®] MOH 10,000	Monofunctional Silanol Polymer	10,000 cSt	
Andisil [®] MOH 50,000	Monofunctional Silanol Polymer	50,000 cP	-





Silanes

Silanes are used in a variety of industrial applications as:

- Oxidation resistance
- Adhesion promoters
- Coupling agents
- Crosslinkers
- Moisture scavengers
- Resin additives
- Surface modifiers

Markets & Applications

- Adhesives & Sealants
- Chemical Manufacturing
- Coatings
- Mineral & Fiber Treatment
- Mold Making
- Roof Coatings
- Rubber Manufacturing

Acetoxy Silanes

NAME	CHEMICAL NAME	CAS #
Andisil [®] MTAS Silane	Methyltriacetoxysilane	4253-34-3
Andisil [®] ETAS Silane	Ethyltriacetoxysilane	17689-77-9
Andisil [®] MTAS/ETAS Silane	Methyltriacetoxysilane /Ethyltriacetoxysilane blend	
Andisil® MTAS/ETAS 30/70	30% Methyltriacetoxysilane, 70% Ethyltriacetoxysilane	
Andisil [®] 4153 Silane	Di-t-butoxydiacetoxysilane	13170-23-5

Alkoxy Silanes

NAME	CHEMICAL NAME	CAS #
Andisil [®] 137 Silane	Octyltriethoxysilane	2943-75-1
Andisil [®] 155 Silane	Vinyltriisopropoxysilane	18023-33-1
Andisil [®] 162 Silane	Methyltriethoxysilane	2031-67-6
Andisil [®] 163 Silane	Methyltrimethoxysilane	1185-55-3
Andisil [®] 1150 Silane	Bis-(triethoxysilyl)ethane	16068-37-4
Andisil [®] 6665 Silane	Octyltrimethoxysilane	3069-40-7
Andisil [®] TEOS Silane	Tetraethoxysilane	78-10-4
Andisil [®] TEOS-40 Silane	Tetraethoxysilane, Si-40	78-10-4



Silanes

Silanes are used in a variety of industrial applications as:

- Oxidation resistance
- Adhesion promoters
- Coupling agents
- Crosslinkers
- Moisture scavengers
- Resin additives
- Surface modifiers

Markets & Applications

- Adhesives & Sealants
- Chemical Manufacturing
- Coatings
- Mineral & Fiber Treatment
- Mold Making
- **Roof Coatings**
- Rubber Manufacturing

Amino Silanes

NAME	CHEMICAL NAME	CAS #
Andisil [®] 1100 Silane	Aminopropyltriethoxysilane	919-30-2
Andisil [®] 1110 Silane	Aminopropyltrimethoxysilane	13822-56-5
Andisil [®] 1120 Silane	Aminoethylaminopropyltrimethoxysilane (technical grade)	1760-24-3
Andisil [®] 1122 Silane	Aminoethylaminopropyltrimethoxysilane	1760-24-3
Andisil [®] 1130 Silane	Triamino-functional propyltrimethoxysilane	35141-30-1
Andisil [®] 1170 Silane	Bis(trimethoxysilylpropyl)amine	82985-35-1
Andisil [®] 2100 Silane	Aminopropylmethyldiethoxysilane	3179-76-8
Andisil® 2120 Silane	N-(2-Aminoethyl)-3-aminopropylmethyldimethoxysilane	3069-29-2
Andisil [®] 6021 Silane	Aminoethylaminopropyltriethoxysilane	5089-72-5

Chloro Silanes

NAME	CHEMICAL NAME	CAS #
Andisil [®] 6376 Silane	Chloropropyltriethoxysilane	5089-70-3
Andisil [®] 143 Silane	Chloropropyltrimethoxysilane	919-30-2



Epoxy Silanes

NAME	CHEMICAL NAME	CAS #
Andisil [®] 186 Silane	Epoxycyclohexylethyltrimethoxysilane	3388-04-3
Andisil [®] 187 Silane	Glycidoxypropyltrimethoxysilane	2530-83-8
Andisil [®] 6041 Silane	Glycidoxypropyltriethoxysilane	2602-34-8
Andisil [®] 78 Silane	Glycidoxypropylmethyldiethoxysilane	2897-60-1
Andisil [®] 1770 Silane	Epoxycyclohexylethyltriethoxysilane	10217-34-2

Methacryloxy Silanes

NAME	CHEMICAL NAME	CAS #
Andisil [®] 174 Silane	Methacryloxypropyltrimethoxysilane	2530-85-0
Andisil [®] 502 Silane	Methacryloxypropylmethyldimethoxysilane	14513-34-9

Phenyl Silanes

NAME	CHEMICAL NAME	CAS #
Andisil [®] 6123 Silane	Phenyltriethoxysilane	780-69-8
Andisil [®] 6124 Silane	Phenyltrimethoxysilane	2996-92-1



Silanes

Silanes are used in a variety of industrial applications as:

- Oxidation resistance
- Adhesion promoters
- Coupling agents
- Crosslinkers
- Moisture scavengers
- Resin additives
- Surface modifiers

Markets & Applications

- Adhesives & Sealants
- **Chemical Manufacturing**
- Coatings
- Mineral & Fiber Treatment
- Mold Making
- **Roof Coatings**
- Rubber Manufacturing

Sulfur Silanes

ppyltrimethoxysilane	4420-74-0
ppyltriethoxysilane	14814-09-6
propyltriethoxysilane	34708-08-2
oxysilyl)propyl]tetrasulfide	40372-72-3
ysilylpropyl)disulfide	56706-10-6
	opyltrimethoxysilane opyltriethoxysilane opropyltriethoxysilane ioxysilyl)propyl]tetrasulfide xysilylpropyl)disulfide

Ureido Silanes

NAME	CHEMICAL NAME	CAS #
Andisil [®] 1524 Silane	Ureidopropyltrimethoxysilane	23843-64-3
Andisil [®] 1160 Silane 50% Methanol	Ureidopropyltriethoxysilane	23779-32-0

Vinyl Silanes

NAME	CHEMICAL NAME	CAS #
Andisil [®] 151 Silane	Vinyltriethoxysilane	78-08-0
Andisil [®] 158 Silane	Vinyltris(isopropenoxy)silane	2530-83-8
Andisil [®] 171 Silane	Vinyltrimethoxysilane	2602-34-8
Andisil [®] 172 Silane	Vinyltris(2-methoxyethoxy)silane	2897-60-1



Silica

Medium surface fumed silica which imparts a significant increase in viscosity in liquid systems, free flow of powders and reinforcement of silicone and organic rubbers. Good high and low temperature stability

Markets & Applications

- One Part RTVs
- Two Part RTVs
- Roof Coatings
- Rubber Manufacturing

Fumed Silica

PROPERTIES	Andifil AS 150	Andifil AS 200
Specific Surface Area	150 ± 25 m2/g	200 ± 30 m2/g
Loss On Dry	≤ 3.0%	≤ 1.0 %
Loss On Ignition	≤ 2.5%	≤ 2.5%

Silicone Masterbatch

Andiform silicone masterbatch are vinyl silicone polymers compounded with silica for ease of use in RTV formulations. All of these products provide excellent improvement to physical properties and eliminate the hazards of handling or working with hydrophobic silicas. These products are additives for two part RTV formulations.

Markets & Applications

Dental & Medical

- Mold Making
- Two Part RTVs

Silica Filled Vinyl Polymers

NAME	DESCRIPTION	CAS #
Andiform C 100	Filled Silicone Vinyl-terminated Compound	68083-18-2
Andiform C 106	Filled Silicone Vinyl-terminated Compound	68083-18-2
Andiform C 300	Filled Silicone Vinyl-terminated Compound	68083-18-2
Andiform C 1000	Filled Silicone Vinyl-terminated Compound	68083-18-2

Additives

NAME	DESCRIPTION	CAS#
Andisil [®] HMDZ	Hexamethyldisilazane	999-97-3



Silicone Gums & Bases

Silicone Gums – Andigum:Vinyl containing silicone polymers Andigum Bases – General Purpose VMQ Silicone Base in 40 and 70 durometer

Markets & Applications

Rubber Manufacturing

Silicone Gum	Transparent; free of foreig Typical Specific Gravity: 0	gn material .97	Maximum Volatile Content: 1.3% Terminal Vinyl and/or Pendant Vinyl
PRODUCT	MOL. WT (10 ⁴)	VINYL (%)	
Andigum D110-9S	45 - 85	0.02 - 0.03	
Andigum D110-3S	45 - 75	0.21 - 0.24	
Silicone Bases	Translucent; free of foreig Specific Gravity: 1.09 -1.2	gn material 23	
PROPERTIES	ANDIGUM BASE 40F		ANDIGUM BASE 70F
Duro	40		70
Tensile, Psi	1377		1378
Elongation, %	875		625
Tear, Ppi	194		78.5
CS, %	37		
	CURATIVE		DBPH, 0.7%



Silicone Fluid / Dimethicone

Silicone fluids / Dimethicones are a series of fluids with various viscosities and of excellent purity. Chemically known as dimethyl polysiloxane, they are completely soluble in all viscosities of dimethyl polysiloxane fluids and useful due to their many benefits:

- Thermal stability
- Resistance to change with changes in temperature
- Heat stable

Silicone Fluid

- Resistant to oxidation
- Inert, non-corrosive, nontoxic
- Clear and colorless
- Excellent water repellency
- Good dielectric properties
- Low surface tension
- Very low vapor pressure
- High flash point

Markets & Applications

- Car Care
- Food & Beverage Processing
- Personal Care
- Rubber Manufacturing

NAME	VISCOSITY	RI	VOLATILE %
Andisil [®] SF 5	5 cSt	1.397	-
Andisil [®] SF 10	10 cSt	1.399	0.01
Andisil [®] SF 20	20 cSt	1.401	0.045
Andisil [®] SF 50	50 cSt	1.402	0.005
Andisil [®] SF 100	100 cSt	1.403	0.005
Andisil [®] SF 200	200 cSt	1.403	0.005
Andisil [®] SF 350 *	350 cSt	1.4035	0.005
Andisil [®] SF 500	500 cSt	1.4035	0.005
Andisil [®] SF 1,000	1,000 cSt	1.4035	0.005
Andisil [®] SF 5,000	5,000 cSt	1.4035	0.015
Andisil [®] SF 10,000	10,000 cSt	1.4035	0.02
Andisil [®] SF 12,500	12,500 cSt	1.4035	0.005
Andisil [®] SF 30,000	30,000 cSt	1.4035	0.005
Andisil [®] SF 60,000	60,000 cSt	1.404	0.02
Andisil [®] SF 100,000	100,000 cSt	1.404	0.02
Andisil [®] SF 600,000	600,000 cP	1.404	0.0075

* Food & Kosher grade available



Silicone Polyethers

Silicone polyethers, also known as silicone surfactants, are used in many industries as:

- Emulsifiers
- Foaming Agents
- Solubilizers
- Softeners
- Surfactants

They are also known to add leveling, slip and mar resistance properties to coatings formulations.

Silicone Polyethers

Markets & Applications

- Car Care
- Coatings
- Personal Care
- Pulp & Paper Manufacturing

PRODUCT	HLB	VISCOSITY	INDUSTRIES	BENEFIT
Andisil [®] SP 19 OH Capped		30 cSt	Agriculture	Ideal wetting agentLow viscosity and is water dispersible
Andisil [®] SP 19M Methoxy Capped		20 cSt	Agriculture	 Ideal wetting agent Low viscosity and is water dispersible Good wetting agent for colorants or pigments
Andisil [®] SP 4407M		45 cSt		 Reduces surface tension; provides good wetting and foaming properties
Andisil [®] SP 4410	4.5	500 cP	Personal Care	 INCI: PEG-10 Dimethicone Used as emulsifying and co-solubilizing agents for siloxane and organic systems
Andisil [®] SP 4410B	10.5	300 cP	Personal Care	 INCI: Bis-PEG-10 Dimethicone Used as emulsifying and co-solubilizing agents for siloxane and organic systems
Andisil [®] SP 4414	13.0	400 cP	Personal Care PU Foam	 INCI: PEG-12 Dimethicone Useful as a wetting agent and a closed-cell rigid polyurethane foam additive Used as emulsifying and co-solubilizing agents for siloxane and organic systems
Andisil [®] SP 4414B	8.7	350 cP	Textile & Leather PU Foam Personal Care	 INCI: Bis-PEG-12 Dimethicone Used as emulsifying and co-solubilizing agents for siloxane and organic systems





PRODUCT	HLB	VISCOSITY	INDUSTRIES	BENEFIT
Andisil [®] SP 1818	7.0	2,500 cP	Textile & Leather Paints, Ink, & Coatings Personal Care	 INCI: PEG/PPG-18/18 Dimethicone Hydrophilic treatment for non-woven substrates Leveling agent Provides slip resistance and mar resistance Increases gloss Imparts smooth, satin feel to surface Used as emulsifying and co-solubilizing agents for siloxane and organic systems
Andisil [®] SP 5900		-	Pulp & Paper	 Knockdown and persistence booster for antifoams
Andisil [®] SP 5100	5.7	2,300 cSt	Pulp & Paper	 Used for compatibilizing MDI with water Additive to provide slip & mar resistance Surfactant used in preparation of flexible PU foam
Andisil [®] SP 5300	6.7	360 cSt	Pulp & Paper General Purpose	 Stabilizes emulsions in various media ex. alcohols Preparation of oil in water (O/W) or silicone in water emulsions Soluble in ethanol; water dispersible Knockdown & persistence booster for antifoams Stability booster for antifoam emulsions
Andisil [®] SP 5200	3.4	17,000 cSt	Pulp & Paper General Purpose	 Drainage / De-aerator booster for pulp antifoams Knockdown booster for antifoams Stability booster for antifoam emulsions Water soluble
Andisil® SP 5500	6.3	4,450 cSt	Pulp & Paper General Purpose	 Drainage / De-aerator booster for pulp antifoams Knockdown booster for antifoams Stability booster for antifoam emulsions Water soluble
Andisil [®] SP 5700	3.4	1,200 cSt	Pulp & Paper General Purpose	 Booster for pulp mill defoamers
Andisil [®] SP 5900	6.1	2,700 cSt	Pulp & Paper General Purpose	 Knockdown booster for mineral or silicone oil based pulp defoamers Emulsifier and booster for paper mill defoamers Lubricant and wetting agent in non-polar systems Soluble in water, alcohol and aromatic hydrocarbons





Vinyl Silicones

Vinyl Polymers

Vinyl-terminated dimethylpolysiloxanes available in a range of viscosities and vinyl contents. They can be used as base polymers or as blend polymers in order to create the desired hardness.

NAME	VINYL CONTENT	VISCOSITY
Andisil [®] VS 6	3.00 mmoles/gm	6 cSt
Andisil [®] VS 10	1.70 mmoles/gm	10 cSt
Andisil [®] VS 20	1.20 mmoles/gm	20 cSt
Andisil [®] VS 50	0.80 mmoles/gm	50 cSt
Andisil [®] VS 100	0.37 mmoles/gm	100 cSt
Andisil [®] VS 200	0.25 mmoles/gm	200 cSt
Andisil [®] VS 250	0.22 mmoles/gm	250 cSt
Andisil [®] VS 400	0.19 mmoles/gm	400 cSt
Andisil [®] VS 500	0.15 mmoles/gm	500 cSt
Andisil® VS 1,000	0.11 mmoles/gm	1,000 cSt
Andisil® VS 2,000	0.08 mmoles/gm	2,000 cSt
Andisil® VS 4,000	0.07 mmoles/gm	4,000 cSt
Andisil® VS 5,000	0.06 mmoles/gm	5,000 cSt
Andisil [®] VS 10,000	0.05 mmoles/gm	10,000 cSt
Andisil [®] VS 20,000	0.04 mmoles/gm	20,000 cSt
Andisil [®] VS 65,000	0.03 mmoles/gm	65,000 cP
Andisil [®] VS 80,000	0.024 mmoles/gm	80,000 cP
Andisil [®] VS 100,000	0.02 mmoles/gm	100,000 cP
Andisil [®] VS 165,000	0.015 mmoles/gm	165,000 cP

Markets & Applications

- Dental & Medical
- Electronic Encapsulation
- Mold Making
- Rubber Manufacturing
- Two Part RTVs



Vinyl Resins

Additives for the improvement of mechanical properties of addition cured silicone elastomers.

Andisil® VQM 0.6 1.406 600 cP 0.3 mmole/gm Andisil® VQM 1 1.406 1,200 cP 0.24 mmoles/gm	REFRACTIVE	IDEX VISCOSITY	VINYL CONTENT
Andisil® VQM 1 1.406 1,200 cP 0.24 mmoles/gm Andisil® VQM 1 1.406 0.000 cP 0.000 cP	M 0.6 1.406	600 cP	0.3 mmole/gm
	M 1 1.406	1,200 cP	0.24 mmoles/gm
Andisii" vuvi 6 1.406 6,000 CP 0.22 mmoles/gm	M 6 1.406	6,000 cP	0.22 mmoles/gm
Andisil® VQM 60 1.406 60,000 cP 0.20 mmoles/gm	M 60 1.406	60,000 cP	0.20 mmoles/gm
Andisil® VQM 100 1.406 100,000 cP 0.52 mmoles/gm	M 100 1.406	100,000 cP	0.52 mmoles/gm
Andisil® VQM 1040 1.406 15,000 cP 0.40 mmoles/gm	M 1040 1.406	15,000 cP	0.40 mmoles/gm
Andisil® VQM 2050 1.406 500 cP 1.1 mmoles/gm	M 2050 1.406	500 cP	1.1 mmoles/gm

Specialty Vinyl Polymers

Used in two part RTV formulations to adjust mechanical properties including the durometer and crosslinking density.

NAME	VINYL CONTENT	VISCOSITY
Andisil® VDM 500	0.28 mmoles/gm	500 cSt
Andisil [®] VDM 65,000	1.30 mmoles/gm	65,000 cP
Andisil [®] MV 2,000	0.06 mmoles/gm	2,000 cSt

Inhibitors

NAME	DESCRIPTION	CAS#
Andisil [®] 2827-186L	1,3 Divinyl Tetramethyl Disiloxane	2627-95-4
Andisil [®] MVC	Methyl Vinyl Cyclics	2554-06-5



HEADQUARTERS 3725 Hawthorn Court Waukegan, IL 60087

CONTACT Sales & Customer Service (847) 599-7765 EMAIL

info@andisil.com

WEBSITE www.andisil.com www.andisil-personal-care.com

Enthusiasm & Innovation Create Success.



We believe that the information shown in this Product Bulletin to be an accurate description of the typical characteristics and/or uses of the products. Any suggestions of uses are not to be taken as an inducement to infringe any particular domestic or foreign patent. We recommend that the products be thoroughly tested for a specific application to determine the performance, efficacy and its safe handling and use.

rev.7-S0-8/23