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SANG WON CHEM. CO., LTD.

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PRODUCTS INFORMATION

COATING RESINS & ADDIIVES



SANG WON CHEM. CO., LTD.



SANG WON CHEM. Co., LTD

was established in 2004 a company specialized in production of synthetic resins, has developed, produced And supplied a variety of synthetic resins and Additives for coating to both local and overseas clients.

Based on the corporate policy of 'customer first' And the customer-oriented quality management trusted by its customers, The Company shall use all its efforts to continue to challenge the world by supplying The best products to its customers and at the same time performing its environmental duties for the society through the realization of its ethical eco-friendly policies.

HISTORY

- 2004. 04 Establish KETO CHEM.
- 2004. 04 Manufacture and sale of various additives for paints
- 2004. 07 Export Taiwan for paint additives.
- 2004. 10 Export China for paint additives.
- 2004. 10 Manufactured and sold High polymer polyester resins and additives for PCM.
- 2006. 02 Manufactured and sold High polymer polyester resins and additives for CAN coating.
- 2006. 07 Changed company name to SANG WON CHEM. CO.,LTD. And registered corporation.
- 2006. 08 ISO 9001 certification.
- 2006. 09 Manufactured and sold water-based resins for pipe coating.
- 2007. 07 Export Singapore for paint additives.
- 2008. 05 Manufactured and sold PCB related synthetic resins for electronic materials.
- 2008. 09 Manufactured and sold acrylic polyol synthetic resins for paints.
- 2009. 05 Manufactured and sold PDP related synthetic resins for electronic materials.
- 2010. 05 Main office moved (Gyeong nam, Yangsan-si)
- 2010. 06 Founded Houngyu China (Guangzhou)
- 2010. 11 Certified as a Venture business
- 2011. 02 Manufactured and sold synthetic resins for Mobile phone related paints
- 2011. 02 Established Research Institute (Korea Industrial Technology Association)
- 2011. 09 Main office & Manufacture equipment construction moved (Sejong-si)
- 2013. 04 Indirect export Viet nam oligomer & paint for U.V
- 2014. 02 Indirect export Central and south America for paint additives.
- 2014. 04 Indirect export Indonesia for paint additives.
- 2016. 06 Founded SANGHAI FENGHAO HI-TECH CO., LTD (Shanghai)

SYNTHETIC RESINS FOR INKS AND SURFACE COATINGS



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SYNTHETIC RESINS

FOR INKS AND SURFACE COATINGS

ALKYD RESINS

SHORT OIL ALKYD RESINS

PRODUCT CODE	OIL TYPE	OIL LENGTH (%)	SOLIDS (%)	SOLVENT	VIS. (G# 25°C)	AV (solid)	MAIN APPLICATION
SWR-1117	D.C.O	27	59~61	XL	W~Z	18~21	Primers & surfacers for automobile (bus and truck) refinishes
SWR-1125	LINSEED	35	49~51	XL/MS	V~X	max. 10	General purpose for fast drying enamels
SWR-1130	SOFA	41	59~61	XL	Z3~Z5	max. 10	Stoving enamels for steel equipment and steel furniture
SWR-1133	SOFA	34	49~51	XL/MS	Z2~Z4	max. 10	Stoving enamels finish for bus, metal and home appliances. Anti-corrosive finishes for bicycle, motor cycle
SWR-1134	SOFA	33	54~56	XL	Z4~Z6	max. 8	General purpose for fast drying enamels (NC lacquer)
SWR-1141	COCONUT OIL	33	59~61	TOL	Y~ Z	max. 8	Primer and top coat for furniture and automobiles based on nitro cellulose

MEDIUM OIL ALKYD RESINS

SWR-1331	SOFA	54	54~56	MS	Z1~Z3	max. 8	Interior & exterior decorative paint. Air drying enamels for wood finish.
SWR-1335	SOFA	48	49~51	MS/HM	Z4~Z6	max. 8	Air-drying industrial paint for steel, marine and architectural
SWR-1340	TOFA	49	49~51	MS	Z5~Z6	max. 6	Air-drying industrial paint for steel, marine and architectural

LONG OIL ALKYD RESINS

SWR-1531	SOFA	58	69~71	MS	Z5~Z7	max. 10	Interior & exterior decorative paint
SWR-1533	SOFA	62	64~66	MS	Y~Z2	max. 9	Interior & exterior decorative paint
SWR-1536	SOFA	56	59~61	XL/MS	Z~Z3	max. 10	Interior & exterior decorative paint. Air drying enamels for wood or steel finishes.
SWR-1538	SOFA	82	min.98	XL	Z~Z3	max. 8	Particularly low viscosity resin for decorative and steel structure finishes.

MODIFIED ALKYD RESINS

EPOXY ESTER RESINS

PRODUCT CODE	OIL TYPE	SOLIDS (%)	SOLVENT	VIS. (G# 25°C)	AV (solid) max.	MAIN APPLICATION
SWR-2057		74~76	XL	Y~Z1	3	Finishes for container and steel structure interval free coat

STYRENE & ACRYL MODIFIED ALKYD RESINS

SWR-2131	SOFA/ DCOFA	59~61	XL	S~V	8	Fast air drying paints for harmmer finish enamels.
SWR-2148	SOFA/ DCOFA	46~50	XL	S~V	9	Protective coating for chassis of car, truck and bus etc
SWR-2155		54~56	XL	W~Y	7	Fast air drying paints for steel industrial

URETHANE MODIFIED ALKYD RESINS

SWR-2246	SOFA	45~47	XL	Y~Z1	5	Anti-corrosive primers for steel exterior and surfacers
SWR-2250	LINSEED	54~56	MS	W~Z	4	Anti-corrosive primers for steel exterior and surfacers
SWR-2260	SOFA/ LINSEED	59~61	MS/SL#100	Y~Z2	3	Urethane varnish for decorative, wood and steel products

SILICONE MODIFIED ALKYD RESINS

SWR-2350	SOFA	48~52	XL/MS	T~V	15	High quality air drying paints for metal finishes Heat resistance paints
SWR-2351	SOFA	59~61	MS	V~Z	12	High quality air drying paints for metal finishes Heat resistance paints

ROSIN ESTER RESINS

SWR-2401		69~71	XL	W~Y	25~35	Lacquer for wood, steel
SWR-2460		59~61	XL	A~A3	90~110	Lacquer for wood, steel

PHENOLIC MODIFIED ALKYD RESINS

SWR-2608	TUNG/ LINSEED	59~61	MS	L~N	6	Deck paints, anti-corrosive steel structure finishes.
SWR-2640	TUNG/ LINSEED	59~61	MS	K~N	25	Fast drying metal primer for steel product and heavy equipments

SYNTHETIC RESINS

FOR INKS AND SURFACE COATINGS

POLYESTER RESINS

POLYESTER RESINS

PRODUCT CODE	SOLIDS (%)	SOLVENT	VIS. (G# 25°C)	Tg	MAIN APPLICATION
SWR-3002	39~41	SL#100/CH	Y~Z1	50	Binder for inks
SWR-3007	39~41	SL#100/SL#150/CH	Z~Z2	55	Can coatings
SWR-3008	39~41	SL#100/SL#150/CH	Z~Z2	55	Can coatings
SWR-3030	39~41	SL#100/CH	Y~Z1	8	Binder for inks
SWR-3041	39~41	SL#100/SL#150/DBE	Y~Z1	40	Can coatings
SWR-3051	39~41	SL#100/CH	X~Z	13	Top coating for PCM
SWR-3090	39~41	SL#100/CH	Z~Z2	48	Primers and Top coating for PCM
SWR-3164	39~41	SL#100/CHA/DBE	Y~Z1	52	Primers, requiring flexibility for PCM Primers for steel furniture of home appliance.
SWR-3017	49~51	SL#150/CH	Z1~Z3	53	Can coatings
SWR-3056	49~51	SL#150/CH	Z1~Z3	53	Can coatings
SWR-3072	44~46	XL/DAA	Z~Z3	9	Can coatings
SWR-3171	44~46	XL/DAA	Z~Z3	9	Can coatings
SWR-3150	49~51	SL#100/CH	X~Z	27	Top & Primers, requiring flexibility for PCM
SWR-3190	49~51	SL#100/CH	W~Z	20	Top coating for PCM
SWR-3085	49~51	SL#100/EGA	Z~Z2	25	High durable top coating for PCM
SWR-3162	49~51	SL#100/CH	X~Z1	18	Top coating for PCM
CSR-3089	49~51	SL#100/DBE	Z1~Z3	25	Top coating for PCM
SWR-3091	49~51	SL#100/CH	Z~Z3	25	Primers, requiring flexibility for PCM Primers for steel furniture of home appliance.
SWR-3095	49~51	SL#100/EGA	Z2~Z4	50	Primers coating for PCM
SWR-3021	54~56	SL#100/PMA	Y~Z2	48	Primers, requiring flexibility for PCM Primers for steel furniture of home appliance.
SWR-3099	54~56	SL#100/PMA	Y~Z2	48	Primers, requiring flexibility for PCM Primers for steel furniture of home appliance.
SWR-3103	54~56	SL#100/PMA	W~Z	22	Primers and Top coating for PCM
SWR-3165	54~56	SL#100/PMA	W~Z	22	Primers and Top coating for PCM
SWR-3123	59~61	SL#100	U~W	20	Excellent durability and Top coating for PCM
SWR-3098	59~61	SL#100/DBE	R~U	20	Excellent weatherbility and Top coating for PCM

SILICONE MODIFIED POLYESTER RESINS

SWR-3460	59~61	EGA/CH	U~W		High quality stoving paint for metals heat resistance paints
SWR-3462	60~63	EGA/NBA	U~W		Finishes for coil coating enamels

URETHANE MODIFIED POLYESTER RESINS

SWR-3602	59~61	XL/EGA	S~U		Primers and surface for automotive coating.
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POLYESTER POLYOL RESINS

OIL MODIFIED POLYESTER POLYOL

PRODUCT CODE	OIL TYPE	SOLIDS (%)	SOLVENT	VIS. (G# 25°C)	AV(solid) max.	OHV (SOLID)	MAIN APPLICATION
SWR-3230	TOFA	59~61	TOL	V~X	9	126~135	Sanding sealers for wood and lacquer based paints
SWR-3245	SOFA	59~61	TOL	Z2~Z4	8	140~150	Urethane lacquire for furniture
SWR-3247	SOFA	59~61	TOL/BAC	Y~Z	13	140~150	Sanding sealers & clear sealer coatings for furniture
SWR-3248	DCOFA	74~76	XL	Y~Z1	8	110~140	Top coat for musical instrument
SWR-3250	COCONUT	59~61	TOL/BAC	Z~Z2	12	145~155	Top coat for furniture and musical instrument
SWR-3285	CASTOR	64~66	EAC/BAC	U~X	7	185~205	Top coat for wood, decorative and metal Filler for use on wood products
SWR-3292	COCONUT	59~61	XL	Y~Z	15	85~95	Urethane lacquire for furniture
SWR-3295	CASTOR	59~61	XL	Z2~Z4	8	190~200	Fast drying lacquers for furniture, musical instrument and polyurethane base coating

OIL FREE POLYESTER POLYOL

SWR-3341	OIL FREE	72-74	EGA	W~Y	4	280~300	Urethane topcoat wood,Anti-corrosive coatings, stoving enamels for metal
SWR-3352	OIL FREE	59~61	TOL/BAC	Z~Z2	7~11	140~150	Urethane top coat for wood and furniture
SWR-3365	OIL FREE	79-81	BAC	X~Z	5	135~152	Top and primers of bumper paint for automotive
SWR-3367	OIL FREE	MIN 99		Z4~Z5	1	45~65	Decorative coating for automotive inner parts Plastic coating
SWR-3374	OIL FREE	79~81	EGA	X~Z	5	164~174	Urethane top coat for wood. Anti-corrosive coating stoving enamels for metal & AL
SWR-3382	OIL FREE	89~91	XL	Y~Z1	5	54~62	Decorative coating for automotive inner parts Plastic coating
SWR-3385	OIL FREE	69~71	MIBK	Y~Z2	3	43~53	Decorative coating for automotive inner parts
SWR-3392	OIL FREE	79~81	XL/EGA	Z2~Z4	8	85~95	Urethane top coat wood and plastics

SYNTHETIC RESINS

FOR INKS AND SURFACE COATINGS



ACRYLIC RESINS

THERMOPLASTIC ACRYLIC RESINS

PRODUCT CODE	SOLIDS (%)	SOLVENT	VIS. (G# 25°C)	AV (solid)	MAIN APPLICATION
SWR-4103	39~41	TOL	R~U		Conductive paints for plastics (ABS,PS,HIPS,NORYL,PMMA) for electronic equipment housing
SWR-4111	39~41	TOL/I-BUOH I-B.Ac	R~T		Lacquers paint for plastic of electric application.
SWR-4117	30~32	TOL/XL	O~R		Electrical insulating coating for printed circuitry.
SWR-4128	54~56	TOL/XL	Z4~Z5		Exterior wall & roof paints. Paints for scribbling forbidden
SWR-4129	57~59	TOL/XL	Z5~Z7		Exterior wall & roof paints. Paints for scribbling forbidden
SWR-4138	49~51	XL	Y~Z2		Satiable for plastic and cement concrete wall.
SWR-4139	49~51	TOL	Z~Z3		Finishing coat for exterior of container and steel structure
SWR-4149	39~41	SL#100 XL	U~Y		High quality exterior paints for metal, wood & fabrics Heat resistance coat
SWR-4155	54~56	TOL	X~Y		Paint for road marking.
SW-4190	49~51	XL	H~J		Air drying industrial finishes for steel pipe and metal.

THERMOSETTING ACRYLIC RESINS

SWR-4221	48~50	XL/I-BUOH	R~U	22~26	Top coat and metallic base coating for metal, glass and engineering plastic.
SWR-4225	49~51	SL#100/NBA	R~U		Top coat for automotive(Solid color), truck and elevator
SWR-4231	49~51	XL/NBA	H~K		High quality stoving enamels for household appliance & electric apparatus. Especially suitable for refrigerator
SWR-4240	69~71	AAC/SL#100	W~X		Automotive clear in wet on wet base / clear system
SWR-4260	54~56	DBE/SL#100	Z2~Z4		High quality stoving paint for household appliance. Especially suitable gravure ink for refrigerator door.
SWR-4272	59~61	XL/NBA	W~Y		High quality stoving enamel paints for metals
SWR-4281	69~71	SL#100/NBA	W~Y	8~12	Clear coat for metallic coating such as automotive aluminum wheel.
SWR-4294	61~63	PMA/NBA/BAC	Z3~Z5	65~75	Clear coat for metal such as brass, electroplated Nickel, Zn and stainless steel.
SWR-4500	49~51	SL#150/BDG/NBA	W~Z		Can coating and Al extrusion finishes
SWR-4503	50~52	SL#150/XL/NBA	Y~Z1		Coil coating for general industrial application

ACRYLIC RESINS

ACRYLIC POLYOL RESINS

PRODUCT CODE	SOLIDS (%)	SOLVENT	VIS. (G# 25°C)	OHV (SOLID)	MAIN APPLICATION
SWR-4300	49~51	TOL/BAC	V~Y	62~68	Paint for building materials(concrete & asbestos cement)
SWR-4310	47~49	TOL/XL/PMA	Z1~Z2	67~73	Paints for plastics of electric application.
SWR-4311	47~49	XL/PMA/I-BAc	T~V	70~73	Paints for plastics of electric application.
SWR-4312	54~56	XL	Z1~Z3	85~95	Paint for wood, metal and concrete.
SWR-4313	49~51	XL/BAC	U~W	99~105	Paints for automotive refinish and plastics
SWR-4316	69~71	BAC	Z1~Z4	135~142	Topcoat for car repair(Solid color & clear), Industrial topcoats.
SWR-4318	64~66	XL	Y~Z1	67~73	Clear paint for car repair and plastics
SWR-4320	49~51	TOL/BAC	X~Z1	61~67	High quality decorative paints for metals
SWR-4321	49~51	TOL/BAC	W~Z	38~43	Paints for automotive refinish and plastics
SWR-4350	53~55	XL/PMA	Y~Z1	144~150	Paints for automotive refinish and plastics
SWR-4360	54~56	DBE/SL#100	Z2~Z4	52~58	High quality stoving enamels for household appliance & electric apparatus. Especially suitable for refrigerator
SWR-4390	64~66	XL/BAC	Z3~Z5	57~63	Clear coats for golf shaft and plastics.
SWR-4382	54~56	XL/BAC	U~X	57~63	Industrial paint with excellent adhesion on plastic substrates.
SWR-4392	79~81	BAC	Z3~Z5	130~140	Fast curing acrylic polyol resin for high solids polyurethane coating applications
SWR-4393	64~66	XL	Z1~Z3	110~116	Paints for automotive refinish and plastics
SWR-4394	51~63	BAC	Z2~Z4	64~70	Paint for Plastics and wood. Two-component lacquers and varnishes.
SWR-4395	59~61	XL/PMA	T~V	129~135	Paints for automotive refinish and plastics
SWR-4398	69~71	BAC	Z3~Z5	137~143	Automotive refinish coating for and plastics Metallic base coats, Clear coat and solid color systems

SYNTHETIC RESINS

FOR INKS AND SURFACE COATINGS



ACRYLATE OLIGOMER FOR UV COATING

EPOXY- ACRYLATE RESINS

PRODUCT CODE	SOLIDS (%)	DESCRIPTION	VIS. (G# 25°C)	AV(solid) MAX.	COLORMAX. (G#)	MAIN APPLICATION
SWR-5421	100	MPG epoxy / DA	W~Y	10	1	Photo resin and UV resin
SWR-5422	100	TPG epoxy / DA	U~W	10	1	Photo resin and UV resin
SWR-5425	78~82	BPA epoxy / HDDA	Z4~Z7	20	1	High reactivity binder for paper, plastic and wood coating

URETHANE ACRYLATE RESINS

PRODUCT CODE	SOLIDS (%)	DESCRIPTION	VIS. (G# 25°C)	AV(solid) MAX.	COLORMAX. (G#)	MAIN APPLICATION
SWR-5610	100	Phenol epoxy-A with HDI	Z1~Z3		1	Coating for W.P & metal PVC flooring and screen ink
SWR-5620	78~82	Acrylate with TDI	Y~Z2		2	Binder for paper and wood coating
SWR-5650	78~82	Acrylate with IPDI	Z3~Z5		3	Binder for plastic and over printing coating

WATER SOLUBLE RESINS

PRODUCT CODE	TYPE (oil)	SOLIDS (%)	SOLVENT	VIS. (G# 25°C)	AV (solid)	COLOR MAX.(G#)	MAIN APPLICATION
SWR-6138	ALKYD (LINSEED)	74~77	BG/NBA	W~Z	50~60	13	Interior & exterior decorative paint intermediate polymer of solubility in water
SWR-6265	ALKYD /ACRYL(SOFA)	64~66	BG	Z5~Z7	41~45	10	Interior & exterior decorative paint intermediate polymer of solubility in water
SWR-6410	ACRYL	29~31	BG/WT	Z2~Z4			Interior & exterior decorative paint industrial and architecture coating
SWR-6450	ACRYL	47~49	BG	Y~Z1	47~53	3	Interior & exterior decorative paint intermediate polymer of solubility in water
SWR-6520	EPOXY /ACRYL	32~36	BG/WT	28~34" (F#4)	18~22		Interior & exterior decorative paint metal and architecture coating
SWR-6526	EPOXY /ACRYL	34~38	BG/WT	X~Z1	23~27		Interior & exterior decorative paint industrial and architecture coating
SWR-6560	EPOXY /ACRYL	59~61	BG	Z4~Z6	60~65	10	Interior & exterior decorative paint intermediate polymer of solubility in water





ADDITIVES

FOR INKS AND SURFACE COATINGS

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- + LEVELLING ADDITIVES.
- + WETTING & DISPERSING ADDITIVES
- + ANTI-SAGGING DDITIVES
- + SLIP ADDITIVES
- + ACID CATALYSTS.



DEFORMING ADDITIVES

ACRYLIC COPOLYMER TYPE DEFORMER

PRODUCT CODE	SOLIDS (%)	COMPOSITION	MAIN APPLICATION
SWADD-101	38~42	Solution of foam destroying polymers	Solvent-based and solvent-free coatings. Acrylic/vinylacetate-combinations and oil-free or unsaturated polyesters.
SWADD-105	33~37	Solution of foam destroying polymers	Solvent-based and solvent-free coatings Unsaturated polyesters.
SWADD-123	75~79	Acrylic copolymer	Alkyd, Acrylic, Polyester melamine high temperature baking system. Recommendable for PCM(coil) coating and acid catalyst curable coating system.
SWADD-132	18~22	Solution of foam destroying polymers	It is used as the standard defoamer for many solvent-based coatings. Recommendable for industrial coatings
SWADD-133	18~22	Solution of foam destroying polymers	It has the best defoaming performance in polar as well as in non-polar system. Recommendable for industrial, Architectural and wood coatings
SWADD-160	48~52	Acrylic copolymer	Alkyd, Acrylic, Polyester melamine high temperature baking system. For all solvent-based coatings system.
SWADD-1100	33~37	Acrylic copolymer	It shows excellent deaerating effect on urethane floor coatings. It also can be used on UV system and thermo-setting paints (as anti solvent popping)
SWADD-1102	28~32	Acrylic copolymer	For all solvent based coatings system. Acrylic, Alkyd, Epoxy and Urethane.
SWADD-1103	28~32	Acrylic copolymer	It is used as a defoaming and a de-aerating agent for non-aqueous coatings. It shows a remarkable de-aerating effect for various kind of air drying and thermo-setting stems.
SWADD-1127	69~71	Acrylic copolymer	Typical anti-popping agent. Also suitable as a de-aerating agent in decorative paints. Recommendable for Various thermo-setting and air-drying paints,
SWADD-1170	49~51	Acrylic copolymer	Typical anti-popping agent. It is used in various thermo-setting- and air-drying paints. Applications include architectural paints, auto-refinishes, and coil coatings.
SWADD-1171	49~51	Acrylic copolymer	Typical anti-popping agent. It is used in various thermo-setting- and air-drying paints. Applications include architectural paints, auto-refinishes, and coil coatings.
SWADD-1130	73~77	Acrylic copolymer	It is Used as deaerator for industrial and automotive coatings. It shows a effective anti-popping properties and very good flow promotion.
SWADD-1131 T	73~77	Acrylic copolymer	It is Used as deaerator for industrial and automotive coatings. It shows a effective anti-popping properties and very good flow promotion.
SWADD-1132	49~51	Acrylic copolymer	It is used as a defoaming and a de-aerating agent for non-aqueous coatings. It shows a remarkable de-aerating effect for various kind of air drying and thermo-setting systems.
SWADD-1133	100	Acrylic copolymer	It is Used as deaerator for industrial and automotive coatings. It shows a effective anti-popping properties and very good flow promotion.
SWADD-1135	88~92	Acrylic polymer/ Oligomer	Typical anti-popping agent. It is used as the defoamer for Various thermo-setting and various air-drying paints. Recommendable for decorative paints.

ADDITIVES

FOR INKS AND SURFACE COATINGS



DEFORMING ADDITIVES

SILICON TYPE DEFORMER

PRODUCT CODE	SOLIDS (%)	COMPOSITION	MAIN APPLICATION
SWADD-103 S	MAX. 3	Solution of a polysiloxanes	It is used for epoxy paints, wood coating and clear paints.
SWADD-110 S	8~12	Modified polysiloxane copolymer	It suitable for aqueous coatings that are used as air drying and baking primer or UV-curing coatings for metal, wood and paper.
SWADD-113 WS	18~22	Polysiloxane emulsion copolymer.	It is used for water soluble and emulsion coating.
SWADD-114 WS	57~61	Polysiloxane emulsion copolymer.	It is used for water soluble and emulsion coating. Suitable for polyurethane or polyacrylate emulsions.
SWADD-122 S	7~11	Solution of a polysiloxanes	It is used for Alkyd, Acrylic, Polyester melamine baking system. Specially, suitable for Polyurethane curtain coatings
SWADD-136 S	MAX. 1	Solution of a polysiloxanes	Silicone-type defoamer. It is used as the standard defoamer for many solvent-based coatings.
SWADD-151 S	MAX. 3.5	Solution of a polysiloxanes	It is used as the standard defoamer for solvent-based and solvent-free coatings system. Recommendable for industrial coatings.
SWADD-155 S	MAX. 1	Solution of a polysiloxanes	It is used as the standard defoamer for many solvent-based coatings
SWADD-156 S	MAX. 1	Solution of a polysiloxanes	Form control in solvent-based coatings, especially UV screen printed inks and varnishes.
SWADD-157 S	4.5~5.5	Solution of a polysiloxanes	It is used as the standard defoamer for many solvent-based coatings. Recommendable for high build two-component polyurethane.
SWADD-1150 S	28~32	Solution of a polysiloxanes	It shows excellent deaerating effect on epoxy floor coating. It also can be used on UV system.

LEVELLING ADDITIVES

PRODUCT CODE	SOLIDS (%)	COMPOSITION	MAIN APPLICATION
SWADD-207	MAX.1	Combination of high boiling hydrocarbon and polysilioxane compound	Solvent base coatings (air drying & baking system) Polyester, Acrylic, Alkyd, Urethane, NC paints, etc.
SWADD-208S	MAX.1	Combination of high boiling hydrocarbon and polysilioxane compound	Alkyd, acrylic enamel baking system. Air drying lacquer, epoxy, polyurethane and chlorinated rubber coating.
SWADD-220R	68~72%	Acrylic copolymer	It is used as a flow and a leveling additive Specially, recommendable for coil, can and industrial coating.
SWADD-235	68~72%	Acrylic copolymer	It is used as a flow and a levelling additive In most systems such as automotive, coil, can, industrial coating and uv varnishes

LEVELLING ADDITIVES

PRODUCT CODE	SOLIDS (%)	COMPOSITION	MAIN APPLICATION
SWADD-236	68~72%	Acrylic copolymer	It is used as a flow and a leveling additive In most systems such as automotive, coil,can, industrial, silk screen inks coating and uv varnishes
SWADD-237	73~77%	Acrylic copolymer	It is used as an anti-cratering and a levelling additive in most systems.Specially, recommendable for PCM coatings.
SWADD-238	50~54%	Acrylic copolymer	It is suitable for high quality pigmented and non-pigmented industrial coatings
SWADD-239	MIN 95%	Acrylic copolymer	It is used as general purpose flow and anti-crater additive. In most systems such as automotive, coil, industrial, printing inks coating and wood coating.
SWADD-239-50	48~52%	Acrylic copolymer	It is used as general purpose flow and anti-crater additive. In most systems such as automotive, coil, industrial, printing inks coating and wood coating.
SWADD-240	59~61%	Acrylic copolymer	It is used as an anti-cratering and a levelling additive in most systems. Specially, recommendable for PCM coatings.
SWADD-241	59~61%	Acrylic copolymer	It is used as an anti-cratering and a levelling additive in most systems. Specially, recommendable for PCM coatings.
SWADD-248	59~61%	Acrylic copolymer	It is used as a flow and a levelling additive In most systems such as coil,can, industrial coating.
SWADD-249	62~64%	Acrylic copolymer	It is used as an anti-cratering and a levelling additive in most systems. Specially, recommendable for PCM coatings.
SWADD-250	48~52%	Acrylic copolymer	It is used for solvent based coating. Specially, suitable for clear coatings
SWADD-257	68~72%	Acrylic copolymer	It is used as a flow and a levelling additive Specially, recommendable for coil,can and industrial coating.
SWADD-260-50	48~52%	Acrylic copolymer	It is used as an anti-cratering and a levelling additive. Specially, recommendable for PCM coatings.
SWADD-261-45	44~56%	Acrylic copolymer	It is mainly used as, PCM coating and industrial coatings(Epoxy and Urethane)
SWADD-265	53~57%	Acrylic copolymer	It is used as an anti-cratering and a levelling additive in most systems
SWADD-266	50~54%	Acrylic copolymer	It is mainly used as industrial coatings, OEM and automotive refinish. As well as in coil coatings.
SWADD-280	81~85%	Acrylic copolymer	It has a excellent leveling effect for thermo-setting and powder coating paint. - Alkyd-melamine, Polyester-melamine, Acrylic-melamine,Epoxy,Polyester
SWADD-281	81~85%	Acrylic copolymer	It has a excellent leveling effect for thermo-setting and powder coating paint. - Alkyd-melamine, Polyester-melamine, Acrylic-melamine, Epoxy, Polyester
SWADD-287	MIN 95%	Acrylic copolymer	It is recommendable for UV curing coatings. It also works as anti-flooding agent without foam stabilizing problem.
SWADD-288-50	48~52%	Acrylic copolymer	It is used as a flow and a levelling additive. In most systems such as PCM,can and industrial coating.
SWADD-290	50~52%	Acrylic copolymer	It has a excellent leveling effect for solvent based, powder and non solvent coatings. Specially, recommendable for PCM coatings
SWADD-291	95~99%	Acrylic copolymer	It has a excellent leveling effect for solvent based, powder and non solvent coatings. Specially, recommendable for PCM coatings
SWADD-293	48~52%	Acrylic copolymer	It is used as an anti-popping,defoaming and a levelling additive in baking systems. Specially, suitable for airless and airmix systems.
SWADD-557	68~72%	Fluoro modified acrylate copolymer in xylene	It is used as a flow and a levelling additive Specially, recommendable for coil, can, Polyurethane coatings and air-dried alkyd system

ADDITIVES

FOR INKS AND SURFACE COATINGS



WETTING & DISPERSING ADDITIVES

PRODUCT CODE	SOLIDS (%)	ACID VALUE	AMINE VALUE	COMPOSITION	MAIN APPLICATION
SWADD-301	48~52	48~54	48~54	Alkylammonium salt of polymerized fatty acid.	It is used as the Wetting and dispersing additive to improve pigment wetting Specially, suitable for dispersing organophilic Bentonites.
SWADD-305	49~53	43~49	36~43	A polycarboxylic acid salt of polyamine amide.	It is used as the Wetting and dispersing additive to improve pigment wetting Specially, suitable for non-polasystems.
SWADD-312	48~52	47~57		Solution of a copolymer with acidic groups	It is used as the Wetting and dispersing additive to improve pigment wetting(especially TiO2) and stabilize the pigment dispersion. As well as, It provide acid catalyst for PCM coatings and anti-corrosion primers.
SWADD-314	48~52	110~135		Unsaturated polycarboxylic acid polymer	It is used as the Wetting and dispersing additive to improve pigment wetting and stabilize the pigment dispersion. Specially, recommendable for PCM coatings and anti-corrosion primers.
SWADD-315S	48~52	100~125		Unsaturated polycarboxylic acid polymer with polysiloxane copolymer	It is used for Various kinds of solvent based paints
SWADD-318	MIN. 97		65~75	Hydroxyfunctional carboxylic acid ester	It is used as the Wetting and dispersing additive for solvent-based and solvent-free coatings to improve pigment wetting. Specially, recommendable for General Industrial and Architectural coating.
SWADD-326	71~73	30~40		Unsaturated polycarboxylic acid polymer	It is used for economical and wide range of applications as the Wetting and dispersing additive for solvent-based paints.
SWADD-380	48~52	MAX. 3	11~18	Salt of unsaturated polyamine amides	It is the standard wetting and dispersing additive for industrial and architectural coatings.
SWADD-350	44~46		11~18	High molecular weight modified polyurethane copolymer with pigment affinic groups	It is the wetting and dispersing additive for stabilizing carbon blacks and organic pigments.
SWADD-360	28~32		6~11	High molecular weight modified polyurethane copolymer with pigment affinic groups	It is the wetting and dispersing additive for stabilizing inorganic and organic pigments.
SWADD-370	28~32	MAX. 3	11~18	High molecular weight modified polyurethane copolymer with pigment affinic groups	It is the wetting and dispersing additive for excellent stabilization of inorganic and organic pigments. Specially, suitable for PCM coatings.
SWADD-390	MIN. 96	14~20	11~18	Unsatd.polycarboxylic acid amine amide derivative.	It is the wetting and dispersing additive for PVC Sol and PU foam / Pigment concentrates in polyol or plasticizer.

ANTI-SAGGING DDITIVES

PRODUCT CODE	SOLIDS (%)	ACID VALUE	AMINE VALUE	COMPOSITION	MAIN APPLICATION
SWADD-961	71~75	MAX. 5		Polycarboxylic acid ester polymer	It is used as a anti-sagging agent designed for acryl paints such as plastic industrial paints.

SLIP ADDITIVES

PRODUCT CODE	SOLIDS (%)	COMPOSITION	MAIN APPLICATION
SWADD-611	50~54%	Solution of a polysiloxane copolymer	It has excellent effect on slip and flow control property. Acryl, acryl-urethane for industrial or wood coatings.
SWADD-612	50~54%	Polyether modified polysiloxane copolymer	It has excellent effect on slip and flow control, improved levelling property. Used for both Non-aqueous and aqueous coating systems.
SWADD-613	MIN 95%	Polyether modified siloxane copolymer	It has excellent effect on slip and flow control, improved levelling property. Used for both water soluble and solvent based coating systems.
SWADD-617	10~14%	Solution of a polysiloxane copolymer	It has effect on slip, anti-cratering and levelling on surface of film. It also has improved dampness of surface paints.
SWADD-618	48~52%	Polyether modified polysiloxane surfactants	Air drying, baking curing acrylic,PE,& alkyd coating system. Urethane, Acrylic-urethanecoating system.
SWADD-619	18~22%	Dimethyl polysiloxane surfactants	Epoxy, urethane coating system. Alkyd, Acrylic melamine high temperature baking coatings
SWADD-621	20~24%	Polyether modified polydimethylsiloxane.	High temperature baking of general industrial coatings. Automobile OEM, car refinish coating system. Polyurethane based wood coatings.
SWADD-622	50~54%	Polyether modified polysiloxane copolymer	Epoxy, Acrylic-urethane coating system. Alkyd, Acrylic melamine high temperature baking coatings
SWADD-631	49~53%	Polyether polysiloxane surfactants	Water borne based air drying and baking coatings. High temperature baking acrylic, polyester coatings.
SWADD-633	MIN 97%	Polyether modified polysiloxane copolymer	It has excellent effect on slip and improved dampness on surface of film. It show good levelling and anti-cratering on coating. It used solvent base as well as water soluble coatings.
SWADD-646	23~27%	Polyether modified siloxane copolymer	Epoxy, Urethane coatings Alkyd, Acrylic melamine high temperature baking coatings
SWADD-649	MIN 99%	Polyether modified siloxane copolymer	It is recommended for all aqueous coating, also for formulations which do not solvent system.
SWADD-652	48~52%	Dimethyl polysiloxane surfactants	Epoxy, urethane coating system. Alkyd, Acrylic melamine high temperature baking coatings

ADDITIVES
FOR INKS AND SURFACE COATINGS



ACID CATALYSTS

TYPE	PRODUCT CODE	ACID	ACTIVE (%)	pH	Acid value	PRINCIPAL PROPERTIES	MAIN APPLICATION
BLOCKED	SWCAT-4603	DNNSA	25	6.5 - 7.5		General purpose catalyst	Coil and can coating
	SWCAT-4509	DNNSA	30			Applications for water, water and salt spray resistance	Coil and can coating
	SWCAT-4145	PTSA	20	2.5 - 3.5		Low temperature cure. Good water and salt spray resistance.	General industrial and metal coating .
	SWCAT-4500	PTSA	25	6.0 - 7.0		Good overall properties, water and corrosion resistance.	Automotive and General industrial coating
	SWCAT-4513	PTSA	25	5.5 - 6.5		Low temperature cure and good stability.	General industrial coating
	SWCAT-4517	PTSA	25	8.0 - 9.0		Good metal mark resistance, waterborne and high solids paints.	Coil coating and General industrial coating
	SWCAT-4511	DNNSA	25	6.5 - 7.5		Low temperature cure and good stability.	General industrial coating
	SWCAT-4503	DDBSA	50	6.2 - 7.2		General purpose catalyst	Coil and can coating
	SWCAT-4504	DDBSA	25			Good electrostatic spray, good adhesion	Automotive coating
	SWCAT-4505	DDBSA	25	6.0 - 8.0		Good solubility in high solid paint	Coil coating and automotive top coating
NON-BLOCKED	SWNCAT-4101N	DNNSA	50		60 - 65	Water and corrosion resistance. High temperature application	Coil and can coating
	SWNCAT-4100N	PTSA	40		130 - 140	Fast cure, good exterior durability and high gloss.	Wood,paper,printing and general industrials coatings.
	SWNCAT-4240N	PTSA	40		130 - 140	Low temperature cure. Good stability in solvent and water base system coatings.	General industrial and metal coating.
	SWNCAT-4240NW	PTSA	40		130 - 140	Low temperature cure. Good stability in solvent and water base system coatings.	General industrial and metal coating.
	SWNCAT-4105N	DNNSA	55		110 - 118	General purpose catalyst. Good water and salt spray resistance.	Wood,General industrials and electrocoatings
	SWNCAT-4200N	DDBSA	40			High temperature application.	Coil, can and general industrial coating

SOLVENTS AND DILUENTS USED IN COATING FORMULATIONS

Solvents	CAS No.	Evaporation Rate nBuOAc=1	Formula	Specific Gravity (20°C)	Flash Point (°F)	Surface Tension	Boiling Range (°C)	R.I Value (20°C)
ACETONE	67-64-1	6.3	CH3COCH3	0.792	-4	22.3	55.5-57.1	1.3591
ETHYL ACETATE	141-78-6	4.1	CH3COOC2H5	0.901	24	23.9	75.5-78.5	1.3718
METHYL ACETATE	79-20-9	6	CH3COOCH3	0.934	5	25.8	56-58	1.3601
MEK	78-93-3	3.8	CH3COC2H5	0.802	16	24.6	79.6	1.3788
MIBK	108-10-1	1.6	CH3COCH2CH(CH3)2	0.802	60	23.6	114-117	1.3958
DIBK	108-83-8	0.2	(CH3)2CHCH2COCH2CH(CH3)2	0.811	120	24.6	163-176	1.4150
n-BUTYL ACETATE	123-86-4	1	CH3COOC4H9	0.883	81	25.1	122-129	1.3941
PM	107-98-2	0.7	CH3OCH2CH(CH3)OH	0.923	90	28.3	120	1.4036
PMA	108-65-6	0.4	CH3COOCH(CH3)CH2OCH3	0.97	114	26.4	140-150	1.3995
AMYL ACETATE	628-63-7	0.4	CH3COOC5H11	0.876	106	28.5	146	1.4013
METHYL AMYL ACETATE	108-84-9	0.5	CH3COOCH(CH3)C4H9	0.858	96	22.6	146-150	1.4008
CYCLOHEXANONE	108-94-1	0.3	[CH2(CH2)4CO]	0.948	111	27.7	156	1.4507
ISOPHORONE	78-59-1	0.02	[OCHC:C(CH3)CH2C(CH3)2CH2]	0.922	17	32.3	210-218	1.4781
CA	111-15-9	0.2	CH3COOC2H4OC2H5	0.973	130	28.2	150-160	1.403
DIACETONE ALCOHOL	123-42-2	0.12	(CH3)2C(OH)CH2COCH3	0.94	126	28.9	145-172	1.4234
DIBASIC ESTERS		0.007	CH3COO(CH2)nCOOCH3[n=2,3,&4]	1.092	212	35.6	196-225	1.4221
E.C	110-80-5	0.3	C2H5OC2H4OH	0.931	110	29.3	134-136	1.4076
B.C	111-76-2	0.09	C4H9OC2H4OH	0.902	143	26.6	169-173	1.4193
METHYL ALCOHOL	67-56-1	3.5	CH3OH	0.792	50	22.6	64-65	1.3286
IPA	67-63-0	1.7	(CH3)3CHOH	0.786	55	21.3	80-84	1.3776
I-BUOH	78-83-1	0.6	CH3CH(CH3)CH2OH	0.803	85	22.8	106-109	1.3955
n-BUOH	71-36-3	0.5	C4H9OH	0.811	97	24.6	116-119	1.3993
2-ETHYL HEXANOL	104-76-7	0.01	C4H9CH(C2H5)CH2OH	0.833	164	28.7	182-186	1.4316
TOLUENE	108-88-3	1.9	C6H5CH3	0.871	45	28.5	228-233	1.4969
XYLENE	1330-20-7	0.7	C6H4(CH3)2	0.865	83	28.7	275-290	1.4983
NAPHTHA 100	64742-95-6	0.29	Mixture	0.873	108	29	313-343	1.4993
NAPHTHA 150	64742-94-5	0.06	Mixture	0.895	150	30	362-410	1.5083
NAPHTHA 200		<0.001	Mixture	1		35.9	439-535	1.592
VM&P NAPHTHA	64742-89-8	1.6	Mixture	0.753	44		244-282	1.4233
METHYLENE CHLORIDE	75-09-02	14.5	CH2Cl2	1.336		26.5	102-106	1.4242
THF	109-99-9	6.3	[OCH2CH2CH2CH2]	0.889	6	26.4	65-67	1.4073
DMF	68-12-02	0.2	CHCON(CH3)2	0.951	136	35.2	153	1.4283

Application Chart.

Paint systems		Aikyd resins air drying	Acrylic air drying	2-component Epoxy	2-component Acrylic-urethane	2-component Polyurethane	Thermosetting polyester melamine
Additives							
Levelling	SWADD-207	●	●	●	●	●	
	SWADD-208S						
	SWADD-2038W						
	SWADD-220R	●	●	●	●	●	●
	SWADD-235	●	●	●	●	●	●
	SWADD-236	●	●	●	●	●	●
	SWADD-237						●
	SWADD238	●	●		●	●	●
	SWADD-239	●	●	●	●	●	●
	SWADD-239-50	●	●	●	●	●	●
	SWADD-240	●		●	●		●
	SWADD-241	●		●	●		●
	SWADD-248	●		●	●		●
	SWADD-249	●		●	●		●
	SWADD-250	●	●		●	●	●
	SWADD-257	●	●		●		●
	SWADD-577	●	●		●		●
	SWADD-260-50						●
	SWADD-261-45						●
	SWADD-265	●	●		●		●
	SWADD-266	●	●		●	●	●
	SWADD238W						
	SWADD-280			●			●
	SWADD-281			●			●
	SWADD-282			●			●
	SWADD-283						
	SWADD-284			●			●
	SWADD-287						●
	SWADD-288-50			●			●
	SWADD-290	●		●	●		●
SWADD-291	●		●	●	●	●	
SWADD-293	●	●	●	●	●	●	

Paint systems		Aikyd resins air drying	Acrylic air drying	2-component Epoxy	2-component Acrylic-urethane	2-component Polyurethane	Thermosetting polyester melamine
Deforming	SWADD-101		●	●	●	●	●
	SWADD-105		●			●	
	SWADD-117		●	●			●
	SWADD-123	●	●				●
	SWADD-132	●		●		●	●
	SWADD-133	●	●	●	●	●	●
	SWADD-160	●	●	●	●	●	●
	SWADD-1100			●	●	●	●
	SWADD-1102		●	●			●
	SWADD-1103	●	●	●	●	●	●
	SWADD-1127	●			●	●	●
	SWADD-1130	●	●	●	●	●	●
	SWADD-1131T	●	●	●	●	●	●
	SWADD-1132	●	●	●	●	●	●
	SWADD-1133	●	●	●	●	●	●
	SWADD-1134	●	●	●	●	●	●
	SWADD-1135	●		●		●	●
	SWADD-1170	●			●	●	●
	SWADD-1171	●			●	●	●
	SWADD-1035	●		●			
	SWADD-1105	●	●				●
	SWADD-113WS						
	SWADD-114WS						
	SWADD-1225	●	●	●	●	●	●
	SWADD-1365	●		●	●	●	
	SWADD-1515	●	●		●		●
	SWADD-1555	●		●			
	SWADD-1565	●	●		●		
SWADD-1575	●		●				
SWADD-1150S			●		●		

[illegible]

Thermosetting alkyd melamine	Thermosetting acrylic	Powder coating	U.V curing	Unsaturated polyester	Chlorinated rubber	Water soluble	Emulsions
●	●			●			
				●			
●	●			●			
●	●			●			
●	●						
●	●			●	●		
●	●		●				
●	●						
●	●			●	●		
●	●			●	●		
●	●			●	●		
●	●			●	●		
●	●			●	●		
●	●						
●							
●	●					●	
						●	●
	●					●	●
●	●			●	●	●	●
●					●		
●							
			●				

Paint systems		Aikyd resins air drying	Acrylic air drying	2-component Epoxy	2-component Acrylic-urethane	2-component Polyurethane	Thermosetting polyester melamine
Additives							
Wetting & Dispersing	SWADD-301	●		●	●	●	
	SWADD-305	●	●	●	●	●	
	SWADD-312	●		●			●
	SWADD-314	●			●		●
	SWADD-3155	●		●	●		●
	SWADD-318	●	●				
	SWADD-380	●	●	●	●	●	●
	SWADD-350	●	●		●	●	●
	SWADD-360	●			●	●	
	SWADD-370	●	●				●
SWADD-3600	●			●	●		
Anti- sagging	SWADD-961	●		●	●		●
	SWADD-962	●		●	●		●
Slip	SWADD-611		●	●	●	●	●
	SWADD-612				●		●
	SWADD-613			●	●	●	●
	SWADD-617				●	●	●
	SWADD-618			●			●
	SWADD-619				●	●	●
	SWADD-621				●		●
	SWADD-622				●		●
	SWADD-631				●		●
	SWADD-633			●	●		●
	SWADD-646			●	●		●
	SWADD-649		●	●	●	●	●
SWADD-652				●		●	

TYPE		PRODUCT NAME	ACID TYPE	MIN CURE	APPLICATIONS		
					PRIMER COAT	CAN	COIL
ACID CATALYSTS	BLOCKED	SWCAT-4504	DDBSA	120			
		SWCAT-4505	DDBSA	120			○
		SWCAT-4543	DDBSA	120			●
		SWCAT-4509	DNNSA	150			●/○
		SWCAT-4511	DNNSA	90	●/○		●/○
		SWCAT-4603	DNNSA	150			●
		SWCAT-4500	P-TSA	80			●/○
		SWCAT-4513	P-TSA	80		●	●
	SWCAT-4517	P-TSA	90			●	
	NON -BLOCKED	SWNCAT-4101N	DNNSA	125			●
		SWNCAT-4105N	DNNSA	RT	○	●/○	●
		SWNCAT-4200N	DDBSA	130			●
		SWNCAT-4100N	P-TSA	RT			
SWNCAT-4100NW		P-TSA	RT			●	
SWNCAT-4240N		P-TSA	RT				

[illegible]

APPLICATIONS						
GENERAL INDUSTRIAL	AUTOMOTIVE	PLASTICS	WOOD	PAPER	ADHESIVES	INKS
	●					
	●/○					
●	●					
●						
●						
●	●/○					
●						
●			●/○	●		
●						
			●/○	●/○		●/○
			●		●	
			●/○	○	●	●/○
●	●					

