

200 m

Specialized Manufacturer of Paint & Coating Additives

Version 1 Sep 2023 We believe the company's length of existence doesn't always mean definite success and prosperity. **Noyan Afzon Chem** is a young and expert corporation, led by a management team with decades of experience in the coatings and additives industries. **NAC** always focuses on innovating first-ever generated products in Iran and quickly became one of the leading paints and coatings additives suppliers in regions' markets. These additives, which include solvent-based, solvent-free, water-based, or universal systems wetting & dispersing, defoamer-air release & leveling are successfully used in the paint and coatings industry including epoxy internal flow coating for pipelines, epoxy flooring, automotive coatings, construction coatings, coil coatings, inks, adhesives, other industrial coatings, and oils.

We are always working to provide competitive advantages in the market for our customers by continuous innovation and consistently expanding our product range based on the needs of customers, achieving and maintaining international quality and selling without intermediaries.

According to the significant changes that small amounts of additives make in your product's performance, we believe that:

One drop of our products can change the equations.



NAC's range of wetting and dispersing additives are used to wet and stabilize inorganic & organic pigments and extender fillers within paints, coatings and ink formulations. The result of a fine and homogeneous distribution of solid particles in liquid media (water and the entire range of organic solvents of varying polarity), is color strength, gloss, viscosity stability, prevent flocculation, phases separation & sedimentation of particles, time and cost savings and ensure the long-term stability of such systems.

VIIIIIIIIIIIIIIIIII

Product Selection Guide Formulation Additives by NAC

/es	Product Name	Counter Product	Chemical Type	Active Ingredients %	Prevent Floating/Flooding	Acrylic (Water-Based)	Acrylic (Solvent-Based)	Short Oil Alkyds	Medium Oil Alkyds	Long Oil Alkyds	Polyester (water-based)	Polyester	Ероху	Polyurethane	Nitrocellulose
iti	NACO-DS 1211	-	Acrylic salt	20-25		\checkmark									
qq	NACO-DS 1280	BYK 180	Copolymer with acidic groups	100		\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark			
Ă	NACO-DS 1012	EFKA 4140	Acrylic copolymer	60-65		\checkmark		\checkmark	\checkmark	\checkmark					
ng	NACO-DS 1013	EFKA 4608	Acrylic copolymer	60				\checkmark	\checkmark	\checkmark					
rsi	NACO-DS 1013 S	EFKA 4608	Acrylic copolymer	60	\checkmark			\checkmark	\checkmark	\checkmark					
þe	NACO-DS 1014	EFKA FA 4600	Acrylic copolymer	45-50				\checkmark	\checkmark	\checkmark					
)is	NACO-DS 1020	BYK 108	Polycarboxylic acid	100				\checkmark	\checkmark	\checkmark		\checkmark			
	NACO-DS 1022	EFKA PA 4450	Polymer with acidic groups	25				\checkmark	\checkmark	\checkmark		\checkmark			
an	NACO-DS 1022 S	EFKA 4666	Polymer with acidic groups	27	\checkmark			\checkmark	\checkmark	\checkmark		\checkmark			
5	NACO-DS 1031	-	Polymer with acidic groups	30			\checkmark	\checkmark	\checkmark	\checkmark		\checkmark			
tin	NACO-DS 1040	BYK 110	Copolymer with acidic groups	52			\checkmark	\checkmark	\checkmark	\checkmark		\checkmark		\checkmark	
/et	NACO-DS 1046	EFKA 4046	Modified polyurethane	40-45	\checkmark		\checkmark	\checkmark	\checkmark	\checkmark		\checkmark	\checkmark	\checkmark	\checkmark
3	NACO-DS 1060	BYK P 104	Polycarboxylic acid	55-60			\checkmark	\checkmark	\checkmark	\checkmark		\checkmark	\checkmark	\checkmark	\checkmark
	NACO-DS 1060 S	BYK P 104 S	Polycarboxylic acid	55-60	\checkmark		\checkmark	\checkmark	\checkmark	\checkmark		\checkmark	\checkmark	\checkmark	\checkmark
	NACO-DS 1065	BYK 220 S	Polyester	50			\checkmark	\checkmark	\checkmark	\checkmark		\checkmark	\checkmark	\checkmark	\checkmark
	NACO-DS 1065 S	BYK 220 S	Polyester	52	\checkmark		\checkmark	\checkmark	\checkmark	\checkmark		\checkmark	\checkmark	\checkmark	\checkmark
	NACO-DS 1070	BYK 170	Polymer with pigment affinic groups	70								\checkmark			
	NACO-DS 1080	EFKA 4608	Copolymer with pigment affinic groups	100				\checkmark	\checkmark	\checkmark					\checkmark

NACO-DS 1211

Wetting and Dispersing Additive (Water Based)

Economic wetting and dispersing additive with low dosage for water-based construction paints for stabilizing fillers, organic, inorganic, and carbon black pigments. Prevent coagulation of pigment particles during the storage time.

Product Data					
Product Type	Wetting and Dispersing				
Applications/ Recommended for	Coatings > Water-based systems				
Particularly Recommended	Acrylic construction paints				
Counter Product	-				
Special Feature	Slight increase in paint viscosity				
Composition	Salt of an acrylic copolymer				
Physical Form	Clear light yellow liquid				
Active Content	20-25%				
Density (20 °C)	0.95-1.00 g/ml				
Non-volatile Matter (10 min., 150 °C)	20-25%				
Typical Dosage %	0.2% based on total formulation,				
	Or based on pigment weight:				
	Titanium dioxide: 2%				
	Organic pigments: 3-5%				
	Carbon black: 6-8%				

NACO-DS 1280

Wetting and Dispersing Additive (Water/Solvent Based)

Solvent-free wetting and dispersing additive for solvent-borne, solvent-free, and aqueous coating systems, printing inks and adhesives for stabilizing inorganic pigments, in particular titanium dioxide. The additive is recommended for OEM primers and base coats.

Product Data				
Product Type	Wetting and Dispersing > Universal			
Applications/ Recommended for	Coatings > Water/Solvent based systems			
Particularly Recommended	Water/Solvent based Acrylic and Polyester			
	systems			
Counter Product	BYK 180			
Special Feature	Compatible with all resin types			
Composition	Copolymer with acidic groups			
Physical Form	Clear light yellow liquid			
Active Content	100%			
Acid Value	65-75 mg KOH/g			
Non-volatile Matter (10 min., 150 °C)	100%			
Typical Dosage %	0.3-1% based on total formulation,			
	Or based on pigment weight:			
	Titanium dioxide: 2%			
	Organic pigments: 4-6%			
	Carbon black: 8-10%			

NACO-DS 1012

Wetting and Dispersing Additive (Water/Solvent Based)

Dual-purpose wetting and dispersing additive with low dosage for solvent-borne, aqueous, and solvent-free coating systems and adhesives for stabilizing fillers, organic, inorganic, and carbon black pigments. Suitable dispersing additive for use in universal pigment pastes.

Product Data				
Product Type	Wetting and Dispersing > Universal			
Applications/ Recommended for	Coatings > Water/Solvent-based systems			
Particularly Recommended	Water-based acrylic & Solvent-based alkyds			
Counter Product	EFKA 4140			
Special Feature	Suitable for use in universal pigment pastes			
Composition	Salt of an acrylic copolymer			
Physical Form	Brownish liquid			
Active Content	60-65%			
Density (20 °C)	0.95-1.00 g/ml			
Non-volatile Matter (10 min., 150 °C)	60-65%			
Typical Dosage %	0.2% based on total formulation,			
	Or based on pigment weight:			
	Titanium dioxide: 2%			
	Organic pigments: 3-5%			
	Carbon black: 6-8%			

NACO-DS 1013

Wetting and Dispersing Additive (Solvent Based)

Solvent-based, wetting and dispersing additive with low dosage for solvent-borne alkyd construction coatings for stabilizing fillers, organic, inorganic, and carbon black pigments.

Product Data				
Product Type	Wetting and Dispersing			
Applications/ Recommended for	Coatings > Solvent-based systems			
Particularly Recommended	Alkyd systems			
Counter Product	EFKA 4608			
Special Feature	Low dosage			
Composition	Acrylic copolymer			
Physical Form	Brownish liquid			
Active Content	60%			
Density (20 °C)	0.95-1.00 g/ml			
Non-volatile Matter (10 min., 150 °C)	60%			
Typical Dosage %	0.2% based on total formulation,			
	Or based on pigment weight:			
	Titanium dioxide: 2%			
	Organic pigments: 3-5%			
	Carbon black: 6-8%			

NACO-DS 1013 S

Wetting and Dispersing Additive (Solvent Based, Anti Flooding/Floating)

Solvent-based, wetting and dispersing additive with low dosage for solvent-borne alkyd construction coatings for stabilizing fillers, organic, inorganic, and carbon black pigments. Prevent the flooding/floating of titanium dioxide in combination with colored pigments.

Product Data				
Product Type	Wetting and Dispersing			
Applications/ Recommended for	Coatings > Solvent-based Systems			
Particularly Recommended	Alkyd systems			
Counter Product	EFKA 4608			
Special Feature	Prevent flooding/floating			
Composition	Acrylic copolymer			
Physical Form	Brownish liquid			
Active Content	60%			
Density (20 °C)	0.95-1.00 g/ml			
Non-volatile Matter (10 min., 150 °C)	60%			
Typical Dosage %	0.2% based on total formulation,			
	Or based on pigment weight:			
	Titanium dioxide: 2%			
	Organic pigments: 3-5%			
	Carbon black: 6-8%			

*Anti-floating version of NACO-DS 1013

NACO-DS 1014

Wetting and Dispersing Additive (Solvent Based)

Very economically controlled flocculating wetting and dispersing additive with low dosage for solvent-based construction (Alkyd resin) coatings for stabilizing fillers, organic, inorganic, and carbon black pigments.

Product Data				
Product Type	Wetting and Dispersing			
Applications/ Recommended for	Coatings > Solvent-based systems			
Particularly Recommended	Alkyd systems			
Counter Product	EFKA FA 4600			
Special Feature	Low dosage			
Composition	Acrylic copolymer			
Physical Form	Brownish liquid			
Active Content	45-50%			
Density (20 °C)	0.95-1.00 g/ml			
Non-volatile Matter (10 min., 150 °C)	45-50%			
Typical Dosage %	0.2% based on total formulation,			
	Or based on pigment weight:			
	Titanium dioxide: 2%			
	Organic pigments: 3-5%			
	Carbon black: 6-8%			

NACO-DS 1020

Wetting and Dispersing Additive (Solvent Based)

Solvent-free, low-dosage wetting and dispersing additive for solvent-based and solventfree coatings and printing inks as well as pigment concentrates for stabilizing fillers, organic, inorganic, and carbon black pigments. Slightly increases in the viscosity of final coatings and is suitable for managing viscosity and sagging properties.

Product Data				
Product Type	Wetting and Dispersing			
Applications/ Recommended for	Coatings > Solvent-based systems			
Particularly Recommended	Alkyd systems			
Counter Product	BYK 108			
Special Feature	Slight increase in paint viscosity			
Composition	Polycarboxylic acid			
Physical Form	Clear dark yellow viscose liquid			
Active Content	100%			
Density (20 °C)	0.90-0.95 g/ml			
Acid value	180-200 mg KOH/g			
Non-volatile Matter (10 min., 150 °C)	100 %			
Typical Dosage %	0.2% based on total formulation			
	Or based on pigment weight:			
	Titanium dioxide: 2%			
	Organic pigments: 3-4%			
	Carbon black: 6-8%			

NACO-DS 1022

Wetting and Dispersing Additive (Solvent Based)

Polymeric wetting and dispersing additive for use in solvent-based coatings for stabilizing fillers, organic, inorganic, and carbon black pigments. Slightly increases in the viscosity of final coatings and is suitable for managing viscosity and sagging properties.

Product Data				
Product Type	Wetting and Dispersing			
Applications/ Recommended for	Coatings > Solvent-based systems			
Particularly Recommended	Alkyd systems			
Counter Product	EFKA PA 4450			
Special Feature	Slight increase in paint viscosity			
Composition	Polymer with acidic groups			
Physical Form	Clear yellow liquid			
Active Content	25%			
Density (20 °C)	0.90 g/ml			
Acid value	45-50 mg KOH/g			
Non-volatile Matter (10 min., 150 °C)	25 %			
Typical Dosage %	0.3-0.5% based on total formulation			
	Or based on pigment weight:			
	Titanium dioxide: 2%			
	Organic pigments: 3-5%			
	Carbon black: 8-10%			

NACO-DS 1022 S

Wetting and Dispersing Additive (Solvent Based, Anti flooding/floating)

Polymeric wetting and dispersing additive for solvent-borne coatings for stabilizing fillers, organic, inorganic, and carbon black pigments. Slightly increases in the viscosity of final coatings and is suitable for managing viscosity and sagging properties. Prevent the flooding/floating of titanium dioxide in combination with colored pigments.

Product Data				
Product Type	Wetting and Dispersing			
Applications/ Recommended for	Coatings > Solvent-based systems			
Particularly Recommended	Alkyd systems			
Counter Product	EFKA 4666			
Special Feature	Prevent flooding/floating			
Composition	Polymer with acidic groups			
Physical Form	Clear yellow liquid			
Active Content	27%			
Density (20 °C)	0.9 g/ml			
Acid value	40-45 mg KOH/g			
Non-volatile Matter (10 min., 150 °C)	27%			
Typical Dosage %	0.3-0.5% based on total formulation			
	Or based on pigment weight:			
	Titanium dioxide: 2%			
	Organic pigments: 3-5%			
	Carbon black: 8-10%			

*Anti-floating version of NACO-DS 1022

NACO-DS 1031

Wetting and Dispersing Additive (Solvent Based)

Polymeric wetting and dispersing additive for use in solvent-based coatings for stabilizing fillers, organic, inorganic, and carbon black pigments. Slightly increases in the viscosity of final coatings and is suitable for managing viscosity and sagging properties.

Product Data				
Product Type	Wetting and Dispersing			
Applications/ Recommended for	Coatings > Solvent-based systems			
Particularly Recommended	Alkyd systems			
Counter Product	-			
Special Feature	Slight increase in paint viscosity			
Composition	Polymer with acidic groups			
Physical Form	Clear yellow liquid			
Active Content	30%			
Density (20 °C)	0.90 g/ml			
Acid value	50-60 mg KOH/g			
Non-volatile Matter (10 min., 150 °C)	30 %			
Typical Dosage %	0.2-0.4% based on total formulation,			
	Or based on pigment weight:			
	Titanium dioxide: 2%			
	Organic pigments: 3-4%			
	Carbon black: 6-8%			

NACO-DS 1040

Wetting and Dispersing Additive (Solvent Based)

Polymeric wetting and dispersing additive for solvent-borne and solvent-free coating systems for stabilizing inorganic pigments, in particular titanium dioxide. suitable for high gloss solvent-based systems with broad compatibility in a wide range of resins. Suitable for many coating systems such as:

- automotive refinish and OEM coatings,
- solvent-based industrial coatings,
- coil coatings, especially TiO₂

Product Data				
Product Type	Wetting and Dispersing			
Applications/ Recommended for	Coatings > Solvent-based systems			
Particularly Recommended	Polyester and Alkyd systems			
Counter Product	BYK 110			
Special Feature	Suitable for high gloss solvent-based systems			
Composition	Copolymer with acidic groups			
Physical Form	Clear light yellow liquid			
Active Content	52%			
Density (20 °C)	0.90-1.00 g/ml			
Acid value	35-45 mg KOH/g			
Non-volatile Matter (10 min., 150 °C)	52 %			
Typical Dosage %	0.5% based on total formulation,			
	Or based on pigment weight:			
	Titanium dioxide: 2-4%			
	Organic pigments: 6-8%			
	Carbon black: 8-10%			

NACO-DS 1046

Wetting and Dispersing Additive (Solvent Based)

Polymeric wetting and dispersing additive for solvent-borne and solvent-free coating systems for stabilizing fillers, inorganic, organic pigments, in particular carbon black. It results in:

- High gloss
- Reduced floating/flooding
- Reduced viscosity

Product Data					
Product Type	Wetting and Dispersing				
Applications/ Recommended for	Coatings > Solvent-based systems				
Particularly Recommended	All kinds of resin systems (Alkyd, PU, Epoxy,				
	Polyester, Nitrocellulose)				
Counter Product	EFKA 4046				
Special Feature	Suitable for high gloss solvent-based systems				
Composition	Modified polyurethane				
Physical Form	Light yellow liquid				
Active Content	40-45%				
Density (20 °C)	0.90-1.00 g/ml				
Amine value	30-40 mg KOH/g				
Non-volatile Matter (10 min., 150 °C)	40-45 %				
Typical Dosage %	0.2-0.5% based on total formulation,				
	Or based on pigment weight:				
	Titanium dioxide: 2-3%				
	Inorganic pigments: 3-5%				
	Organic pigments: 5-8%				
	Carbon black: 10-15%				

NACO-DS1060

Wetting and Dispersing Additive (Solvent Based)

General wetting and dispersing additive for solvent-borne coatings for stabilizing fillers, organic, inorganic, and carbon black pigments in all kinds of resin systems such as:

- two-pack polyurethane and chlorinated polymer systems
- two-pack epoxy resin systems
- alkyd/amino resin combinations
- nitrocellulose systems
- Solvent-based primer and base-coat of automotive coatings (saturated polyester systems)
- Solvent-based primer and base-coat of coil coatings

Product Data				
Product Type	Wetting and Dispersing			
Applications/ Recommended for	Coatings > Solvent-based systems			
Particularly Recommended	All kinds of resin systems (Alkyd, PU, Epoxy,			
	Polyester, Nitrocellulose)			
Counter Product	BYK 104			
Special Feature	Compatible with all resin types			
Composition	High molecular weight polycarboxylic acid			
Physical Form	Clear light yellow liquid			
Active Content	55-60%			
Density (20 °C)	0.90-1.00 g/ml			
Acid value	120-130 mg KOH/g			
Non-volatile Matter (10 min., 150 °C)	55-60%			
Typical Dosage %	0.3-0.5% based on total formulation			
	Or based on pigment weight:			
	Titanium dioxide: 2%			
	Inorganic pigments: 3-5%			
	Organic pigments: 4-6%			
	Carbon black: 8-10%			

NACO-DS1060 S

Wetting and Dispersing Additive (Solvent Based, Anti flooding/floating)

General wetting and dispersing additive for solvent-borne coatings for stabilizing fillers, organic, inorganic, and carbon black pigments in all kinds of resin systems such as:

- two-pack polyurethane and chlorinated polymer systems
- two-pack epoxy resin systems
- Alkyd/amino resin combinations
- Nitrocellulose systems
- Solvent-based primer and base-coat of automotive coatings (saturated polyester systems)
- Solvent-based primer and base-coat of coil coatings

Prevent the flooding/floating of titanium dioxide in combination with colored pigments.

Product Data					
Product Type	Wetting and Dispersing				
Applications/ Recommended for	Coatings > Solvent-based systems				
Particularly Recommended	All kinds of resin systems (Alkyd, PU, Epoxy,				
	Polyester, Nitrocellulose)				
Counter Product	BYK P104 S & EFKA 4665				
Special Feature	Prevent flooding/floating				
Composition	High molecular weight polycarboxylic acid				
Physical Form	Clear light yellow liquid				
Active Content	55-60%				
Density (20 °C)	0.90-1.00 g/ml				
Acid value	120-130 mg KOH/g				
Non-volatile Matter (10 min., 150 °C)	55-60%				
Typical Dosage %	0.3-0.5% based on total formulation				
	Or based on pigment weight:				
	Titanium dioxide: 2%				
	Inorganic pigments: 3-5%				
	Organic pigments: 4-6%				
	Carbon black: 8-10%				

*Anti-floating version of NACO-DS 1060.

www.noyanafzon.com

NACO-DS1065

Wetting and Dispersing Additive (Solvent Based)

General wetting and dispersing additive for solvent-borne coatings for stabilizing fillers, organic, inorganic, and carbon black pigments in all kinds of resin systems (specially recommended for epoxy coatings) such as:

- two-pack polyurethane and chlorinated polymer systems
- two-pack epoxy resin systems
- alkyd/amino resin combinations
- nitrocellulose systems
- Solvent-based primer and base-coat of automotive coatings (saturated polyester systems)

Product Data				
Product Type	Wetting and Dispersing			
Applications/ Recommended for	Coatings > Solvent-based systems			
Particularly Recommended	Epoxy resin systems			
Counter Product	BYK 220 S			
Special Feature	Compatible with all resin types			
Composition	High molecular weight polyester			
Physical Form	Clear yellow liquid			
Active Content	50%			
Non-volatile matter (10 min., 150 °C)	50 %			
Typical Dosage %	0.2-0.5% based on total formulation			
	Or based on pigment weight:			
	Titanium dioxide: 2%			
	Inorganic pigments: 3-5%			
	Organic pigments: 4-6%			
	Carbon black: 8-10%			

NACO-DS1065 S

Wetting and Dispersing Additive (Solvent Based, Anti flooding/floating)

General wetting and dispersing additive for solvent-borne coatings for stabilizing fillers, organic, inorganic, and carbon black pigments in all kinds of resin systems (specially recommended for epoxy coatings) such as:

- two-pack polyurethane and chlorinated polymer systems
- two-pack epoxy resin systems
- alkyd/amino resin combinations
- nitrocellulose systems
- Solvent-based primer and base-coat of automotive coatings (saturated polyester systems)

Prevent the flooding/floating of titanium dioxide in combination with colored pigments.

Product Data					
Product Type	Wetting and Dispersing				
Applications/ Recommended for	Coatings > Solvent-Based systems				
Particularly Recommended	Epoxy resin systems				
Counter Product	BYK 220 S				
Special Feature	Prevents flooding/floating				
Composition	High molecular weight polyester				
Physical Form	Clear yellow liquid				
Active Content	52%				
Non-volatile matter (10 min., 150 °C)	52 %				
Typical Dosage %	0.5% based on total formulation				
	Or based on pigment weight:				
	Titanium dioxide: 2%				
	Inorganic pigments: 3-5%				
	Organic pigments: 4-6%				
	Carbon black: 8-10%				

*Anti-floating version of NACO-DS 1065

NACO-DS 1070

Wetting and Dispersing Additive (Solvent Based)

Wetting and dispersing additive for solvent-borne coil coatings and industrial coatings for stabilizing fillers, organic, inorganic, and carbon black pigments. Standard additive for acid-catalyzed and acid-curable coating systems.

Product Data				
Product Type	Wetting and Dispersing			
Applications/ Recommended for	Coatings > Solvent-based systems			
Particularly Recommended	Polyester coil coatings			
Counter Product	BYK 170			
Special Feature	Low dosage			
Composition	Solution of a high molecular weight block			
	copolymer with pigment-affinic groups			
Physical Form	Clear dark yellow liquid			
Active Content	70%			
Acid value	130-140 mg KOH/g			
Density	0.9-1.0 g/ml			
Non-volatile matter (10 min., 150 °C)	70 %			
Typical Dosage %	0.2-0.5% based on total formulation			
	Or based on pigment weight:			
	Titanium dioxide: 2-4%			
	Organic pigments: 6-8%			
	Carbon black: 8-10%			

NACO-DS 1080

Wetting and Dispersing Additive (Solvent Based)

Solvent-free wetting and dispersing additive for solvent-borne and solvent-free coatings and printing inks, as well as pigment concentrates. Especially recommended for solventbased printing inks. Strong reduction in mill-base and final product viscosity.

Product Data					
Product Type	Wetting and Dispersing				
Applications/ Recommended for	Coatings > Solvent-based systems				
Particularly Recommended	Solvent-based inks & Alkyd systems				
Counter Product	EFKA 4608				
Special Feature	Reducing viscosity of millbase				
Composition	Copolymer with pigment affinic groups				
Physical Form	Brownish liquid				
Active Content	100%				
Amine value	52-62 mg KOH/g				
Non-volatile matter (10 min., 150 °C)	100%				
Typical Dosage %	0.2-0.5% based on total formulation				
	Or based on pigment weight:				
	Titanium dioxide: 2-4%				
	Organic pigments: 6-8%				
	Carbon black: 8-10%				

Defoamer and Leveling Additives

NAC's range of defoamer and air release additives are used to prevent and destroy the foam bubbles, removes (micro-) air bubbles from a liquid and helps them to rise to the surface to ensure an optimum paint & coating surface without any remaining bubbles or other surface defects. Paint manufacturers benefit from foam-free an improved production processes, a perfect surface whiteout defects like pinholes, craters and fisheyes and optimum product properties.

NAC's Slip and Leveling additive improves leveling, prevents cratering, helps substrate wetting, acts as a defoamer and de-aeration aid

Product Selection Guide Formulation Additives by NAC

d Air Release	Product Name	Counter Product	Chemical Type	Active Ingredients %	Acrylic(Water-Based)	Polyester (Water-based)	Short Oil Alkyds	Medium Oil Alkyds	long Oil Alkyds	Acrylic(Solvent-Based)	Ероху	Polyester	Polyurethane	Nitrocellulose	Oil & Lubricants
an c	NACO-DF 2211	BYK-011	Oil-based	100%		\checkmark									
	NACO- DF 2212	TEGO 2-89	Oil-based	17%	\checkmark	\checkmark									
Ĕ	NACO- DF 2020	-	Silicone-based	60%							\checkmark				
foa	NACO- DF 2022	EFKA 2723	Silicone-based	10%							\checkmark				
Def	NACO- DF 2027	EFKA 2722	Silicone-based	15%							\checkmark		\checkmark		
	NACO- DF 2030	BYK A 530	Silicone-based	5%							\checkmark		\checkmark		
	NACO- DF 2040	HITEC 2030	Polymer-based	50%											\checkmark
Leveling	NACO- L 3077	EFKA 3777	Modified acrylic copolymer	30%			~	✓	~	~	✓	~	✓	~	

NACO-DF 2211

Defoamer and Air Release Additives (Oil Based)

Silicone-free foam control agent is especially recommended for water-based automotive primers and top coats based on saturated polyester resins. Don't create defects like pinholes, craters, and fish eyes in the final coatings film. Don't interfere with adhesion between layers of coatings.

Product Data					
Product Type Defoamers/Anti-foaming agents > Silicone-fr					
Applications/ Recommended for	Coatings/ Emulsion polymerization/ Adhesives				
	> Water-based systems				
Particularly Recommended	Water-based OEM coatings				
Counter Product	BYK 011				
Special Feature	Don't create pinholes, craters and fish-eyes				
Composition	Oil based defoamer				
Physical Form	Opaque liquid				
Active Content	100%				
Specific gravity (25 °C)	0.9 g/ml				
Solubility	Water miscible				
Typical Dosage %	Based on total weight:				
	0.3% to 0.7%				

NACO-DF 2212

Defoamer and Air Release Additives (Oil-Based)

Antifoam based on oil for use in aqueous coatings, emulsion polymerization process, and adhesives. The product is recommended for use in water-based acrylic, polyester, and polyvinyl acetate systems. Strong long-term de-foaming and anti-foaming effects. Undesirable effects associated with silicone-based antifoams (silicone spotting, fish eyes) can be eliminated in most applications.

Product Data				
Product Type Defoamers/Anti-foaming agents > Oil-bas				
Applications/ Recommended for	Coatings > Water-based systems			
Particularly Recommended	Acrylic, polyesters and polyvinyl acetate			
	systems			
Counter Product	TEGO 2-89			
Special Feature	Eliminates silicone related defects			
Composition	Oil-based defoamer			
Physical Form	Turbid liquid			
Active Content	17%			
Solubility	Water miscible			
Typical Dosage %	Based on pigment weight:			
	0.3% to 1%			

NACO-DF 2020

Defoamer and Air Release Additives (Silicone Based)

Silicone and polymer-containing defoamer and air release additive for solvent-borne and solvent-free coatings, adhesives, and sealants. Particularly recommended for epoxy clear coats (coatings with no pigment and fillers). Creates clear epoxy films and suitable leveling of coating without adding any leveling additives.

Product Data				
Product Type Defoamers/Anti-foaming agents > Silicone-ba				
Applications/ Recommended for	Coatings > Solvent-based systems			
Particularly Recommended	Epoxy resin systems			
Counter Product	-			
Special Feature	Creates clear epoxy films			
Composition	Solution of foam-destroying polymers and			
	polysiloxanes			
Physical Form	Clear yellowish liquid			
Active Content	60 %			
Flash point	42°C			
Typical Dosage %	Based on total formulation:			
	1.5% to 2.5%			

NACO-DF 2022

Defoamer and Air Release Additives (Silicone Based)

Silicone and polymer-containing highly effective defoamer and air release additive for solvent-borne and solvent-free coatings, adhesives, and sealants. Particularly recommended for epoxy resin systems (flooring and epoxy internal flow coating for pipelines).

Product Data				
Product Type	Defoamers/Anti-foaming agents > Silicone-based			
Applications/ Recommended for	Coatings > Solvent-based systems			
Particularly Recommended	Epoxy resin systems			
Counter Product	EFKA 2723			
Special Feature	Effective in low dosages			
Composition	Solution of foam-destroying polymers and			
	polysiloxanes			
Physical Form	Opaque liquid			
Active Content	10%			
Solvents	Hydrocarbon mixture			
Typical Dosage %	Based on total formulation:			
	0.5% to 0.8%			

NACO-DF 2027

Defoamer and Air Release Additives (Silicone Based)

Silicone and polymer-containing highly effective defoamer and air release additive for solvent-borne and solvent-free coatings, adhesives, and sealants. Particularly recommended for epoxy resin systems (flooring and epoxy internal flow coating for pipelines) and polyurethane. NACO-DF 2027 produces rapid de-aeration of solvent-free epoxy and polyurethane compounds so that foam- and blister-free coatings can be produced. NACO-DF 2027 acts as a leveling agent, giving a smooth surface to the coating.

Product Data	
Product Type	Defoamers/Anti-foaming agents > Silicone-based
Applications/ Recommended for	Coatings > Solvent-based systems
Particularly Recommended	Epoxy and Polyurethane resin systems
Counter Product	EFKA 2722
Special Feature	Creates clear epoxy films, Effective in low
	dosages, Self-leveling
Composition	Solution of foam-destroying polymers and
	polysiloxanes
Physical Form	Clear to slightly yellowish liquid
Active Content	15%
Solvents	Hydrocarbon mixture
Typical Dosage %	Based on total formulation:
	0.5% to 1.5%

NACO-DF 2030

Defoamer and Air Release Additives (Silicone Based)

Silicone and polymer-containing highly effective defoamer and air release additive for solvent-borne and solvent-free coatings, adhesives, and sealants. Particularly recommended for epoxy resin systems (flooring and epoxy internal flow coating for pipelines) and polyurethane. NACO-DF 2030 produces rapid de-aeration of solvent-free epoxy and polyurethane compounds so that foam- and blister-free coatings can be produced.

Product Data		
Product Type	Defoamers/Anti-foaming agents > Silicone-based	
Applications/ Recommended for	Coatings > Solvent-based systems	
Particularly Recommended	Epoxy and Polyurethane resin systems	
Counter Product	BYK A 530	
Special Feature	Creates clear epoxy films, Effective in low dosages	
Composition	Solution of foam-destroying polymers and	
	polysiloxanes	
Physical Form	Clear liquid	
Active Content	5 %	
Solvents	Hydrocarbon mixture	
Typical Dosage %	Based on total formulation:	
	0.5% to 1.5%	

NACO-DF 2040

Defoamer and Air Release Additives (Polymer Based)

Silicone-free foam control agent for use in industrial and driveline lubricant applications. Particularly recommended for gear oils, special lubricants, hydraulic turbines, and transmission oils.

Product Data		
Product Type	Defoamers/Anti-foaming agents > Silicone-free	
Applications/ Recommended for	Coatings > Solvent-based systems	
Particularly Recommended	industrial and driveline lubricant	
Counter Product	HITEC 2030	
Special Feature	Very low dosage	
Composition	Acrylate based foam inhibitor	
Physical Form	Clear light yellow liquid	
Active Content	50%	
Density	0.85 g/ml	
Flash point	38° C	
Viscosity (25° C)	13 ± 3 s	
Typical Dosage %	Based on total formulation:	
	0.02%	

Slip and Leveling Additives

NACO-L3077

Slip and Leveling additive (Solvent Based)

Slip and Leveling additive for solvent-borne coating systems, improves leveling, prevents cratering, helps substrate wetting, acts as a defoamer and de-aeration aid, and does not interfere with inter-coat adhesion. Furthermore, prevents floating/flooding of organic pigments in combination with TiO2. The additive is recommended for baking enamels based on alkyd, acrylic or polyester resins, polyurethane coatings, two-pack epoxy coatings, and air-drying alkyd systems.

Product Data		
Product Type	Flow/leveling agents > Silicone-free	
Applications/ Recommended for	Coatings > Solvent-based systems	
Particularly Recommended	All kinds of resin systems	
Counter Product	EFKA 3777	
Special Feature	Compatible with all resin types	
Composition	Modified acrylic copolymer	
Physical Form	Clear light yellowish liquid	
Active Content	30%	
Typical Dosage %	Based on total formulation:	
	0.5%	

Our solutions for your requirements

Recommended application of additives for optimum performance in your products:

Maindustrial solvent-based Polyester coatings:

Wetting and Dispersing: NACO-DS 1060 & 1060 S Wetting and Dispersing: NACO-DS 1040 (High gloss OEM and Coil coatings) Wetting and Dispersing: NACO-DS 1046 (High gloss OEM & Coil coatings) Wetting and Dispersing: NACO-DS 1280 (High gloss OEM and Coil coatings) Wetting and Dispersing: NACO-DS 1070 (Coil coatings)

Industrial Epoxy floor coatings and flow coatings for pipelines:

Wetting and Dispersing: NACO-DS 1065 & 1065 S, NACO-DS 1046 Defoamer and Air Release: NACO DF-2022, NACO DF-2027, NACO DF-2030 Slip and Leveling: NACO-L 3077 Defoamer and Air Release: NACO-DF 2020 (For epoxy clear coats)

Industrial Polyurethane coatings:

Wetting and Dispersing: NACO-DS 1060 & 1060 S, Wetting and Dispersing: NACO-DS 1040 Wetting and Dispersing: NACO-DS 1046 Slip and Leveling: NACO-L 3077 Defoamer and Air Release: NACO DF-2027, NACO DF-2030

Solvent-based inks:

Wetting and Dispersing: NACO-DS 1080



Solvent-based Alkyd coatings:

Wetting and Dispersing: NACO-DS 1014 (Economic) Wetting and Dispersing: NACO-DS 1013 & 1013 S Wetting and Dispersing: NACO-DS 1060 & 1060 S (Constant viscosity) Wetting and Dispersing: NACO-DS 1022, 1022 S, 1031 (Slight increase in viscosity) Wetting and Dispersing: NACO-DS 1046 (Decrease mill-base viscosity)

(AN) Water-based Polyester OEM coating:

Wetting and Dispersing: NACO-DS 1280 Defoamer and Air Release: NACO-DF 2211

Water-based emulsion polymerization and adhesives:

Defoamer and Air Release: NACO-DF 2212

(NA) Water-based Acrylic coating:

Wetting and Dispersing: NACO-DS 1211 (Slight increase in viscosity) Defoamer and Air Release: NACO-DF 2212

Industrial and driveline lubricant:

www.noyanafzon.com Defoamer and Air Release: NACO-DF 2040 (gear oils, special lubricants, hydraulic turbines and transmission oils)

Page | 34

Product Selection Guide Formulation Additives by NAC

Contacts:

Noyan Afzon Chem, No 86-87 first building, Iran Polymer and Petrochemical Research Institute, Pajouhesh Blvd, Km 15th Tehran Karaj Highway, Tehran, Iran.

Postal code: 149 771 311 5

Phone: (+9821) 44787098 - 44787095

WhatsApp: (+98) 9056030635

Web: www.noyanafzon.com

Email: info@noyanafzon.com

LinkedIn: Noyan Afzon Chem

You are so welcomed to our additives world. This catalog has been designed as practical guidance for you to find your expected additives.



The data contained in this publication are based on our current knowledge and experience. While the descriptions, designs, data and information contained herein are presented in good faith and believed to be accurate, they are provided for guidance only. Because many factors may affect processing or application/use, NAC recommends that the reader make tests to determine the suitability of a product for a particular purpose prior to use. For more information, visit www.noyanafzon.com