

The background of the slide is a photograph of several large, irregular, translucent white chunks of pine resin derivatives, possibly rosin, resting on a light-colored surface. The resin has a crystalline, layered appearance with some internal fractures and a slightly glossy texture.

**PINE BASED  
ROSIN DERIVATIVES**

Product List V2301

# MODIFIED ROSIN AND RESIN

Rosin is the primary product of rosin sources. In China, rosin normally is meant Gum Rosin.

There has been produced 661,200 metric tons of gum rosin that China contributed 76% of global production (Forecast, 2011). Wood Rosin and Tall Oil Rosin (TOR) also are the primary products of rosin sources. USA is the largest production country of TOR in the world, which to possessed 50% markets. In data of 2011, the production of rosin is 1,270,000 metric tons, the separate percentage of gum rosin, wood rosin and TOR were 68%, 1%, 31%.

Gum rosin is tapping the oleoresin of living pine trees which pines are grown in the middle-latitude zone, such as the countries of China, Brazil, Indonesia, India and other Latin America.

TOR is a by-product of the kraft pulping process. The USA, Finland, Russia, Sweden, France, Japan and Australia is the main country of manufactures.

Now today, the newly sustainable gum rosin processing will change market dynamics. According to Charles Morris said, president of the Pine Chemicals Association (PCA), the hybrid pine trees can increase the production of pine oleoresin from 2 kilograms to 6~8 kilograms annually. The new plantation system can increase number to 7,000 to 10,000 trees in a year, compared with the number of 1,500 to 2,000 trees, a worker harvests in a forest with difficult terrain a dense underbrush.



# Buyer Guide

## 1. Gum Rosin & Modified Rosin

Type Number	Alternative Product	Product Name	CAS	Specification	Features
R/X, R/WW		<a href="#">Gum Rosin</a>	8050-09-7	Color: Slight Yellow Acid Value, mgKOH/g: 166 min Softening Point, R&B, °C: 76 min	
AR120240		<a href="#">Acrylic Acid Modified Rosin</a>	83137-13-7	Color, @Fe-Co scale: 2 max Acid Value, mgKOH/kg: 235 to 245 Softening Point, R&B, °C: 115 to 125	
D459	RONDIS R-CH(Arakawa)	<a href="#">Disproportionated Rosin</a>	8050-09-7	Colour: max N(Yellow:20 Red: 2.1) Softening Point, R&B, °C: 75.0 min Acid Value, mg KOH/g: 150.0 min	Emulsifier for polymerization of synthetic rubber
D529		<a href="#">Disproportionated Rosin</a>	8050-09-7	Colour: max N(Yellow:20 Red: 2.1) Softening Point, R&B, °C: 75.0 min Acid Value, mg KOH/g: 150.0 min	
D574		<a href="#">Disproportionated Rosin</a>	8050-09-7	Colour: 4# max, @Fe-Co Softening Point, R&B, °C: 75.0 min Acid Value, mg KOH/g: 152 to 155	
D614		<a href="#">Disproportionated Rosin</a>	8050-09-7	Colour: 4# max, @Fe-Co Softening Point, R&B, °C: 75.0 min Acid Value, mg KOH/g: 152 to 155	
D701		<a href="#">Disproportionated Rosin</a>	8050-09-7	Colour: 1# max, @Fe-Co Softening Point, R&B, °C: 75.0 min Acid Value, mg KOH/g: 155 min	
PR95	Poly-Pale(Eastman); Aradime R-95(Arakawa); Polygral 95(DRT)	<a href="#">Polymerized Rosin</a>	65997-5-9	Color, Gardner: 10 max Softening Point, R&B, °C: 92 to 98 Acid Value, mgKOH/g: 165 max	
PR115	Polygral 115(DRT)	<a href="#">Polymerized Rosin</a>	65997-5-9	Color, Gardner: 10 max Softening Point, R&B, °C: 110 to 120 Acid Value, mgKOH/g: 145 min	
PR140	ARDYME R-140(Arakawa); Polygral 140(DRT); DymereX®(Eastman)	<a href="#">Polymerized Rosin</a>	65997-5-9	Color, Gardner: 10 max Softening Point, R&B, °C: 135 to 145 Acid Value, mgKOH/g: 140 min	

# Buyer Guide

## 2. Hydrogenated Rosin

Type Number	Alternative Product	Product Name	CAS	Specification	Features
H106	HYDROGRAL®(DRT)	<a href="#">Hydrogenated Rosin</a>	65997-06-0	Color, Gardner: 7 max Softening Point, R&B, °C: 72.0 min Acid Value, mgKOH/g: 162.0 min	
H106G	STAYBELITE® (DRT); STAYBELITE® Resin-E (Eastman)	<a href="#">Hydrogenated Rosin</a>	65997-06-0	Color(Gardner): 7max Softening Point (R&B), °C: 71.0-73 Acid Value, mgKOH/g: 162.0 min	
H101		<a href="#">Hydrogenated Rosin</a> <a href="#">(Water-White Hydrogenated Rosin)</a>	65997-06-0	Color, @Fe-Co scale: 1 max Acid Value, mg KOH/g: 170.0 min Softening Point, R&B, °C: 76.0 min	Water-white
H301		<a href="#">Hydrogenated Rosin</a> <a href="#">(Water-White Hydrogenated Rosin)</a>	65997-06-0	Color, @Fe-Co scale: 1 max Acid Value, mg KOH/g: 170.0 min Softening Point, R&B, °C: 76.0 min	Highly hydrogenated rosin, water-white
H301M		<a href="#">Hydrogenated Rosin</a> <a href="#">(Water-White Hydrogenated Rosin)</a>	65997-06-0	Color, @Fe-Co scale: 1 max Acid Value, mg KOH/g: 170.0 min Softening Point, R&B, °C: 76 to 81	Highly hydrogenated rosin, water-white
H30100H	FORAL AX®/FORAL DX®(DRT); FORAL®AX-E(Eastman)	<a href="#">Hydrogenated Rosin</a> <a href="#">(Colorless Fully Hydrogenated Rosin)</a>	65997-06-0	Color, Hazen, #: 50 to 100 Softening Point, R&B, °C: 70 to 76 Acid Value, mgKOH/g: 158 to 173	Highly hydrogenated rosin, water-white
HAR125220	PINECRYSTAL KE-604(Arakawa)	<a href="#">Modified Rosin</a> <a href="#">(Hydrogenated Acrylic Acid Modified Rosin)</a>	144413-22-9	Color, Gardner: 200, @ASTM D1209 Softening Point (R&B), °C: 122 to 134 Acid Value, mgKOH/g: 220 to 245	
HAR125230	PINECRYSTAL KE-604(Arakawa)	<a href="#">Modified Rosin</a> <a href="#">(Hydrogenated Acrylic Acid Modified Rosin)</a>	144413-22-9	Color, Gardner: 2 max Softening Point (R&B), °C: 120 to 130 Acid Value, mgKOH/g: 230 min	The polarity of solvent should be slightly improved when replacing Arakawa KE-604

# Buyer Guide

## 3. Rosin Esters

Type Number	Alternative Product	Product Name	CAS	Specification	Features
G858FV		<a href="#">Glycerol Ester of Gum Rosin (ESTER GUM)</a>	8050-31-5	Color, @Fe-Co scale: 8 max Softening Point, R&B, °C: 80 to 90 Acid Value, mgKOH/g: 3 to 9	
G858F	Ester Gum 8BG®(DRT)	<a href="#">Glycerol Ester of Gum Rosin(Food)</a>	8050-31-5	Color, @Fe-Co scale: 8 max Softening Point, R&B, °C: 80 to 90 Acid Value, mgKOH/g: 3 to 9	
G854F		<a href="#">Glycerol Ester of Gum Rosin(Food)</a>	8050-31-5	Color, @Fe-Co scale: 4 max Softening Point, R&B, °C: 82 to 90 Acid Value, mgKOH/g: 3 to 9	
G1004		<a href="#">Glycerol Ester of Gum Rosin (Industrial)</a>	8050-31-5	Color, @Fe-Co scale: 2 to 4 Softening Point, R&B, °C: 98 to 102 Acid Value, mgKOH/g: 10 max	
GER-85	Permalyn® 5095(EASTMAN)	<a href="#">Glycerol Ester of Gum Rosin (Industrial)</a>	8050-31-5	Color, @Fe-Co scale: 3 to 5 Softening Point, R&B, °C: 83 to 87 Acid Value, mgKOH/g: 15 max	
G852	GERTOLINE® G2L(DRT)	<a href="#">Glycerol Ester of Gum Rosin (Industrial)</a>	8050-31-5	Color, @Fe-Co scale: 2 max Softening Point, R&B, °C: 85 to 95 Acid Value, mgKOH/g: 10 max	
G705		<a href="#">Glycerol Ester of Gum Rosin (Industrial)</a>	8050-31-5	Color, @Fe-Co scale: 3 to 5 Softening Point, R&B, °C: 65 to 75 Acid Value, mgKOH/g: 10 max	
PG1008	DERTOPOLINE®G(DRT); Poly-pale® Ester 10(Eastman)	<a href="#">GLYCEROL ESTER OF POLYMERIZED ROSIN(Polymerized Ester Gum)</a>	9006-47-7	Color, @Fe-Co scale: 8 max Softening Point, R&B, °C: 96 to 120 Acid Value, mgKOH/g: 3.0 to 9.0	

# Buyer Guide

## 3. Rosin Esters

Type Number	Alternative Product	Product Name	CAS	Specification	Features
P90255	Permalyn® 6110-M(Eastman)	<a href="#">Pentaerythrityl Rosinate</a>	8050-26-8	Color, @Fe-Co scale: 3 to 5 Softening Point, R&B, °C: 90 to 95 Acid Value, mgKOH/g: 25 max	
P90253	GERTOLINE® PLS(DRT)	<a href="#">Pentaerythrityl Rosinate</a>	8050-26-8	Color, @Fe-Co scale: 3 max Softening Point, R&B, °C: 90 to 95 Acid Value, mgKOH/g: 25 max	
P95253	GERTOLINE® 105(DRT)	<a href="#">Pentaerythrityl Rosinate</a>	8050-26-8	Color, @Fe-Co scale: 2 to 3 Softening Point, R&B, °C: 95 to 105 Acid Value, mgKOH/g: 25 max	
P100255	Permalyn® 5110(Eastman)	<a href="#">Pentaerythrityl Rosinate</a>	8050-26-8	Color, @Fe-Co scale: 3 to 5 Softening Point (R&B), °C: 95 to 105 Acid Value, mgKOH/g: 25 max	
P100251	Permalyn® 6110(Eastman)	<a href="#">Pentaerythrityl Rosinate</a>	8050-26-8	Color, @Fe-Co scale: 1 max Softening Point (R&B), °C: 95 to 105 Acid Value, mgKOH/g: 25 max	
P110255		<a href="#">Pentaerythrityl Rosinate</a>	8050-26-8	Color, @Fe-Co scale: 5 to 6 Softening Point (R&B), °C: 110 to 120 Acid Value, mgKOH/g: 25 max	
P120253		<a href="#">Pentaerythrityl Rosinate</a>	8050-26-8	Color, @Fe-Co scale: 2-3 max Softening Point (R&B), °C: 95 to 120 Acid Value, mgKOH/g: 25 max	
M305	ABALYN(DRT); Metalyn™ 200(EASTMAN)	<a href="#">Methyl Rosinate</a>	68186-14-1	Color, @Fe-Co scale: 5 max Acid Value, mgKOH/g: 8 max	
M301		<a href="#">Methyl Rosinate</a>	68186-14-1	Color, @Fe-Co scale: 1 max, @Ghana Acid Value, mgKOH/g: 9 max	
T7015	GRANOLITE® TEG(DRT)	<a href="#">Triethylene Glycol Rosinate</a>	8050-25-7	Color, @Gardner: 8 max Acid Value, mg KOH/g: 15 max	

# Buyer Guide

## 4. Hydrogenated Rosin Esters

Type Number	Alternative Product	Product Name	CAS	Specification	Features
HG858F		<a href="#">Glycerol Ester of Hydrogenated Rosin(Food)</a>	65997-13-9	Color, Gardner: 8 max Acid value, mgKOH/g: 9 max Softening Point, R&B, °C: 78 to 90	
HG854F		<a href="#">Glycerol Ester of Hydrogenated Rosin(Food)</a>	65997-13-9	Color, Gardner: 3 to 4 Acid value, mgKOH/g: 9 max Softening Point, R&B, °C: 78 to 90	
HG855	Pensel GA-85H (Arakawa); HYDROGRAL® G(DRT)/Staybelite Ester 10/10-E*(DRT&Eastman)	<a href="#">Glycerol Ester of Hydrogenated Rosin(Industrial)</a>	65997-13-9	Color, Gardner: 6 max Acid value, mgKOH/g: 9 max Softening Point, R&B, °C: 78 to 88	
HG853	Foralyn 90®/FORAL® 85/85- E/FORAL® 3085(DRT&Eastman)	<a href="#">Glycerol Ester of Hydrogenated Rosin(Industrial)</a>	65997-13-9	Color, Gardner: 3 max Acid value, mgKOH/g: 3 to 8 Softening Point, R&B, °C: 78 to 88	
HG90H	Pinecrystal KE-311 (Arakawa)	<a href="#">Glyceryl Ester of Hydrogenated Rosin (Colorless Glyceryl Hydrogenated Rosinate)</a>	65997-13-9	Color, Hazen Unit: 150 max Acid Value, mg/g: 10max Softening Point, R&B, °C: 85 to 95	Colorless; Good compatibility with Acryl
HG100H	Pinecrystal KE-100 (Arakawa)	<a href="#">Glyceryl Ester of Hydrogenated Rosin (Colorless Glyceryl Hydrogenated Rosinate)</a>	65997-13-9	Color, Hazen Unit: 150 max Acid Value, mg/g: 2 to 10 Softening Point, R&B, °C: 90 to 100	Colorless; Good compatibility with Acryl
HP959		<a href="#">Pentaerythritol Ester of Hydrogenated Rosin</a>	64365-17-9	Color, Gardner: 10 max Softening Point, R&B, °C: 94 to 100 Acid Value, mgKOH/g: 8 to 14	
HP1008	HYDROGRAL® P(DRT)	<a href="#">Pentaerythritol Ester of Hydrogenated Rosin</a>	64365-17-9	Color, Gardner: 8 max Softening Point, R&B, °C: 98 to 103 Acid Value, mgKOH/g: 20 max	
HP1006	FORAL® 105/105- E(DRT&Eastman)	<a href="#">Pentaerythritol Ester of Hydrogenated Rosin</a>	64365-17-9	Color, Gardner: 6 max Softening Point, R&B, °C: 96 to 103 Acid Value, mgKOH/g: 20 max	

# Buyer Guide

## 4. Hydrogenated Rosin Esters

Type Number	Alternative Product	Product Name	CAS	Specification	Features
HP1108	PENTALYN® H/H-E(DRT&Eastman)	<a href="#">Pentaerythritol Ester of Hydrogenated Rosin</a>	64365-17-9	Color, Gardner: 8 to 10 Softening Point, R&B, °C: 105 to 115 Acid Value, mgKOH/g: 20 max	
HP1104	Foralyn® 110(Eastman)	<a href="#">Pentaerythritol Ester of Hydrogenated Rosin</a>	64365-17-9	Color, Gardner: 4 to 6 Softening Point, R&B, °C: 105 to 115 Acid Value, mgKOH/g: 20 max	
HP100H	FORAL® 105(DRT)	<a href="#">Pentaerythritol Ester of Hydrogenated Rosin (Colorless Pentaerythritol Hydrogenated Rosinate)</a>	64365-17-9	Color: 150 max, @hazen Softening Point, R&B, °C: 100 to 110 Acid Value, mgKOH/g: 20 max	Water-white
HM302	HERCOLYN® D(DRT); Foralyn® 5020-F(Eastman)	<a href="#">Methyl Hydrogenated Rosinate</a>	8050-15-5	Color, Gardner: 2 max Acid Value, mgKOH/g: 8 max	
HM301		<a href="#">Methyl Hydrogenated Rosinate</a>	8050-15-5	Color, Gardner: 1 max Acid Value, mgKOH/g: 9 max	
HT8515	Staybelite™ Ester 3(DRT); Staybelite™ Ester 3-E (Eastman)	<a href="#">Triethylene Glycol Hydrogenated Rosinate</a>	68648-53-3	Color, @Gardner: 8 max Acid Value, mg KOH/g: 15 max	
HA802	Abitol-E®(Eastman)	<a href="#">Hydroabietyl Alcohol</a>	26266-77-3	Color, Gardner: 2 max	



# Buyer Guide

## 5. Modified Rosin Esters

Type Number	Alternative Product	Product Name	CAS	Specification	Features
HC125R		<a href="#">Maleic Modified Rosin Ester</a>		Color, @Fe-Co scale: 4 to 6 Acid Value, mgKOH/g: 30 max Softening Point, R&B, °C: 120 to 126	
AE10020		<a href="#">Maleic Modified Rosin Ester</a>		Color, @Fe-Co scale: 3 to 6 Acid Value, mgKOH/g: 25 max Softening Point, R&B, °C: 100 to 110	
AE10030		<a href="#">Maleic Modified Rosin Ester</a>		Color, @Fe-Co scale: 5 max Acid Value, mgKOH/g: 20 to 30 Softening Point, R&B, °C: 97 to 103	
AE10070		<a href="#">Maleic Modified Rosin Ester</a> (Modified Rosin)		Color, @Fe-Co scale: 7 max Acid Value, mgKOH/g: 70 to 85 Softening Point, R&B, °C: 100 to 105	
AE12030		<a href="#">Maleic Modified Rosin Ester</a>		Color, @Fe-Co scale: 8 max Acid Value, mgKOH/g: 25 to 35 Softening Point, R&B, °C: 115 to 125	
AE13040		<a href="#">Maleic Modified Rosin Ester</a> ((Maleic Rosin Ester)		Color, @Fe-Co scale: 7 max Acid Value, mgKOH/g: 30 to 40 Softening Point, R&B, °C: 125 to 135	
AE130200		<a href="#">Alcohol Soluble Rosin Resin</a>		Color, @Fe-Co scale: 8 max Acid Value, mgKOH/kg: 190 to 210 Softening Point, R&B, °C: 125 to 135	
AE145180		<a href="#">Alcohol Soluble Rosin Resin</a>		Color, @Fe-Co scale: 8 max Acid Value, mgKOH/kg: 170 to 190 Softening Point, R&B, °C: 140 to 145	
AE145220		<a href="#">Alcohol Soluble Rosin Resin</a>		Color, @Fe-Co scale: 8 max Acid Value, mgKOH/kg: 210 to 230 Softening Point, R&B, °C: 140 to 145	
WA-125		<a href="#">Alcohol Soluble Rosin Resin</a>		Color, @Fe-Co scale: 8 max Acid Value, mgKOH/kg: 118 to 128 Softening Point, R&B, °C: ≥110	

# Buyer Guide

## 5. Modified Rosin Esters

Type Number	Alternative Product	Product Name	CAS	Specification	Features
AE125125	Pentalyn FC™ (Pinova/DRT)	<a href="#">Modified Rosin</a>		Color, Gardner: 10 max Softening Point, R&B, °C: 112 to 140 Acid Value, mgKOH/g: 110 min	Fruits Fresh-keeping Agent
PE17020		<a href="#">Modified Rosin</a>		Color, Gardner: 11 max Softening Point, R&B, °C: 165 to 175 Acid Value, mgKOH/g: 15 to 25	
AE150200		<a href="#">Modified Rosin</a>		Color, Gardner: 10 max Softening Point, R&B, °C: 145 to 160 Acid Value, mgKOH/g: 180.0 to 215.0	
AE155205		<a href="#">Modified Rosin</a>		Color, Gardner: 12 max Softening Point, R&B, °C: 150 to 160 Acid Value, mgKOH/g: 190.0 to 215.0	
AE160200		<a href="#">Pentaerythritol Ester of Maleic Rosin</a>	68333-69-7	Color, @Fe-Co scale: 9 max Softening Point, R&B, °C: 155 to 165 Acid Value, mgKOH/g: 190 to 210	
AE14020		<a href="#">Pentaerythritol Ester of Maleic Rosin</a>	68333-69-7	Color, @Fe-Co scale: 7 max Softening Point, R&B, °C: 130 to 145 Acid Value, mgKOH/g: 15 to 30	
AE155165		<a href="#">Pentaerythritol Ester of Maleic Rosin</a>	68333-69-7	Color, @Fe-Co scale: 7 max Softening Point, R&B, °C: 145 to 160 Acid Value, mgKOH/g: 155 to 175	
AE17050		<a href="#">Pentaerythritol Ester of Maleic Rosin</a>	68333-69-7	Color, @Fe-Co scale: 6, @Gardner, 50 resin / 50 toluene Softening Point, R&B, °C: 179 Acid Value, mgKOH/g: 50	

# Buyer Guide

## 6. Rosin Acids and Rosin Salts

Type Number	Alternative Product	Product Name	CAS	Specification	Features
514-10-3-99		<a href="#">Abietic Acid</a>	514-10-3	Purity, %: 99 min	
1740-19-8-70		<a href="#">Dehydroabietic Acid</a>	1740-19-8	Purity by GC: 70% min	
1740-19-8-90		<a href="#">Dehydroabietic Acid</a>	1740-19-8	Purity by GC: 90% min	
RA908		<a href="#">Rosin Amine (Abietylamine)</a>	61790-47-4	Color, Gardner: 8 max Total Amine content, by GC, %: 90 min	
DAA90		<a href="#">Dehydroabietylamine</a>	1446-61-3	Color, @Gardner: 8 max Dehydroabietylamine content : 90%Min	
DK504		<a href="#">Disproportionated Rosin Potassium Soap</a>	61790-50-9	Solid Content (%):50±1 Color (Gardner ),max.:6	Emulsifier for polymerization of synthetic rubber
DK804	Potassium Soap 80 Gresinox 578 M®(DRT)	<a href="#">Disproportionated Rosin Potassium Soap</a>	61790-50-9	Solid Content (%): 80±1 Color (Gardner ),max.: 4	Emulsifier for polymerization of synthetic rubber

# Buyer Guide

## 7. Rosin Resin Dispersion

Type Number	Alternative Product	Product Name	CAS	Specification	Features
PR7510		<a href="#">Rosin Resin Dispersion</a>		Total Solids Content, %: 51 to 53 PH Value, @25°C: 2 to 5	
RDPAP9080		<a href="#">Rosin Resin Dispersion</a>		Total Solids Content, %: 54 to 56 PH Value, @25°C: 7 to 9	
RDPAP9081		<a href="#">Rosin Resin Dispersion</a>		Total Solids Content, %: 54 to 58 PH Value, @25°C: 8 to 9.5	
RDPAT880L		<a href="#">Rosin Resin Dispersion</a>		Total Solids Content, %: 54 to 56 PH Value, @25°C: 7 to 9	
RDPF80		<a href="#">Rosin Resin Dispersion</a>			
RDPWT3509		<a href="#">Rosin Resin Dispersion</a>			
RDPWT5570		<a href="#">Rosin Resin Dispersion</a>		Total Solids Content, %: 54 to 56 PH Value, @25°C: 7 to 9	

# Buyer Guide

## 8. Rosin Modified Phenolic Resin

Type Number	Alternative Product	Product Name	CAS	Specification	Features
APR100		<a href="#">Alkyl Phenolic Resin</a>	9003-35-4	Color, @Fe-Co scale: 7 max Softening Point, R&B, °C: 90 to 110	
RP110		<a href="#">Reactive Alkyl Phenolic Resin</a>	9003-35-4	Color, Gardner: 90 to 110 Softening Point, R&B, °C: 90 to 110	
MP2101		<a href="#">Rosin Modified Phenolic Resin</a>		Color, @Fe-Co scale: 13 max Softening Point, R&B, °C: 166 to 175 Acid Value, mg KOH/g: 25 max	
MP2116		<a href="#">Rosin Modified Phenolic Resin</a>		Color, @Fe-Co scale: 13 max Softening Point, R&B, °C: 151 to 168 Acid Value, mg KOH/g: 12 to 18	
MP5103		<a href="#">Rosin Modified Phenolic Resin</a>		Color, @Fe-Co scale: 13 max Softening Point, R&B, °C: 160 to 170 Acid Value, mg KOH/g: 25 max	
RMP175		<a href="#">Rosin Modified Phenolic Resin</a>		Color, @Fe-Co scale: 7 to 13 Softening Point, R&B, °C: 165 to 185 Acid Value, mg KOH/g: 25 max	
RP4725A		<a href="#">Rosin Modified Phenolic Resin</a>		Color, @Fe-Co scale: 7 to 13 Softening Point, R&B, °C: 165 to 185 Acid Value, mg KOH/g: 25 max	
RPH210		<a href="#">Rosin Modified Phenolic Resin</a>		Color, @Fe-Co scale: 13 max Softening Point, R&B, °C: 135 to 148 Acid Value, mg KOH/g: 25 max	
FR2402		<a href="#">Rosin Modified Phenolic Resin</a>		Softening Point, R&B, °C: 85 to 120	

# Buyer Guide

## 8. Rosin Modified Phenolic Resin

Type Number	Alternative Product	Product Name	CAS	Specification	Features
AF-1438		<a href="#">Rosin Modified Phenolic Resin</a>		Acid Value, mg KOH/g: 25 max Softening Point, R&B, °C: 155 to 175	
AF-1444		<a href="#">Rosin Modified Phenolic Resin</a>		Color, @Gardner: 7 to 13 Acid Value, mg KOH/g: 25 max Softening Point, R&B, °C: 170 to 185	
AF-1458		<a href="#">Rosin Modified Phenolic Resin</a>		Color, @Gardner: 7 to 13 Acid Value, mg KOH/g: 25 max Softening Point, R&B, °C: 175 to 185	
AF-1444N		<a href="#">Rosin Modified Phenolic Resin</a>		Color, @Gardner: 7 to 13 Acid Value, mg KOH/g: 25 max Softening Point, R&B, °C: 170 to 185	
AF-1450		<a href="#">Rosin Modified Phenolic Resin</a>		Color, @Gardner: 7 to 13 Acid Value, mg KOH/g: 25 max Softening Point, R&B, °C: 165 to 180	
AF-1458		<a href="#">Rosin Modified Phenolic Resin</a>		Color, @Gardner: 7 to 13 Acid Value, mg KOH/g: 25 max Softening Point, R&B, °C: 175 to 185	
AF-1462		<a href="#">Rosin Modified Phenolic Resin</a>		Color, @Gardner: 7 to 13 Acid Value, mg KOH/g: 25 max Softening Point, R&B, °C: 165 to 185	
AF-1483		<a href="#">Rosin Modified Phenolic Resin</a>		Color, @Gardner: 7 to 13 Acid Value, mg KOH/g: 25 max Softening Point, R&B, °C: 165 to 180	
AF-1413		<a href="#">Rosin Modified Phenolic Resin</a>		Color, @Gardner: 7 to 13 Acid Value, mg KOH/g: 25 max Softening Point, R&B, °C: 145 to 165	
AF-1419		<a href="#">Rosin Modified Phenolic Resin</a>		Acid Value, mg KOH/g: 25 max Softening Point, R&B, °C: 165 to 185	

# Gum Rosin

Rosin, also called colophony or Greek pitch, is a solid form of resin obtained from pines and some other plants, mostly from conifers. It is produced by heating fresh liquid resin to vaporize the volatile liquid terpene components. It is semi-transparent and varies in color from yellow to black. At room temperature rosin is brittle, but it melts at stove-top temperatures. It chiefly consists of different resin acids, especially abietic acid.

## Packaging

Iron Drum, 225kg net each  
Paper Bag, 25kg net each

## Application & Markets

Adhesives & Sealants, Beverages & Savoury, Coating & Painting, Inks, Surfactant, Dyestuff & Decolorant

Item No.	Color	Acid Value, mgKOH/g	Ash content, %	Softening Point, R&B, °C	Insoluble in alcohol, %	Unsaponifiable matter, %
R/X	Slight Yellow	166 min	0.02 max	76 min	0.03 max	5 max
YPR/WW	Light yellow, Transparent	166 min	0.03 max	76 min	0.03 max	5 max
R/WG	Deep Yellow	165 min	0.04 max	75 min	0.03 max	5 max
R/K	Red Yellow	164 min	0.04 max	74 min	0.04 max	5 max
R/WW	Light yellow, Transparent	166 min	0.03 max	76 min	0.03 max	5 max
PMR/WW ( <i>P.massoniana</i> )	Light yellow, Transparent	166 min	0.03 max	76 min	0.03 max	5 max
PER/WW ( <i>P.elliottii</i> )	Light yellow, Transparent	166 min	0.03 max	76 min	0.03 max	8 max
R/X	Slight Yellow	166 min	0.02 max	76 min	0.03 max	5 max

# Acrylic Acid Modified Rosin

Acrylic Acid Modified Rosin is a derivative from additive reaction of gum rosin with acrylic acid.

## Packaging

Iron Drum, 225kg net each, 80 drums (18mt with pallets) per 20'FCL  
Paper Bag, 25kg net each, 640 bags (16mt with pallets) per 20'FCL

## Application & Markets

Tackifier, Electronic solder flux

Item No.	Appearance	Acid Value, mgKOH/kg	Color, @Fe-Co scale	Softening Point, R&B, °C	Solubility
AR120240	Slight yellow transparent solid	235 to 245	2 max	115 to 125	Clear, @isopropanol 2:8



# Disproportionated Rosin

Disproportionated rosin (DPR) is compound of dehydroabie acid and dihydroabtie acid, the DPR is processed through catalytic reaction of gum rosin on proper temperature. In the synthetic rubber industry, DPR is used as emulsifier in the producing of various product including styrene-butadiene rubber, chloroprene rubber, acrylonitrile-butadiene rubber and acrylonitrile-butadiene-styrene rubber. Using DPR as an emulsifier, rubber product will improve in cohesion, and the endurance to heat will increase for 25%.

## Packaging

Kraft-PP bag, 25kgs net each  
Galvanized iron drum, 225kgs net each

## Application & Markets

Adhesives & Sealants

Item No.	Colour	Abietic Acid, %	Dehydroabietic Acid, %	Softening Point, R&B, °C	Acid Value, mg KOH/g	Unsaponifiable Material, %	Saponifiable Value
D459	Not Darker than Rosin Color Grade N (Yellow:20 Red: 2.1)	0.5 max	45.0 min	75.0 min	150.0 min	12.0 max	
D529	Color Not Darker than Rosin Color Grade N (Yellow:20 Red: 2.1)	0.1 max	52.0 min	75.0 min	150.0 min	10.0 max	
D574	4# max, @Fe-Co	0	56.5 to 58.5	75.0 min	152 to 155	10.0 max	
D614	4# max, @Fe-Co	0	61 to 63	75.0 min	152 to 155	10.0 max	
D701	1# max, @Fe-Co	0.5 max	70 min	75.0 min	155 min		160 min

# Polymerized Rosin

Polymerized Rosin is a pale, acidic which composed predominately of dimeric acids derived from rosin with lesser amounts of monomeric resin acids and neutral materials of rosin origin. It has high dimmer contents, light color, high softening point and acid value, no rystallizing, low hot water dissolvable contents, good oil dissolvability and hardly changing the color of lead acetate. The high resistance to oxidation and does not crystallize from solutions or from solid compositions. It is compatible with many natural and synthetic film formers and rubbers. Being an acidic resin, it reacts readily with polyalcohols or hydrated lime to yield high melting derivatives.

## Packaging

Galvanized Iron Drum, 225kg net each

## Application & Markets

Adhesives & Sealants, Coating & Painting, nks

Item No.	Appearance	Color, Gardner	Softening Point, R&B, °C	Acid Value, mgKOH/g	Undissolved Content in Alcohol, %	Dissolvable Content in Hot Water, %
PR95	Transparent solid	10 max	92 to 98	165 max	0.030 max	0.20 max
PR115	Transparent solid	10 max	110 to 120	145 min	0.030 max	0.20 max
PR140	Transparent solid	10 max	135 to 145	140 min	0.030 max	0.20 max

# Hydrogenated Rosin

Hydrogenated Rosin is one of the dominant varieties of modified rosin with light color, high oxidation resistance and high thermal stability. Conjugated unsaturation of abietic resin acids can be removed through catalytic hydrogenation to overcome the shortcomings of oxidation and color degradation in rosin, is compatible in useful proportions with alkyds, natural and synthetic rubbers, natural resins, ethyl cellulose; waxes; plastic polymers, elastomeric polymers, metallic pigments, and many other raw materials. Hydrogenated rosin is widely used in food-grade ester gum, adhesive, synthetic rubber, coating and paint, ink, cosmetic, food industry etc.

## Packaging

Iron Drum, 225kg net each  
Complex paper bag (block or Granular), 25kg net each

## Application & Markets

Coating & Painting, Cosmetics & Personal Care, Inks, Rubber Aid

Item No.	Appearance	Color, Gardner	Softening Point, R&B, °C	Acid Value, mgKOH/g	Unsaponifiable Matter, %	Abietic Acid, %
H106	Yellow transparent solid	7 max	72.0 min	162.0 min	7.0 max	2.0 max
H301	Transparent solid	1 max	76.0 min	170.0 min	5.0 max	1.0 max
HWG Grade		30 max, @Lovibond, Yellow 2.5 max, @Lovibond, Red	70.0 min	158.0 min	9.0 max	3.0 max

Item No.	Alcohol-insoluble Substance, %	Dehydroabietic Acid, %	Absorbed by oxygen, %	Tetrahydro resin acid, %	Test of heat stability, @200°C/2h
H106	0.02 max	10 max			
H301		10 max		30.0 to 40.0	X max
HWG Grade	0.04 max	15 max	0.3 max		

# Water-White Hydrogenated Rosin

Water-White Hydrogenated Rosin is one of the dominant varieties of modified rosin with light color, high oxidation resistance and high thermal stability. It is soluble in ketones, esters, hydrocarbons, alcohols and chlorinated solvents and insoluble in water. Conjugated unsaturation of abietic resin acids can be removed through catalytic hydrogenation to overcome the shortcomings of oxidation and color degradation in rosin, is compatible in useful proportions with alkyds; natural and synthetic rubbers; natural resins, ethylcellulose; waxes; plastic polymers; elastomeric polymers; metallic pigments; and many other raw materials.

## Packaging

Complex paper bag , 25kg net each  
Iron Drum, 225kg net each

## Application & Markets

Adhesives & Sealants, Coating & Painting, Cosmetics & Personal Care, Food & Feed Additives, Inks, Rubber Aid

Item No.	Appearance	Color, @Fe-Co scale	Acid Value, mg KOH/g	Softening Point, R&B, °C	Tetrahydro Resin Acid, %	Abietic Acid, %	Dehydroabietic Acid, %	Unsaponifiable Matter, %	Test of Heat Stability, @200°C/2h
H101	Transparent solid	1 max	170.0 min	76.0 min	10 min	2.0 max			
H301	Transparent solid	1 max	170.0 min	76.0 min	30 to 40	1.0 max	10 max	5.0 max	X max
H301M	Transparent solid	1 max	170.0 min	76 to 81	30 min	1.0 max	10 max		X max

# Colorless Fully Hydrogenated Rosin

Foreverest™ Colorless Fully Hydrogenated Rosin 400 is refined from hydrogenated rosin or high-hydrogenated rosin that are eliminated foreign matter. With the benefit of colorless, is applied as solid or liquid solder flux, and the raw material of light-colored rosin resin and hot melt adhesives. It's similar as [Eastman® product](#).

## Packaging

Iron Drum, 225kg net each  
Paper-plastic compound Bag, 25kg net each, 640 bags (16000kg) per 20'FCL

## Application & Markets

Solder flux, HMA, Light-colored resin material, PSAs, Printing, Acrylate adhesive

Item No.	Appearance	Color, Hazen, #	Softening Point, R&B, °C	Tetrahydro resin acid, %	Hydro-resin acid, %
H30100H	White transparent solid	50 to 100	74 to 78	40 to 60	92 min
	Dehydroabietic acid, %	Acid Value, mgKOH/g	Ash, %	Unsaponifiable matter, %	Abietic Acid, %
	10 max	164 to 168	0.008 max	5.0 max	0.5 max

# Hydrogenated Acrylic Acid Modified Rosin

Modified Rosin HAR125220 is colorless and transparent rosin derivative that could only be born with unique technology. It is high acid value and high softening point.

HAR125220 can replace the Colorless Rosin Derivatives product.

## Packaging

25KG COMPLEX PAPER BAG NET EACH, BLOCK

## Application & Markets

Adhesives & Sealants, Coating & Painting, Cosmetics & Personal Care, Food & Feed Additives, Inks, Rubber Aid

Item No.	Color, Gardner	Softening Point (R&B), °C	Acid Value, mgKOH/g	Solubility, @Isopropanol 2:8
HAR125220	200, @ASTM D1209	122 to 134	220 to 245	Clear
HAR125230	2 max	120 to 130	230 min	

# Glycerol Ester of Gum Rosin (ESTER GUM)

Glycerol Ester of Gum Rosin (GEGR), also called as Glyceryl Rosinate, or Ester Gum, is an oil-soluble food additive. which esterified with Rosin and edible Glycerol.

Its high density helps keep oils in suspension in water and this property is the reason why it is often used as a beverage stabilizer. It is widely used as a base in the production of chewing-gum. It also serves as an alternative to brominated vegetable oil in citrus oil flavored soft drinks. In some case both ingredients are used together. (Approved by FDA 172.735)

## Packaging

Fiber Drum is made to orders  
Inner Aluminum Foil Vacuum complex bag, 25kg net each  
Paper-plastic compound Bag, 25kg net each, 640 bags (16000kg, 20 pallets per 20'FCL)  
Paper Carton, 25kg net each, 780 cartons (19500kg, 20 pallets per 20'FCL)  
Woven Bag, 500kg net each

## Application & Markets

Adhesives & Sealants, Coating & Painting

Item No.	Color, @Fe-Co scale	Softening Point, R&B, °C	Acid Value, mgKOH/g	Solubility, @benzene 1:1	Ash Content, %	Arsenic Content, mg/kg	Heavy metal (as Pb), mg/kg
G858FV	8 max	80 to 90	3 to 9	Clear	0.1 max	1 max	10 max

# Glycerol Ester of Gum Rosin (Food)

Glyceryl Rosinate, also called Glycerol Ester of Gum Rosin (GEGR) or Ester Gum, is an oil-soluble food additive. Its high density helps keep oils in suspension in water and this property is the reason why it is often used as a beverage stabilizer. It is widely used as a base in the production of chewing-gum. It also serves as an alternative to brominated vegetable oil in citrus oil flavored soft drinks. In some cases both ingredients are used together. (Approved by FDA 172.735)

## Packaging

25KG COMPLEX PAPER BAG NET EACH SHELF LIFE: 4MONTHS  
25KG COMPLEX PAPER BAG NET EACH WITH INNER AL FOIL, VACUUM THEN FILLED NITROGEN SHELF LIFE:12MONTHS  
40KG FIBER DRUM NET EACH INNER PE BAG, GRANULAR SHELF LIFE:12MONTHS  
50KG FIBER DRUM NET EACH, BLOCK SHELF LIFE:12MONTHS

## Application & Markets

Food & Feed Additives, Beverages & Savory

Item No.	Color, @Fe-Co scale	Softening Point, R&B, °C	Acid Value, mgKOH/g	Solubility, @Benzene 1:1	Ash content, %	Arsenic Content, mg/kg	Heavy metal (as Pb),mg/kg
G858F	8 max	80 to 90	3 to 9	Clear	0.1 max	1 max	10 max
G854F	8 max	82 to 90	3 to 9	Clear	0.1 max	1 max	10 max



# Glycerol Ester of Gum Rosin (Industrial)

Glycerol Ester of Gum Rosin (INCI Name: Glycerol Rosinate) is manufactured as a polyol ester of rosin, which has been stabilized to provide good heat and storage stability.

## Packaging

25kg net each complex kraft bag net each, 640bags/16000kg/1\*20ft container  
500kg woven plastic bag net each, 20bags/10000kg/1\*20ft container

## Application & Markets

Adhesives & Sealants, Coating & Painting, Inks

Item No.	Color, @Fe-Co scale	Softening Point, R&B, °C	Acid Value, mgKOH/g	Solubility, @Benzene 1:1
G1004	2 to 4	98 to 102	10 max	Clear
GER-85	3 to 5	83 to 87	15 max	Clear
G705	3 to 5	65 to 75	10 max	Clear
G852	2 max	85 to 95	10 max	Clear

# Polymerized Ester Gum

Glycerin Ester of Polymerized Rosin (Polymerized Ester Gum) is a kind of light yellow transparent solid which is esterified with refined special grade polymerized rosin and food grade glycerin.

Used as basic material for gum base with the property of easily becoming bubble and resisting chewing. It can act as anti-oxidant and keeping soft and with good taste in bubble gum and chewing gum. It can be also used as emulsification stabilizer in soft drinks.

## Packaging

Fiber Drum, 250kg net each  
Paper Carton, 25kg net each

## Application & Markets

Beverages & Savory, Cosmetics & Personal Care, Food & Feed Additives

Item No.	Color, @Fe-Co scale	Softening Point, R&B, °C	Acid Value, mgKOH/g	As Content, %	Pb Content, %	Heavy Content, Pb, %
PG1008	8 max	96 to 120	3.0 to 9.0	0.0003 max	0.0003 max	0.004 max

# Pentaerythrite Modified Rosinate

Pentaerythryl Modified Rosinate is the product of esterification of modified rosin with pentaerythrite, which has higher softening point than PERE. It has the property of water-resistance, durability and brightness, which contribute to the industry of adhesives, paint, inks, stencil and electronic applications, etc.

## Packaging

Complex kraft paper bags, 25kg net each, PE films inside available

## Application & Markets

Adhesives & Sealants, Coating & Painting, Inks, Cosmetics & Personal Care

Item No.	Color, @Fe-Co scale	Softening Point (R&B), °C	Acid Value, mgKOH/g	Solubility, @Benzene 1:1
P100255	3 to 5	95 to 105	25 max	Clear
P95253	2 to 3	95 to 105	25 max	Clear
P100251	1 max	95 to 105	25 max	Clear
P110255	5 to 6	110 to 120	25 max	Clear
P120253				
P90253	3 max	90 to 95	25 max	Clear
P90255	3 to 5	90 to 95	25 max	Clear

# Methyl Rosinate

Methyl Rosinate, also called Methyl Ester of Rosin, is an amber-colored, near-neutral, tacky, viscous liquid. It is resinous in nature with clarity and high refractive index, low vapor pressure, high boiling point, and good thermal stability. It has excellent surface-wetting properties. These physical properties, plus its wide compatibility, make it useful in a variety of applications.

Our Methyl Ester of Rosin can substitute for [Pinova® product](#).

## Packaging

Plastic bucket 25/50kg net each  
Iron drum inner polyvinyl fluoride iron drum : 200kg net each

## Application & Markets

Adhesives & Sealants, Inks, Rubber Aid

Item No.	Appearance	Color, @Fe-Co scale	Viscosity, @25°C, mPa.s	Acid Value, mgKOH/g	Halogen Content
M305	Pale yellow transparent sticky liquid	5 max	3000 to 5000	8 max	
M301	Colorless transparent viscous liquid	1 max, @Ghana color number	3200	9 max	0.01 max

# Triethylene Glycol Rosinate

Triethylene Glycol Rosinate, also called Triethylene Glycol Ester of Rosin, is produced via a special process that delivers light initial color and product stability. It is a pale, viscous liquid with tackifying and plasticizing characteristics. It is the substitute for [Eastman® product](#).

### Packaging

Packing in 200kg iron drum inner epoxy resin

### Application & Markets

Adhesives & Sealants

Item No.	Appearance	Color, @Gardner	Acid Value, mg KOH/g	Viscosity, @100°C, mPas	Specific Gravity
T7015	Pale yellow transparent sticky liquid	8 max	15 max	30 to 100	1.06

# Glycerol Ester of Hydrogenated Rosin (Food)

Glycerol Ester of Hydrogenated Rosin, also called Glyceryl Hydrogenated Rosinate (GEHR) and Ester Of Hydrogenated Rosin, is esterified from refined hydrogenated rosin and edible glycerol.

## Packaging

Kraft paper drum in 250kg or 25kg net each

## Application & Markets

Food & Beverage, Feed additives

Item No.	Acid value, mgKOH/g	Specific gravity, 25/25 °C	Softening Point, R&B, °C	Arsenic (as As.) , mg/kg	Heavy metals (as Pb), mg/kg	Ash content, %	Color, Gardner
HG858F	9max	1.060 to 1.070	78 to 90	1 max	10 max	0.1 max	8max
HG854F	3 to 8	1.060 to 1.070	78 to 88	1 max	10 max	0.1 max	3 max

# Glycerol Ester of Hydrogenated Rosin (Industrial)

Glycerol Ester of Hydrogenated Rosin, also called Glyceryl Hydrogenated Rosinate (GEHR) and Ester Of Hydrogenated Rosin, is a kind of light yellow transparent solid which is esterified from hydrogenated rosin and glycerin.

## Packaging

paper bag 25kg net each

## Application & Markets

Adhesive, personal care, wax modifier, rubber and plastic modifier

Item No.	Acid value, mgKOH/g	Specific gravity, 25/25 °C	Softening Point, R&B, °C	Ash content, %	Color, Gardner
HG855	9 max	1.060 to 1.090	78 to 90	0.1 max	6 max
HG853	9 max	1.060 to 1.070	78 to 90	0.1 max	3 max

# Colorless Glyceryl Hydrogenated Rosinate

Glyceryl Hydrogenated Rosinate HG100D is a kind of super light color tackifying polyols resin, which is esterified from refined hydrogenated rosin and edible glycerol, and through series combined technologies units of catalytic hydrogenation. With benefits of light color, low odor, good heat stability and excellent ageing resistance, Glyceryl Hydrogenated Rosinate is mainly used in screen protection film, medicinal patch, diaper adhesive, PSA and HMA.

## Packaging

Iron Drum, 225kg net each  
Kraft Paper Bag, 25kg net each

## Application & Markets

Adhesives & Sealants, Coating & Painting, Electronic Chem, Hygiene Chemicals, Pharma Solutions

Item No.	Solubility, @toluene 1:1	Color, Hazen Unit	Acid Value, mg/g	Softening Point, R&B, °C	Iodine Value, g <sup>l</sup> /100g
HG90H	Clear	150 max	2 to 10	85 to 95	15 max
HG100H	Clear	150 max	2 to 10	90 to 100	15 max



# Pentaerythritol Ester of Hydrogenated Rosin

Pentaerythritol Ester of Hydrogenated Rosin (Pentaerythritol Hydrogenated Rosinate) is made from hydrogenated rosin through esterification with pentaerythritol. HP1104 is Refined Hydrogenated Rosin through esterification with pentaerythritol, it can substitute for Arakawa® Product.

## Packaging

Kraft paper drum, 25kg net each  
Kraft paper drum, 250kg net each

## Application & Markets

Adhesives & Sealants, Coating & Painting

Item No.	Color, Gardner	Softening Point, R&B, °C	Acid Value, mgKOH/g	Specific Gravity, 25/25 °C	Iodine Value, @g/100g	Solubility, @toluene1:1
HP1104	4 to 6	105 to 115	20 max	1.060 to 1.090		Clear
HP1108	8 to 10	105 to 115	20 max	1.060 to 1.090		Clear
HP1006	6 max	98 to 103	20 max	1.060 to 1.090		Clear
HP959	10 max	94 to 100	8 to 14	1.060 to 1.090		Clear

# Colorless Pentaerythritol Hydrogenated Rosinate

HP100H is a kind of super light color tackifying polyols resin, which is esterified from refined gum rosin by pentaerythritol, and through series combined technologies units of catalytic hydrogenation. With benefit of light color, low odor, good heat stability and excellent ageing resistance, CPEHR is mainly used in screen protection film, medicinal patch, diaper adhesive, PSA and HMA.

## Packaging

225kg iron drum,  
18000kg/80drums/20pallets/1\*20ft FCL  
paper bag, 25kg net each, 16000kg/640bags/20pallets/1\*20ft FCL  
paper bag, 25kg net each, 16000kg/640bags/20pallets/1\*20ft FCL

## Application & Markets

Adhesives & Sealants, Coating & Painting

Item No.	Solubility, @toluene 1:1	Color, Hazen Unit	Acid Value, mg/g	Softening Point, R&B, °C	Iodine Value, g/100g
HP100H	Clear	150 max	20 max	100 to 110	15 max

# Methyl Hydrogenated Rosinate

Methyl Hydrogenated Rosinate, a cosmetic-grade resin, is the methyl ester of hydrogenated gum rosin. This liquid resin is given a special steam-sparging treatment to assure minimum odor. With its low odor and low vapor pressure, it is particularly useful as a fragrance fixative. It has excellent solubility and compatibility with non-polar and many polar ingredients in cosmetic applications, contributing to both adhesion and gloss. It is the substitute for [Eastman® product](#).

## Packaging

Plastic bucket 25/50kg net each  
Iron drum inner polyvinyl fluoride iron drum : 200kg net each

## Application & Markets

Adhesives & Sealants, Coating & Painting, Cosmetics & Personal Care, Food & Feed Additives, Plastics Additives, Daily Chemicals

Item No.	Color, Gardner	Acid Value, mgKOH/g	Viscosity, @25°C, mPa.s	Refractive Index, @20°C
HM302	2 max	8 max	5500 to 7500	1.5100 to 1.5200
HM301	1 max	9 max	4500 to 7500	

# Triethylene Glycol Hydrogenated Rosinate

Triethylene Glycol Hydrogenated Rosinate is a pale, viscous, balsamic liquid with the resistance to oxidation. In general, it finds use where there is a need for a pale, non-oxidizing, color-stable, highly tacky liquid resin. It is widely used in personal care, such as the component in depilatory waxes and other personal care preparations.

Substance Name: Resin acids and Rosin acids, hydrogenated, esters with triethylene glycol

## Packaging

According to customer demand

## Application & Markets

Cosmetics & Personal Care

Item No.	Appearance	Color, @Gardner	Acid Value, mg KOH/g	Viscosity, @100°C, mPas
HT8515	A pale, viscous, liquid	8 max	15 max	75 to 95

# Hydroabietyl Alcohol

Hydroabietyl Alcohol is a colorless, tacky, balsamic resin ester.

It is a high molecular weight, primary, monohydric alcohol made from Methyl Hydrogenated Rosinate.

Its tackiness and extremely pale color, combined with its solubility in common organic solvents and compatibility with resins, film-formers, and oils, have led to its use as a resinous plasticizer and/or tackifier in plastics, lacquers, inks and adhesives.

## Packaging

50/200kg Iron drum

## Application & Markets

Adhesives & Sealants, Cosmetics & Personal Care

Item No.	Color, Gardner	Viscosity, @Brookfield 60 DEG C	Refractive Index, @20°C	Ash content, %	Solubility, @toluene & alcohol
HA802	2 max	3000 to 7000 CP	1.4850 to 1.5190	0.5 max	Clear

# Maleic Modified Rosin Ester

Maleic Modified Rosin Ester is slight yellow transparent solid made from maleic modified rosin through esterification with Glycerol or Pentaerythritol. It is used in road marking paints, phenolic paints, polyesters, nitryl and PU paints.

## Packaging

Paper-plastic compound Bag, 25kg net each, 640 bags (16000kg) per 20ft container

## Application & Markets

Adhesives & Sealants, Coating & Painting

Item No.	Color, @Fe-Co scale	Acid Value, mgKOH/g	Softening Point, R&B, °C	Solubility
AE10020	3 to 6	25 max	100 to 110	Clear, @Toluene 1:1
AE10030	5 max	20 to 30	97 to 103	Clear, @Toluene 1:1
HC125R	4 to 6	30 max	120 to 126	Clear, @Toluene 1:1
HC100R	5 max	20 to 30	97 to 103	Clear, @Toluene 1:1
AE10070	7 max	70 to 85	100 to 105	Clear, @Alcohol 1:1
AE12030	8 max	25 to 35	115 to 125	Clear, @Toluene 1:1
AE13040	7 max	30 to 40	125 to 135	Clear, @Toluene 1:1

# Alcohol Soluble Rosin Resin

Alcohol Soluble Rosin Resin are Rosin derivative that modified by unsaturated acid and partial esterified with multi-alcohol.

## Packaging

Paper-plastic Compound bag, 25kg net each, 640 bags (16mt) per 20'FCL

## Application & Markets

Printing ink, Glazing oil, Paints, Water-based ink

Item No.	Appearance	Acid Value, mgKOH/kg	Color, @Fe-Co scale	Softening Point, R&B, °C	Solubility, @alcohol 1:1
AE130200	Granule or flake	190 to 210	8 max	125 to 135	Clear
AE145180	Granule or flake	170 to 190	8 max	140 to 150	Clear
AE145220	Granule or flake	210 to 230	8 max	140 to 150	Clear
WA-125	Granule or flake	118 to 128	8 max	≥110	Clear

# Modified Rosin

Modified Rosin, a large generic term for resins, is a fumaric modified ester of tall oil rosin designed for use in “E” type gravure and flexographic inks. It is compatible with nitrocellulose, polyketone resins, shellac and other modifiers commonly used in alcohol-based printing inks. Foreverest® AE150200 has similar properties to Arizona® liquid ink resins. It is widely used in the ink industry.

## Packaging

25kg complex paper bag

## Application & Markets

Adhesives & Sealants; Inks

Item No.	Appearance	Color, Gardner	Softening Point, R&B, °C	Acid Value, mgKOH/g	Solubility
AE150200	Solid	10 max	145 to 160	180.0 to 215.0	
AE155205	Solid	12 max	150 to 160	190.0 to 215.0	
AE130140	Yellow transparent solid	8 max	125 to 135	130.0 to 150.0	Clear, @alcohol 1:1
AE10070	Solid in slightly yellow and transparent beads or flakes	7 max	100 to 105	70 to 85	Clear, @alcohol 1:1
AE125125	Slightly yellow or yellow transparent irregular-shaped solid	10 max	112 to 140	110 min	Clear, @alcohol 1:1
PE17020		11 max	165 to 175	15 to 25	7 times min, 120#



# Pentaerythritol Ester of Maleic Rosin

Pentaerythryl Modified Rosinate is the product of esterification of modified rosin with pentaerythrite, which has higher softening point than PERE. It has the property of water-resistance, durability and brightness, which is contribute to the industry of adhesives, paint, inks, stencil and electronic applications, etc.

## Packaging

Paper Bag, 25kg net each

## Application & Markets

Adhesives & Sealants, Coating & Painting, Electronic Chem, Inks

Item No.	Color, @Fe-Co scale	Softening Point, R&B, °C	Acid Value, mgKOH/g
AE160200	9 max	155 to 165	190 to 210
AE14020	7 max	130 to 145	15 to 30
AE155165	7 max	145 to 160	155 to 175
AE17050	6 max	179	50

# Abietic Acid

Abietic acid is a white resinous powder. It takes rosin as raw material, after a series of distillation, the residual liquid of turpentine oil is steamed out, then filter it at 210°C or so and cool and crystallize to get the finished product. Abietic acid is widely used in the cosmetics and pharmaceutical industry and used as a pesticide emulsifier, textile sizing agent, construction material lubricant, plastic, rubber plasticizer, paint drier in various fields.

## Packaging

25kg fiber drum net each, Vacuum-packed

## Application & Markets

Curing agents, Pharm intermediates, Starting material, Stabilizer, Polymerization emulsifier, Plasticizer

Item No.	Appearance	Melting Point, °C	Acid Value, mgKOH/g	Purity, %
514-10-3-99	White powder	160 to 162	180 min	99 min

# Dehydroabietic Acid

Dehydroabietic acid, a colorless needle crystal, is an abietane diterpenic resin acid that is obtained from Pinus resin.

## Packaging

Packing in 25kg fiber drum or complex paper bag net each

## Application & Markets

Coating & Painting, Electronic Chem

Item No.	Color, @Gardner	Softening Point, R&B, °C	Acid Value, mgKOH/g	Purity by GC
1740-19-8-90	Colorless needle crystal	Melting point by capillary method : 150°C min	185min	90% min
1740-19-8-70	2 max	84 to 94	180 to 210	70% min

# Rosin Amine (Abietylamine)

Rosin amine is an ammonia derivative of rosin. It is a viscous yellow transparent liquid with ammonia and pine flavor. Rosin amine is soluble in conventional solvents, while insoluble in cold water, partly soluble in hot water. Rosin amine is mainly composed of dehydroabietylamine. It has extensive applications in the industry.

## Packaging

Package in 200kg iron drum net each

## Application & Markets

Electronic Chem, Inks, Pharma Intermediates, Detergent & Household Cleaners, Daily Chemicals

Item No.	Appearance	Color, Gardner	Refractive index, n <sub>20</sub> /D	Total Amine content, by GC, %
RA908	Pale yellow, transparent, viscous oily liquid	8 max	1.5350 to 1.5450	90 min

# Dehydroabietylamine

Dehydroabietylamine (Leelamine) is a diterpene compound, derivatives from gum rosin. After a series of distillation process, the residual liquid of turpentine oil is steamed out. Then filter the residual liquid at 210°C or so and cool and crystallize to get the finished product.

Dehydroabietylamine has a weak affinity for the cannabinoid receptors CB1 and CB2, as well as being an inhibitor of pyruvate dehydrogenase kinase. Optically active leelamine is also used as a chiral resolving agent for carboxylic acids.

## Packaging

Package in 200kg iron drum net each

## Application & Markets

Electronic solder pastes additives, Detergent, Disinfection agent, Dispersing agent, Intermediate, Preservative, Pest control

Item No.	Appearance	Color, @Gardner	Content of total amine, @Neutralization titration, %	Refractive Index, @n20/D
DAA90	Yellow transparent viscous liquid with a faint ammoniacal odor	8 max	98 min	1.535 to 1.545

# Disproportionated Rosin Potassium Soap

It is obtained by saponification of disproportionated rosin and potassium hydroxide. It can increase the viscosity and plasticity of synthetic rubber which improve tensile strength and heat resistance.

## Packaging

iron drums with inner PVC of about 200kgs net each.

## Application & Markets

as an emulsifier for SBR , CR ,NBR synthetic rubbers, and ABS plastic

Item No.	Color (Gardner ),max	Solid Content (%)	Potassium Dehydroabietic (%),min	Potassium Abietic (%),max	PH (25°C)	Acid Value. (mg KOH/g)	Unsaponifiable Material (%)	Chloride (as KCL) (%),max
DK804	4	80±1	43.0	0.25	9.2-9.8	5-9	13 max	0.20
DK504	6	50±1	26	0.1	9.2-10.8	7-9	10max	0.2

# Rosin Resin Dispersion

Rosin Resin Emulsion is an aqueous, solvent free resin made from Rosin Resins.

## Packaging

Packing in 200kgs plastic drum net each

## Application & Markets

Adhesives & Sealants, Coating & Painting

Item No.	Solid Content, %	BROOKFIELD #1 25°C, cps	PH Value, @25°C	Particle Size, @AVG um
PR7510	51 to 53	500 max	2 to 5	0.1 to 0.5

Item No.	Particle Size, nm	Coarse Particles, @100um, ppm	Hercules Drop Softening Point °C	Grit Content, ppm	Total Solids Content, %	PH Value	Brookfield Viscosity, mPaS	Arsenic Content, ppm	Lead (Pb) Content, ppm	Impurity C
RDPAP9080	600 max	100 max	78 to 88		54 to 56	7 to 9	300 max			
RDPAP9081	600 max	100 max	65 to 75		54 to 58	8 to 9.5	250 to 700			
RDPAT880L			83 to 88	50 max	54 to 56	7 to 9	300 max	3 max	10 max	2 max
RDPF80										
RDPWT3509										
RDPWT5570			65 to 75		54 to 56	7 to 9	600 to 1200			2 max

# Alkyl Phenolic Resin

Alkyl Phenolic Resin is a product prepared by the condensation reaction between an aldehyde and alkylphenols. It is a kind of phenol-formaldehyde resin with good solubility. Therefore it is a perfect modifying agent for chloroprene rubber and it makes a great contribution to the rubber industry.

## Packaging

Paper Bag, 25kg net each, 640 bags (16000kg) per 20' FCL

## Application & Markets

NRB adhesives, Tire modification

Item No.	Absolute Molecular Weight	Color, @Fe-Co scale	Dispersion Degree	GPC Molecular Weight	Reactivity with Magnesium Oxide, %	Softening Point, R&B, °C
APR100	1700 to 2100	7 max	2.61	2000 to 9000	6.6	90 to 110



# Reactive Alkyl Phenolic Resin

Alkyl Phenolic Resin is a product prepared by the condensation reaction between an aldehyde and alkylphenols. It is a kind of phenol-formaldehyde resin with good solubility. Therefore, it is a perfect modifying agent for chloroprene rubber, and it makes a great contribution to the rubber industry.

## Packaging

Paper-plastic compound Bag, 25kg net each

## Application & Markets

Rubber Aid

Item No.	Color, Gardner	Softening Point, R&B, °C	Melting Point, @Capillary method	Absolute Molecular Weight	Reactivity with Magnesium oxide, %	Dispersity
RP110	7 max	90 to 110	75 to 95	1700 to 2100	6.6 min	2.61

# Rosin Modified Phenolic Resin

Rosin Modified Phenolic Resin is the vacuum treated product of esterification of glycerol (or pentaerythrite) with the polycondensate of rosin, phenol (or bisphenol A) and formaldehyde. It is soluble in tar, ester, turpentine oil and similar solvents. Insoluble in alcoholic solvents, partially soluble in petroleum products, mix well with vegetable oils, high softening point, fast drying. Rosin Modified Phenolic Resin can be used for phenolic resin paints (through polymerization with vegetable oils under heat), texture printing inks, the low cost enhancer in bonding capability for pressure-sensitive adhesive, hot-melt adhesive and other bonding agents.

## Packaging

Paper-plastic compound Bag, 25kg  
Paper-plastic compound Bag, 500kg

## Application & Markets

Adhesives & Sealants, Coating & Painting, Inks

Item No.	Color, @Fe-Co scale	Softening Point, R&B, °C	Acid Value, mg KOH/g	Methylol Content, %	Free Phenol, %	Water Content, %	Ash Content, %	Lipid Solubility, @1:2 tung oil, 240°C	Normal Heptane, ml/2g, 25C	Viscosity (resin:linseed oil=1:2) mPa.s/25C
FR2402		85 to 120		9 to 15	1 max	1 max	0.3 max	Clear		
MP2101	13 max	166 to 175	25 max						4 to 7	4000 to 6000
MP2116	13 max	151 to 168	12 to 18						1 to 3	3000 to 5000
MP5103	13 max	160 to 170	25 max						2 to 5	7000 to 12000
RMP175	7 to 13, @Gardner	165 to 185	25 max						4 to 7	5000 to 10000
RP4725A	7 to 13, @Gardner	165 to 185	25 max						4 to 7	5000 to 9000
RPH210	13 max	135 to 148	25 max							

# Rosin Modified Phenolic Resin

Rosin Modified Phenolic Resin is the vacuum treated product of esterification of glycerol (or pentaerythrite) with the polycondensate of rosin, phenol (or bisphenol A) and formaldehyde. It is soluble in tar, ester, turpentine oil and similar solvents. Insoluble in alcoholic solvents, partially soluble in petroleum products, mix well with vegetable oils, high softening point, fast drying. Rosin Modified Phenolic Resin can be used for phenolic resin paints (through polymerization with vegetable oils under heat), texture printing inks, the low cost enhancer in bonding capability for pressure-sensitive adhesive, hot-melt adhesive and other bonding agents.

## Packaging

Fiber drum, 25kg net each  
Fiber drum, 250kg net each

## Application & Markets

Adhesives & Sealants, Coating & Painting, Inks

Item No.	Appearance	Color, @Gardner	Acid Value, mg KOH/g	Softening Point, R&B, °C
AF-1413	Amber Solid	7 to 13	25 max	145 to 165
AF-1419	Amber Solid, block		25 max	165 to 185
AF-1438	block		25 max	155 to 175
AF-1444	Chunks	7 to 13	25 max	170 to 185
AF-1444N	Chunks	7 to 13	25 max	170 to 185
AF-1450	Chunks	7 to 13	25 max	165 to 180
AF-1458	Chunks	7 to 13	25 max	175 to 185
AF-1462	Chunks	7 to 13	25 max	165 to 185
AF-1483	Chunks	7 to 13	25 max	165 to 180

More Details...

➤ [Products List](#)

➤ [Rosin Derivatives](#)

➤ [Solution Center](#)

➤ [Rosin Resins for Soldering Flux](#)

➤ [Organic Carriers of Electronic Pastes](#)

➤ [Tackifiers & Binders Solution Center](#)

**Foreverest Resources Ltd.** is a family-owned company, which specializes in pine chemicals and provides reliable and comprehensive solutions for pre-sale & after-sale services. With 30 years of history in R&D of forest chemicals products in China, we focus on supplying the substitutes of natural products. Our products include modified resins, terpene based derivatives, flavour & fragrance ingredients, and other biobased chemicals.

Phone: 86.0592.5105533

[info@foreverest.net](mailto:info@foreverest.net)

A1112-1113 ONEPARK

WUYUAN BAY XIAMEN

361010 CHINA



THANK YOU