AIRCO'S NEW FLEXBOND® 860

VINYL ACETATE-ALKYL MALEATE COPOLYMER LATEX FOR INTERIOR AND EXTERIOR PAINTS

FLEXBOND®860 disproves the old myth that a paint polymer can't be a vinyl-maleate copolymer and still have the properties necessary for durability on both interior and exterior exposures. This new copolymer latex performs well in both types of applications because of its

. . . High molecular weight
. . . Fine particle size
. . . Unique surfactant system
. . . All-weather flexibility

Besides a high molecular weight, the FLEXBOND 860 copolymer has high tensile strength and elongation properties. Besides its fine particle size, it has a high degree of deformability and a broad modulus-temperature transition range. These latter properties enable FLEXBOND 860 to coalesce at low temperatures into a continuous film that will remain flexible over a wide temperature range, yet resist dirt pickup in hot weather.

FLEXBOND 860 will also fuse well over porous substrates, and, because of the unique surfactant system of the latex, even on alkaline or salt-containing surfaces. The paint film will resist efflorescence on these surfaces as a further result of FLEXBOND 860's excellent, close fusion.

Because of its high pigment binding capacity, FLEXBOND 860 will make interior and exterior paints at low raw-material costs. Test paints based on FLEXBOND 860 have had the properties needed for successful interior performance: no lap marks on touch-up; full color development; color and sheen uniformity; and resistance to wet abrasion. On the basis of the improvements over contemporary latices that have been built into FLEXBOND 860, Airco Chemical predicts a similarly successful performance by this latex in exterior paints.

TECHNICAL SERVICE

Samples and technical service are available from Airco Chemical sales offices throughout the continental United States. (See the back cover for a list of addresses.) Airco Chemical's Paint Technical Service Laboratory is prepared to assist manufacturers with advice on formulations and production.

AVAILABILITY

FLEXBOND 860 is available in drum, tank truck, and tank car quantities from Cleveland, Ohio; Elkton, Maryland; and City of Industry (Los Angeles County), California. Mixed compartment tank truck and tank car shipments can be made, in combination with other Airco latices, from bulk warehouses throughout the continental United States. Call or write your local Airco Chemical sales office for information on warehouse points in your area.

TENTATIVE SPECIFICATIONS

Total solids	55-57%
Viscosity*	700-1400 cps.
pH	4.8-5.2
Free monomer	0.4% max.

TYPICAL LATEX PROPERTIES		TYPICAL FILM PROPERTIES	
Copolymer type	Vinyl acetate-alkyl maleate	Density	[illegible]
Odor	Slight sweet	Clarity	Clear
Color	Milky white	Gloss	[illegible]
Average particle size	0.24-0.30 micron	[illegible]	[illegible]
Mechanical stability**	Stable	[illegible]	[illegible]
Weight per gallon	[illegible]	[illegible]	[illegible]
Solids per gallon	[illegible]		
Reaction to borax	Stable		

*Brookfield Viscometer, Model LVF (#3 spindle—60 rpm—77°F.)
**Hamilton Beach Mixer #33 (high speed).
***Determined at 77°F. (foam free). Weight per gallon when received may be lower due to air entrainment during shipping or pumping.

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SUGGESTED FORMULATIONS

86010

PRIMER-SEALER

YIELD 100 gallons
PVC 34.4%
SOLIDS 45%
RAW MATERIAL COST
About $0.91 per gallon
VISCOSITY 72 ±2 K.U.

	Pounds
Methocel 65HG, 4,000 cps. (3% solution)	77
Tamol 731	6
Igepal CO-610	3
Ethylene glycol	20
Colloid 677	2
Phenyl mercuric acetate (18% mercury metal)	.03
Titanox RA-50	75
Camel-TEX	100
Asbestine 3X	100
Water	225
Carbitol acetate	8
Methocel 65HG, 4,000 cps. (3% solution)	75
FLEXBOND 860	360

86011

INTERIOR WHITE

YIELD 100 gallons
PVC 65.1%
SOLIDS 53%
RAW MATERIAL COST
About $1.34 per gallon
VISCOSITY 88 ±2 K.U.

	Pounds
Cellosize QP-300 (5% solution)	100
R & R 551	8
Potassium tripolyphosphate	2
Igepal CO-610	3
Colloid 677	2
Ethylene glycol	25
Phenyl mercuric acetate (18% mercury metal)	0.3
Titanox RA-45	250
Zeolex 80	35
Al-Sil-Ate NC	125
Gold Bond R Silica	75
Water	230
Colloid 677	2
Daipad A	6
Cellosize QP-300, (5% solution)	65
FLEXBOND 860	260

86012

INTERIOR TINT BASE

YIELD 101 gallons
PVC 54%
SOLIDS 48%
RAW MATERIAL COST
About $1.02 per gallon
VISCOSITY 88 ±2 K.U.

	Pounds
Methocel 65HG, 4,000 cps. (3% solution)	75
R & R 551	4
Igepal CO-610	2
Tamol 731	6
Ethylene glycol	25
Colloid 677	2
Phenyl mercuric acetate (18% mercury metal)	0.3
Titanox RA-46	150
ASP 400	75
Micro-Cel T-70	30
Asbestine 3X	100
Gold Bond R Silica	60
Water	250
Daipad A	7
Igepal CO-610	2
Colloid 677	1
Methocel 65HG, 4,000 cps. (3% solution)	105
FLEXBOND 860	250

86014

EXTERIOR WHITE

YIELD 101 gallons
SOLIDS 46%
PVC 40%
RAW MATERIAL COST
About $1.37 per gallon
VISCOSITY 94 ±2 K.U.

	Pounds
Natrosol 250 HR (2% solution)	100
Tamol 731	7
Igepal CO-610	4
Colloid 677	3
Ethylene glycol	25
Phenyl mercuric acetate (18% mercury metal)	.6
Titanox RA-50	225
Titanox A-168-LO	25
Nytal 300	100
Water	200
Carbitol acetate	9
Natrosol 250 HR (2% solution)	125
FLEXBOND 860	300

86015

EXTERIOR TINT BASE

YIELD 100.8 gallons
PVC 38%
SOLIDS 45.7%
RAW MATERIAL COST
About $1.09 per gallon
VISCOSITY 94 ±2 K.U.

	Pounds
Natrosol 250 HR (2% solution)	225
Tamol 731	5
Igepal CO-610	2
Colloid 677	3
Ethylene glycol	25
Phenyl mercuric acetate (18% mercury metal)	.6
Ti-Pure R-510	150
Snowflake White	75
Lorite	75
Water	150
Igepal CO-610	2
Carbitol acetate	10
FLEXBOND 860	250

86016

INTERIOR WHITE AND LIGHT TINT BASE

YIELD 100 gallons
PVC 58.1%
SOLIDS 53%
RAW MATERIAL COST
About $1.34 per gallon
VISCOSITY 88 ±2 K.U.

	Pounds
Methocel 65HG, 4,000 cps. (3% solution)	75
R & R 551	3
Igepal CO-610	3
Tamol 731	5
Ethylene glycol	20
Colloid 677	1
Phenyl mercuric acetate (18% mercury metal)	0.3
Ti-Pure R-900	150
Zeolex 80	30
Al-Sil-Ate NC	100
Asbestine 3X	125
Water	230
Carbitol acetate	12
Colloid 677	2
Methocel 65HG, 4,000 cps. (3% solution)	75
FLEXBOND 860	275