

Raybo 90 NoRust NF Flash Rust Protection for “Green Formulations”

Raybo 90 NoRust NF is a nitrite free flash rust inhibitor intended for nitrite sensitive markets. Raybo 90 No Rust NF contains both vapor phase and contact corrosion inhibitors. As a result, Raybo 90 NoRust NF provides superb flash rust protection in a variety of water based systems. The addition of Raybo 90 NoRust NF at 0.5 to 2.0% does the following:

- Eliminates flash rust in direct-to-metal applications
- Provides vapor phase in-can protection
- Protects lined containers from corrosion when micro-cracked

Flash Rust Protection



Scribed panel coated with flat white vinyl-acrylic latex

Suggested Formula: Flat White Vinyl-Acrylic Latex (UCAR 379G) with 0.5% Raybo 90 NoRust NF

Use high speed dispersion to mix the following:

Water	165.8
BYK-035 ¹	1.7
Ethylene Glycol ²	17.9
Tamol 731A 25% ³	6.0
Triton X-100 ⁴	6.8
Natrosol 250 HXR ²	5.5

Mix well, then add the following:

Ti Pure R-900 ⁵	49.7
Satintone W ⁶	256.8
Gamaco ⁷	271.5
BYK-035 ¹	4.1

Disperse to 5.0+ Hegman Grind, then add the following:

Water	336.6
UCAR 379G ⁴	76.1

Mix well, then add the following:

Texanol ⁸	4.5
Amp-95 ⁴	0.5
Busan 1024 ⁹	2.4
Raybo 90 NoRust NF ¹⁰	6.0

Physical Properties:

Grind (Hegman)	5.0+
Viscosity (KU)	87-90
pH	8.5-9.5
Total Weight	1211.9
Density (lbs/gal)	12.12
% Weight Solids	53.09
% Volume Solids	31.98
PVC%	80.36
VOC (lbs/gal, with exempt solvent)	0.27
VOC (lbs/gal, minus exempt solvent)	0.78

Suppliers:

1 BYK Chemie	6 BASF
2 Ashland	7 IMERYS
3 Rohm and Haas	8 Eastman Chemical
4 Dow Chemical	9 Buckman Laboratories
5 DuPont	10 Raybo Chemical

Vapor Phase In-Can Corrosion Protection



Panels partially immersed in UCAR 379 for 23 days (120°F, pH adjusted to 8.3)