Technical Data Sheet

RHOPLEX™ 3479 Floor Finish Polymer

Features & Benefits

- Formulation flexibility—RHOPLEX™ 3479 Floor Finish Polymer offers formulating flexibility to make a range of performance profiles from minimum maintenance to maximum burnish response.
- Gloss—Properly formulated polishes based on RHOPLEX™ 3479 Polymer are an excellent choice for high profile floor areas where an extremely high gloss look is desirable. Supermarkets and retail stores are good examples of this type of application.
- Foam control—Since RHOPLEX™ 3479 Polymer is a low foaming polymer, properly formulated polishes made with RHOPLEX™ 3479 Polymer exhibit less foam in the bucket and during application than most conventional polishes.

Typical Properties

Specification Writers: These values are not intended for use in preparing specifications.

Property	Unit	Result
Appearance		Milky-white liquid
Solids Content	%	38 ± 0.5
Minimum Film-Formation Temperature (MFFT)	°C	~70
pH		~8.5
Viscosity (Brookfield LVT, #1 spindle, 60 rpm)	cP	< 100
Density @ 25°C	Lb/U.S. gal	~ 8.8
Specific Gravity		1.07
Ionic Charge		Anionic
Freeze/Thaw Stability	cycles	≥ 3

Description

RHOPLEX™ 3479 Polymer is a low foaming, metal-crosslinked, modified acrylic polymer that offers the basis for the most economical polish formulations. Properly formulated polishes based on RHOPLEX™ 3479 Polymer are an excellent choice well suited for use in a variety of maintenance environments, such as retail, school, and medical facilities.

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Standard Performance Characteristics

As with all Dow floor polish polymers, RHOPLEX™ 3479 Polymer shares a number of common performance characteristics.

The suggested starting point polish formulations made with RHOPLEX™ 3479 Polymer meet or exceed an industry slip resistance standard as tested by the Standard Test Method ASTM D-2047. These polishes can be formulated to a range of solids levels from 15 to 25 percent. RHOPLEX™ 3479 Polymer offers for the manufacture of polishes that can be applied at floor temperatures of 50°F (10°C) and above.

RHOPLEX™ 3479 Polymer Formulation N-79-8 (20%)

Formulation N-79-8 is a suggested starting point formulation that offers excellent lay down gloss and very good burnish response and wear performance properties. N-79-8 is formulated with RHOPLEX™ 1531C Emulsion, a high gloss, all-acrylic, alkali-soluble emulsion, which imparts excellent leveling characteristics.

Material in Proper Order of Addition	Weight Percent	LBS/ 100 US GAL	Gallons/ 100 US GAL
Water	41.92	358.88	42.99
KATHON™ CG/ICP Preservative	0.04	0.34	0.04
Capstone FS-65 fluorosurfactant[1]	0.04	0.31	0.04
CARBITOL™ Solvent-low gravity	4.81	41.15	4.98
DOWANOL™ DPM Glycol Ether	0.95	8.13	1.02
UCAR™ FILMER IBT coalescent	1.19	10.19	1.28
Tri(butoxyethyl) phosphate plasticizer	1.46	12.49	1.47
RHOPLEX™ 3479 Polymer (38%)	40.43	346.14	38.89
RHOPLEX™ 1531C Emulsion (38%)	3.41	29.17	3.31
A-C 540N ethylene-acrylic copolymer (30%)[2]	3.09	26.43	3.21
A-C 325N polyethylene polymer (35%)[3]	2.65	22.67	2.73
Defoamer[4]	0.02	0.17	0.02
Totals =>	**100.00**	**856.06**	**100.00**

Formulation Constants		
	Theoretical Non-Volatile Solids	20%
	Theoretical Density, Lb/U.S. Gal	8.6
	Polymer/ASE/Wax Ratio	83/7/10

1. Recommended Wetting Agent: Capstone FS-65
2. Commercial Trade Names: Michem Emulsion 44730 (30%) and BYK wax emulsion, Aquacer 8840 (30%)
3. Commercial Trade Names: Michem Emulsion 93235 (35%) and BYK Wax emulsion Aquacer 8059 (35%)
4. Recommended Defoamer: DEE FO PI 40 Münzing, info@munzing.us

RHOPLEX™ 3479 Polymer Formulation N-79-7 (20%)

Formulation N-79-7 is a suggested starting point formulation that offers excellent lay down gloss and very good burnish response and wear performance properties. N-79-7 is similar to formulation N-79-6 but formulated with a solution ASR.

Material in Proper Order of Addition	Weight Percent	LBS/ 100 US GAL	Gallons/ 100 US GAL
Water	44.65	382.45	45.84
KATHON™ CG/ICP Preservative	0.04	0.35	0.04
Capstone FS-65 fluorosurfactant[1]	0.04	0.33	0.04
CARBITOL™ Solvent, low gravity	4.83	41.36	5.00
DOWANOL™ DPM Glycol Ether	0.93	7.98	1.00
Benzoflex 50 plasticizer	0.93	7.98	0.85
Tri(butoxyethyl) phosphate plasticizer	1.45	12.40	1.46
RHOPLEX™ 3479 Polymer (38%)	40.28	344.96	38.76
Alkali solution resin (30%)[2]	1.39	11.90	1.35
A-C 540N ethylene-acrylic copolymer (30%)[3]	2.51	382.45	2.59
A-C 325N polyethylene polymer (35%)[4]	2.93	25.11	3.05
Defoamer[5]	0.02	0.17	0.02
Totals =>	**100.00**	**856.51**	**100.00**

Formulation Constants		
	Theoretical Non-Volatile Solids	20%
	Theoretical Density, Lb/U.S. Gal	~8.6
	Polymer/ASE/Wax Ratio	87/3/10

1. Recommended Wetting Agent: Capstone FS-65 fluorosurfactant
2. Recommended ASRs: Michem dispersion MD-91530 (30%)
3. Commercial Trade Names: Michem emulsion 44730 (30%) and BYK wax emulsion, Aquacer 8840 (30%)
4. Commercial Trade Names: Michem emulsion 93235 (35%) and BYK wax emulsion, Aquacer 8059 (35%)
5. Defoamer: DEE FO PI 40 Münzing, info@munzing.us

Handling Precautions

PRODUCT SAFETY INFORMATION REQUIRED FOR SAFE USE IS NOT INCLUDED IN THIS DOCUMENT. BEFORE HANDLING, READ PRODUCT AND SAFETY DATA SHEETS AND CONTAINER LABELS FOR SAFE USE, PHYSICAL AND HEALTH HAZARD INFORMATION. THE SAFETY DATA SHEET IS AVAILABLE ON THE DOW WEBSITE AT DOW.COM, OR FROM YOUR DOW SALES APPLICATION ENGINEER, OR DISTRIBUTOR, OR BY CALLING DOW CUSTOMER SERVICE.

Usable Life and Storage

Store products in tightly closed original containers at temperatures recommended on the product label.

Limitations

This product is neither tested nor represented as suitable for medical or pharmaceutical uses.

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Health and Environmental Information

To support customers in their product safety needs, Dow has an extensive Product Stewardship organization and a team of product safety and regulatory compliance specialists available in each area.

For further information, please see our website, dow.com or consult your local Dow representative.

Disposal Considerations

Dispose in accordance with all local, state (provincial) and federal regulations. Empty containers may contain hazardous residues. This material and its container must be disposed in a safe and legal manner.

It is the user's responsibility to verify that treatment and disposal procedures comply with local, state (provincial) and federal regulations. Contact your Dow Technical Representative for more information.

Product Stewardship

Dow has a fundamental concern for all who make, distribute, and use its products, and for the environment in which we live. This concern is the basis for our product stewardship philosophy by which we assess the safety, health, and environmental information on our products and then take appropriate steps to protect employee and public health and our environment. The success of our product stewardship program rests with each and every individual involved with Dow products - from the initial concept and research, to manufacture, use, sale, disposal, and recycle of each product.

Customer Notice

Dow strongly encourages its customers to review both their manufacturing processes and their applications of Dow products from the standpoint of human health and environmental quality to ensure that Dow products are not used in ways for which they are not intended or tested. Dow personnel are available to answer your questions and to provide reasonable technical support. Dow product literature, including safety data sheets, should be consulted prior to use of Dow products. Current safety data sheets are available from Dow.

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