



DURAPLUS™ 2 Floor Finish Polymer

Features & Benefits

- Gloss—Polishes formulated with DURAPLUS™ 2 Floor Finish Polymer demonstrate gloss properties associated with highly styrenated polishes. The long-lasting gloss is maintained under all types of floor maintenance systems.
- Durability—DURAPLUS™ 2 Polymer-based finishes demonstrate exceptional wear properties under heavy foot traffic. These finishes have exhibited excellent scuff, scratch and black heel mark resistance. Black heel marks can be easily wiped off the polished surface.
- Low odor—Polishes made with DURAPLUS™ 2 Polymer have a very low ammonia odor, making them appropriate for virtually any end-use situation, even in the most sensitive environments.

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	~60
pH		~8.4
Viscosity (Brookfield LVT, #1 Spindle, 60 rpm)	cP	< 100
Density @ 25°C	Lb/U.S. gal	8.9
Specific Gravity		1.07
Ionic Charge		Anionic
Freeze/Thaw Stability	cycles	≥ 3

Description

DURAPLUS™ 2 Polymer is a distinct, modified acrylic, low odor, floor polish polymer that utilizes mixed-metal crosslinking technology to produce polishes that combine excellent gloss and gloss retention with the new industry standard for durability. Because of its exceptional durability, formulations based on DURAPLUS™ 2 Polymer are ideally suited for use in highly trafficked areas that are minimally maintained. These areas include airports and shopping malls.

**Standard
Performance
Characteristics**

As with all Dow floor polish polymers, DURAPLUS™ 2 Polymer shares a number of common performance characteristics.

DURAPLUS™ 2 Polymer allows formulating flexibility to offer a range of performance profiles from minimum maintenance to frequent burnishing. The suggested polish formulations made with DURAPLUS™ 2 Polymer meet or exceed the 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. DURAPLUS™ 2 Polymer offers the manufacture of polishes that can be applied at floor temperatures of 50°F (10°C) and above.

DURAPLUS™ 2 Polymer Formulation, DP-2-14 (25%)

DURAPLUS™ 2 Polymer-based formulation, DP-2-14, optimizes high lay down gloss and excellent durability. DP-2-14 offers excellent appearance with minimal maintenance. DP-2-14 is well suited for facilities which require infrequent floor maintenance.

Material in Proper Order of Addition	Weight Percent	LBS/ 100 US GAL	Gallons/ 100 US GAL
Water	33.24	283.07	33.91
KATHON™ CG/ICP Preservative	0.04	0.33	0.04
Capstone FS-65 Fluorosurfactant ¹	0.05	0.41	0.05
CARBITOL™ Solvent- Low Gravity	5.54	47.16	5.71
Eastman TXIB Additive	1.43	12.15	1.54
Tri(butoxyethyl) Phosphate Plasticizer	2.61	22.23	2.62
DURAPLUS™ 2 Polymer (38%)	48.43	412.44	47.42
RHOPLEX™ 1531C Emulsion (38%)	2.85	24.26	2.76
A-C 325N Polyethylene Polymer (35%) ²	3.09	26.34	3.17
Epolene E43N Polypropylene Polymer (40%) ³	2.71	23.07	2.77
Defoamer ⁴	0.01	0.09	0.01
Totals =>	100.00	851.53	100.00
Formulation Constants	Weight Solids		25%
	Density		8.52
	Polymer/ASE/Wax Ratio		85/5/10

1. Recommended Wetting Agent: Capstone FS-65
2. Commercial Trade Names: Michem Emulsion 93235 (35%) and BYK Wax emulsion Aquacer 8059 (35%)
3. Commercial Trade Names: Michem Emulsion 94340 (40%) and BYK Wax emulsion Aquacer 8940 (40%)
4. Recommended Defoamer: DEE FO PI 40 Münzing, info@munzing.us

DURAPLUS™ 2 Polymer Formulation, DP-2-15 (25%)

DURAPLUS™ 2 Polymer-based formulation, DP-2-15, offers an exceptional overall balance of high lay down gloss, excellent durability, and burnish response. DP-2-15 is a good choice for a premium product which must perform under a variety of maintenance systems from minimal maintenance to moderate ultra high speed burnishing.

Material in Proper Order of Addition	Weight Percent	LBS/ 100 US GAL	Gallons/ 100 US GAL
Water	33.90	289.54	34.69
KATHON™ CG/ICP Preservative	0.04	0.34	0.04
Capstone FS-65 Fluorosurfactant ¹	0.05	0.39	0.05
CARBITOL™ Solvent- Low Gravity	5.77	49.30	5.97
Eastman TXIB Additive	1.46	12.43	1.58
Tri(butoxyethyl) Phosphate Plasticizer	3.25	27.78	3.28
DURAPLUS™ 2 Polymer (38%)	44.21	377.63	42.91
RHOPLEX™ 1531C Emulsion (38%)	2.76	23.60	2.68
A-C 325N Polyethylene Polymer (35%) ²	5.40	46.12	5.56
Epolene E43N Polypropylene Polymer (40%) ³	3.15	26.91	3.23
Defoamer ⁴	0.02	0.18	0.02
Totals =>	100.00	854.23	100.00
Formulation Constants	Weight Solids		25%
	Density		8.54
	Polymer/ASE/Wax Ratio		80/5/15

1. Recommended Wetting Agent: Capstone FS-65
2. Commercial Trade Names: Michem Emulsion 93235 (35%) and BYK Wax emulsion Aquacer 8059 (35%)
3. Commercial Trade Names: Michem Emulsion 94340 (40%) and BYK Wax emulsion Aquacer 8940 (40%)
4. Recommended Defoamer: DEE FO PI 40 Münzing, info@munzing.us

DURAPLUS™ 2 Polymer Formulation, DP-2-16 (20%)

DURAPLUS™ 2 Polymer-based formulation, DP-2-16, optimizes high lay down gloss and excellent durability. DP-2-16 looks very good, day-to-day, under a variety of maintenance systems.

Material in Proper Order of Addition	Weight Percent	LBS/ 100 US GAL	Gallons/ 100 US GAL
Water	46.50	394.46	47.26
KATHON™ CG/ICP Preservative	0.04	0.34	0.04
Capstone FS-65 Fluorosurfactant ¹	0.04	0.35	0.04
CARBITOL™ Solvent- Low Gravity	4.83	40.98	4.96
Eastman TXIB Additive	1.24	10.56	1.34
Tri(butoxyethyl) Phosphate Plasticizer	2.28	19.32	2.28
DURAPLUS™ 2 Polymer (38%)	42.25	358.41	41.21

1. Recommended Wetting Agent: Capstone FS-65

DURAPLUS™ 2 Polymer Formulation, DP-2-16 (20%) (Cont.)

Material in Proper Order of Addition	Weight Percent	LBS/ 100 US GAL	Gallons/ 100 US GAL
A-C 325N Polyethylene Polymer (35%) ²	1.95	16.56	2.00
Epolene E43N Polypropylene Polymer (40%) ³	0.85	7.24	0.87
Defoamer ⁴	0.01	0.08	0.01
Totals =>	100.00	848.31	100.00
Formulation Constants	Weight Solids		20%
	Density		8.48
	Polymer/ASE/Wax Ratio		94/0/6

- Commercial Trade Names: Michem Emulsion 93235 (35%) and BYK Wax emulsion Aquacer 8059 (35%)
- Commercial Trade Names: Michem Emulsion 94340 (40%) and BYK Wax emulsion Aquacer 8940 (40%)
- Recommended 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.

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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