Technical Data Sheet

UHS PLUS™ Floor Finish Polymer

Features & Benefits

- Exceptional appearance— UHS PLUS™ Floor Finish Polymer-based finishes dry to a high gloss, deepluster appearance that improves with wear and repeated burnishing over time.
- Excellent repairability—In frequently maintained environments, UHS PLUS™ Polymer-based formulations show excellent resistance to pad scratch “swirling”, exceptional gloss build and excellent repair of traffic damage.
- Gloss retention—Polishes based on UHS PLUS™ Polymer exhibit excellent gloss retention after many months of extensive wear and frequent burnishing.
- Recoatability—UHS PLUS™ Polymer-based polishes have excellent application and recoating properties which offer excellent gloss build.
- Cost/efficiency—Formulations based on UHS PLUS™ Polymer require no initial burnishing for the first 24 hours, thus providing an important labor-savings benefit. If desired, formulations UHS-61-3 and UHS-61-4 can be burnished 45–60 minutes after the final coat is dry.

Typical Properties

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

Property	Unit	Result
Appearance		Milky-white liquid
Solids Content	%	38
Minimum Film-Formation Temperature (MFFT)	°C	~88
pH		~9.0
Viscosity (Brookfield LVT, #1 Spindle, 60 rpm)	cP	< 100
Density @ 25°C	(Lb/U.S. gal)	~8.7
Specific Gravity		1.04
Ionic Charge		Anionic

Description

UHS PLUS™ Polymer is a metal-crosslinked, modified acrylic polymer specifically designed to offer exceptional ultra-highspeed (UHS) burnish response and “wet look” gloss. UHS PLUS™ Polymer-based finishes are excellent choice for a wide range of applications in retail stores and other areas where exceptional appearance is desired.

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Performance Characteristics

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

UHS PLUS™ Polymer allows formulating flexibility to make a range of performance profiles from minimum maintenance to maximum burnish response. Formulations UHS-61-6 based on UHS PLUS™ Polymer meets or exceeds the industry slip resistance standard as tested by the ASTM D-2047 Standard Test Method. UHS PLUS™ Polymer offers for the manufacture of polishes that can be applied at floor temperatures of 50°F (10°C) and above.

UHS PLUS™ Polymer Formulation UHS-61-5 (25%)

Formulation UHS-61-5 is a 25% solids finish specifically engineered for high gloss in hightraffic locations. This formulation offers all of the benefits of dri-brite formulations, plus excellent UHS burnish response and "'wet look' gloss."

Material in Proper Order of Addition	Percent by Weight	Lb/100 U.S. Gal	Gal/100 U.S. Gal
Water	33.95	289.11	34.84
KATHON™ CG/ICP Preservative	0.04	0.26	0.04
Capstone FS-65 Fluorosurfactant[1]	0.05	0.43	0.05
CARBITOL™ Solvent - Low Gravity	5.20	42.96	5.30
DOWANOL™ DPM Glycol Ether	0.95	7.54	1.02
Benzoflex 131 Plasticizer	1.25	10.70	1.15
Tri(butoxyethyl) Phosphate Plasticizer	2.50	21.41	2.52
UHS PLUS™ Polymer (38%)	45.83	392.48	44.60
RHOPLEX™ 1531C Emulsion (38%)[2]	2.79	23.89	2.72
Epolene E43N Polypropylene Polymer (40%)[3]	3.29	28.18	3.38
A-C 325N Polypropylene Polymer (35%)[4]	4.13	35.37	4.26
Defoamer[5]	0.02	0.17	0.02
Totals	**100.00**	**853.37**	**100.00**

Formulation Constants	Theoretical Non-volatile Solids	25%
	Theoretical Density, Lb/U.S. Gal	~8.6
	Polymer/ASE/Wax Ratio	82/5/13

1. Recommended Wetting Agent: Capstone FS-65
2. Alternative ASRs: Michem Dispersion MD-91530 (30%) and Chemrez 30 (30%)
3. Commercial Trade Names: Michem Emulsion 94340 (40%) and BYK Wax emulsion Aquacer 8940 (40%)
4. Commercial Trade Names: Michem Emulsion 93235 (35%) and BYK Wax emulsion Aquacer 8959 (35%)
5. Recommended Defoamer: DEE FO PI40 Münzing, info@munzing.us

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UHS PLUS™ Polymer Formulation UHS-61-6 (20%)

Formulation UHS-61-6 is a 20% solids formulation specifically engineered for high gloss in high traffic locations. This formulation offers all of the benefits of dri-brite formulations, plus excellent UHS burnish response and "'wet look' gloss."

Material in Proper Order of Addition	Percent by Weight	Lb/100 U.S. Gal	Gal/100 U.S. Gal
Water	47.12	401.44	48.10
KATHON™ CG/ICP Preservative	0.04	0.36	0.04
Capstone FS-65 Fluorosurfactant[1]	0.04	0.34	0.04
CARBITOL™ Solvent - Low Gravity	4.00	34.08	4.12
DOWANOL™ DPM Glycol Ether	0.95	8.09	1.02
Benzoflex 131 Plasticizer	1.00	8.52	0.91
Tri(butoxyethyl) Phosphate Plasticizer	2.00	17.04	2.01
UHS PLUS™ Polymer (38%)	36.66	312.34	35.49
RHOPLEX™ 1531C Emulsion (38%)[2]	2.24	19.08	2.17
Epolene E43N Polypropylene Polymer (40%)[3]	2.63	22.41	2.69
A-C 325N Polypropylene Polymer (35%)[4]	3.30	28.12	3.39
Defoamer[5]	0.02	0.17	0.02
Totals	**100.00**	**851.99**	**100.00**

Formulation Constants		
	Theoretical Non-volatile Solids	20%
	Theoretical Density, Lb/U.S. Gal	~8.6
	Polymer/ASE/Wax Ratio	82/5/13

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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.

Avoid high-shear pumps when handling this product.

Usable Life and Storage

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

Keep from freezing. This emulsion product as supplied will irreversibly coagulate upon freezing.

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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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