

Technical Data Sheet

DURAGREEN™ 4373 Floor Finish Polymer

Features & Benefits

Formulations based on DURAGREEN™ 4373 Floor Finish Polymer have been used in various commercial facilities, such as retail stores, office buildings and schools, and have been found to provide the following benefits:

- Bright optical clarity resulting in high initial gloss and luster that withstand burnishing over time
- Excellent gloss retention after months of detergent scrubbing and machine maintenance
- Excellent soil resistance, establishing a high benchmark for treated floors
- Very good buff response in frequently maintained facilities
- Easier removability than leading commercial polishes

Typical Properties

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

Property	Unit	Result
Appearance		Translucent white liquid
Solids content	%	38 ±0.5
рН		8.0–9.0
Viscosity (Brookfield LVT, #1 spindle, 60 rpm)	сР	< 100
Density @ 25°C (Lb./U.S. gal.)		8.8
Specific gravity		1.05
lonic charge		Anionic
Temperature guidelines		Protect from freezing

Description

DURAGREEN™ 4373 Polymer is a styrene acrylic copolymer employing a distinct cross-linking technology and composition. It has been designed to offer a high gloss finish in medium- to high-maintenance floor finishes. DURAGREEN™ 4373 Polymer does not rely on zinc or its compounds to achieve floor finish properties, allowing formulations to address the high quality standards of current polish polymer technology.

Form No. 27-2330-01-0820 S2D

Standard Performance Characteristics

As with all Dow floor polish polymers, DURAGREEN™ 4373 Polymer shares a number of common performance characteristics. DURAGREEN™ 4373 Polymer facilitates formulating flexibility to offer a range of performance profiles from minimum maintenance to frequent burnishing. The suggested polish formulations made with DURAGREEN™ 4373 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. DURAGREEN™ 4373 Polymer offers the manufacture of polishes that can be applied at floor temperatures of 50°F (10°C) and above.

DURAGREEN™ 4373 Polymer Formulation DG-73-1 (20%)

Formulation DG-73-1 is a starting point formulation that uses a polymer that does not rely on traditional zinc cross-linking technology and provides a polish with excellent detergent resistance and gloss retention. It has been designed for periodic to moderate maintenance, but will respond to a variety of floor maintenance procedures.

Material in Proper Order of Addition	Weight Percent	Lbs/100 US Gal	Gallons/100 US Gal
Water	44.10	375.78	45.02
KATHON CG/ICP Preservative	0.07	0.60	0.07
Capstone FS-65 Fluorosurfactant ¹	0.04	0.34	0.04
CARBITOL™ Solvent-low Gravity	4.79	40.82	4.94
DOWANOL™ DPnP Glycol Ether	0.40	3.41	0.44
Eastman TXIB Additive	0.95	8.10	1.03
Tri(butoxyethyl) Phosphate Plasticizer	2.12	18.06	2.13
DURAGREEN™ 4373 Polymer (38%)	38.50	328.06	37.28
SMA 17352H (25%) Resin ²	3.79	32.30	3.67
A-C 325N Polyethylene Polymer (35%) ³	3.78	32.21	3.88
Epolene E43N Polypropylene Polymer (40%) ⁴	1.44	12.27	1.47
Defoamer ⁵	0.02	0.18	0.02
Total	s => 100.00	852.12	100.00
	Theoretical Non-vo	latile Solids	20%
Formulation Constants	Theoretical Density	Theoretical Density, Lb./U.S. Gal	
	Polymer/ASR/Wax	Polymer/ASR/Wax Ratio	

- 1. Recommended Wetting Agent: Capstone FS-65 (supplied by Chemours at 25% active solution)
- 2. Alternative Resins: Michem Dispersion MD-91530 (30%)
- 3. Commercial Trade Names: Michem Emulsion 93235 (35%) and BYK Wax Emulsion Aquacer 8059 (35%)
- 4. Commercial Trade Names: Michem Emulsion 94340 (40%) and BYK Wax Emulsion Aquacer 8940 (40%)
- 5. Recommended Defoamer: DEE FO PI-40 Münzing, info@munzing.us

DURAGREEN™ 4373 Polymer Formulation DG-73-2 (25%)

Formulation DG-73-2 is a high solids (25%) version of formulation DG-73-1 designed for periodic to moderate maintenance, but will respond to a variety of floor maintenance procedures.

Material in Proper Order of Addition		Weight Percent	Lbs/100 US Gal	Gallons/100 US Gal
Water		30.26	259.31	31.07
KATHON CG/ICP Preservative		0.07	0.60	0.07
Capstone FS-65 Fluorosurfactant ¹		0.05	0.42	0.05
CARBITOL™ Solvent-low Gravity		5.47	46.88	5.67
DOWANOL™ DPnP Glycol Ether		0.46	3.94	0.51
Eastman TXIB Additive		1.08	9.26	1.18
Tri(butoxyethyl) Phosphate Plasticizer		2.41	20.65	2.44
DURAGREEN™ 4373 Polymer (38%)		48.72	417.52	47.44
SMA 17352H (25%) Resin ²		4.79	41.05	4.67
A-C 325N Polyethylene Polymer (35%) ³		4.85	41.56	5.01
Epolene E43N Polypropylene Polymer (40%) ⁴		1.82	15.60	15.60
Defoamer ⁵		0.02	0.18	0.02
	Totals =>	100.00	856.97	100.00
		Theoretical Non-volatile S	Solids	25%
Formulation Constants		Theoretical Density, Lb./L	J.S. Gal	8.57
		Polymer/ASR/Wax Ratio		84/5/11

- Recommended Wetting Agent: Capstone FS-65 (supplied by Chemours at 25% active solution)
- Alternative Resins: Michem Dispersion MD-91530 (30%)
- 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%) 3.
- Recommended Defoamer: DEE FO PI-40 Münzing, info@munzing.us

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DURAGREEN™ 4373 Polymer Formulation DG-73-8 (20%)

Formulation DG-73-8 is a starting point formulation that incorporates two distinct polymers in one polish offering an excellent balance of both gloss and durability. It has been designed for periodic to moderate maintenance, but will respond to a variety of floor maintenance procedures.

Material in Proper Order of Addition	Weight Percent	Lbs/100 US Gal	Gallons/100 US Gal
Water	46.49	396.27	47.47
KATHON CG/ICP Preservative	0.07	0.60	0.07
Capstone FS-65 Fluorosurfactant ¹	0.04	0.33	0.04
CARBITOL™ Solvent-low Gravity	4.39	37.42	4.53
DOWANOL™ DPnP Glycol Ether	0.20	1.70	0.22
Eastman TXIB Additive	0.47	4.01	0.51
Tri(butoxyethyl) Phosphate Plasticizer	1.81	15.43	1.82
DURAGREEN™ 4373 Polymer (38%)	19.24	164.00	18.64
DURAGREEN™ MF 1 Floor Finish Emulsion Polymer (40.5%)	19.10	162.81	18.47
Alkali Soluble Resin (30%) ²	3.02	25.74	2.93
A-C 325N Polyethylene Polymer (35%) ³	3.24	27.62	3.33
Epolene E43N Polypropylene Polymer (40%) ⁴	1.90	16.20	1.94
Defoamer ⁵	0.01	0.09	0.01
Totals =>	100.00	852.39	100.00
	Weight Solids		20.00%
Formulation Constants	Density		8.52
	Polymer/ASR/Wax Ratio		84/5/11

- 1. Recommended Wetting Agent: Capstone FS-65 (supplied by Chemours at 25% active solution)
- 2. Commercial Trade Names: Michem Dispersion MD-91530 (30%), Michelman Inc, Cincinnati, OH
- 3. Commercial Trade Names: Michem Emulsion 93235 (35%) and BYK Wax Emulsion Aquacer 8059 (35%)
- 4. Commercial Trade Names: Michem Emulsion 94340 (40%) and BYK Wax Emulsion Aquacer 8940 (40%)
- 5. Recommended Defoamer: DEE FO PI-40 Münzing, info@munzing.us

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DURAGREEN™ 4373 Polymer Formulation DG73-9 (25%)

Formulation DG-73-9 is a high solids (25%) version of formulation DG-73-8. Formulation DG-73-9 incorporates two distinct polymers in one polish offering excellent gloss and durability. DG-73-9 has been designed for periodic to moderate maintenance, but will respond to a variety of floor maintenance procedures.

Material in Proper Order of Addition	Weight Percent	Lbs/100 US Gal	Gallons/100 US Gal
Water	32.80	281.14	33.68
KATHON CG/ICP Preservative	0.09	0.75	0.09
Capstone FS-65 Fluorosurfactant ¹	0.05	0.41	0.05
CARBITOL™ Solvent-low Gravity	5.51	47.26	5.72
DOWANOL™ DPnP Glycol Ether	0.25	2.15	0.28
Eastman TXIB Additive	0.59	5.06	0.64
Tri(butoxyethyl) Phosphate Plasticizer	2.27	19.48	2.30
DURAGREEN™ 4373 Polymer (38%)	24.17	207.12	23.54
DURAGREEN™ MF 1 Polymer (40.5%)	23.99	205.61	23.33
Alkali Soluble Resin (30%) ²	3.79	32.51	3.70
A-C 325N Polyethylene Polymer (35%) ³	4.07	34.88	4.20
Epolene E43N Polypropylene Polymer (40%) ⁴	2.39	20.45	2.46
Defoamer ⁵	0.02	0.18	0.02
Totals =	> 100.00	857.02	100.00
	Weight Solids		25%
Formulation Constants	Density		8.5
	Polymer/ASR/Wax Ratio		84/5/11

- Recommended Wetting Agent: Capstone FS-65 (supplied by Chemours at 25% active solution)
- 2. Commercial Trade Names: Michem Dispersion MD-91530 (30%), Michelman Inc, Cincinnati, OH
- 3. Commercial Trade Names: Michem Emulsion 93235 (35%) and BYK Wax Emulsion Aquacer 8059 (35%)
- 4. Commercial Trade Names: Michem Emulsion 94340 (40%) and BYK Wax Emulsion Aquacer 8940 (40%)
- 5. 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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