

Barentz.



HI&I

Floor Care Ingredients



Better Floor Care Ingredient Solutions

Barentz markets an extensive line of products designed for use in floor finishes for wood, polished concrete, VCT and other flooring types. Enhance durability, shine, scuff resistance and more while choosing from high cost-efficient, eco-friendly and premium ingredients. From polymers to waxes, our technical team can help you build the right product for your market!

Emulsion Polymers from Dow Chemical

Barentz offers a wide range of polymers from the Dow Chemical Corporation. Dow polymers offer high quality products that can improve resistance, buffability and shine to your products. Choose from Duragreen™ zinc-free products if you are looking for a more environmentally friendly option, Duraplus™ products for low-maintenance floor finishes or Rhoplex® product line for high-maintenance floor finishes.

Wax Emulsions from Michelman

Michem® Emulsions and Michem® Dispersions enhance floor finishes by increasing gloss, durability, slip resistance, abrasion & scratch resistance and more.

Polyurethanes from Chase

Improve scratch resistance, heat fluctuations, high humidity tolerance, & chemical resistance with solvent-free polyurethanes from Chase.

TBEP Plasticizer from ICL

Excellent leveling aid and aids in strong, long-lasting film formation.



Alternative Plasticizers from Eastman

For resilient flooring, try TXIB or the Benzoflex™ line of plasticizers from Eastman. These products provide excellent film formation and resistance.

Preservatives from Arxada

Provide fast-acting, broad-spectrum protection from contamination with a wide variety of preservatives. By adding these preservatives to your product, you can increase longevity and shelf-life.

Defoamers from Elkem

Effectively control foam at concentrations as low as 10 ppm solids. Barentz offers Elkem defoamers that are effective even at elevated temperatures under pressure at wide-ranging pH. Alkaline conditions? Not a problem.



barentz-na.com **Always a better solution.**

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Floor Finish Products from The Dow Chemical Company

| Product | Features | Maintenance Procedure | Metal | APE-Free | Solids% | pH | Density (lbs/gal) | Viscosity (cps) | Specific Gravity |
|------------------------------|--|-----------------------|-------|----------|-------------|-----------|-------------------|-----------------|------------------|
| Floor Finish Polymers | | | | | | | | | |
| Duragreen™ MF-1 | Metal Free, Excellent Durability. GreenSeal and DFE certified. | Low - medium | None | Yes | 40.0 - 41.0 | 7.0 - 8.0 | 8.8 | <100 | 1.05 |
| Rhoplex® B-924 | Excellent Durability, Good Gloss. All acrylic. | Low - medium | Zn | Yes | 37.5 - 38.5 | 7.6 - 8.3 | 8.9 | <100 | 1.07 |
| Duragreen™ 4373 | Zinc Free Polymer, with an excellent gloss, very good durability and burnish response. GreenSeal and DfE certification pending | Low - medium | Ca | Yes | 37.5 - 38.5 | 7.0 - 8.0 | 8.8 | <100 | 1.05 |
| Duraplus™ 2 | Outstanding Durability, Excellent Gloss. | Low - medium | K, Zn | Yes | 37.5 - 38.5 | 7.9 - 8.9 | 8.9 | <100 | 1.07 |
| Duraplus™ 3 | Excellent Durability, Excellent Gloss. | Low - medium | K, Zn | Yes | 37.5 - 38.5 | 8.0 - 9.0 | 8.8 | <100 | 1.07 |
| Rhoplex® 2483 | Very Good Durability, Very Good Gloss, Low Cost | Medium - high | Zn | No | 37.5 - 38.5 | 8.6 - 9.4 | 8.9 | <100 | 1.07 |
| Rhoplex® 3479 | Very Good Durability, Excellent Gloss, Low Cost | Medium - high | Zn | Yes | 37.5 - 38.5 | 7.5 - 8.5 | 8.8 | <100 | 1.06 |
| Rhoplex® 3829 | Optically Brightened; Very Good Durability, Excellent Gloss. | Medium - high | Zn | Yes | 37.5 - 38.5 | 7.5 - 8.5 | 8.8 | <100 | 1.06 |
| Rhoplex® 3830 | Very Good Durability, Very Good Gloss. Can be formulation as a concentrate. | Medium - high | Zn | Yes | 37.5 - 38.5 | 8.3 - 8.8 | 8.8 | <100 | 1.05 |
| Rhoplex® 4336 | Optically brightened; Outstanding Ultra High Speed Burnish Response | High | Zn | Yes | 37.5 - 38.5 | 8.6 - 9.6 | 8.7 | <100 | 1.04 |
| Floor Finish Sealers | | | | | | | | | |
| Rhoplex® 2133 | Outstanding Adhesion, Very Good Chemical Resistance | N/A | None | No | 41.0 - 42.0 | 7.0 - 7.8 | 8.6 | <500 | 1.03 |
| Rhoplex® CS-4000 | Excellent Water-Blushing Resistance | N/A | None | No | 47.5 - 48.5 | 8.2 - 8.8 | 8.8 | <800 | 1.06 |
| Rhoplex® NTS-2923 | Excellent Stain Resistance | N/A | None | Yes | 37.5 - 39.0 | 7.0 - 7.8 | 8.8 | <100 | 1.05 |
| Rhoplex® WL-91 | Excellent Chemical Resistance, High Gloss, Low Cost | N/A | None | No | 41.0 - 42.0 | 7.1 - 8.2 | 8.6 | 200 - 1000 | 1.03 |
| Wood Finish Polymers | | | | | | | | | |
| Duraplus™ C-3668 | Water-Borne, Very Good Durability & Gloss | Medium | None | Yes | 37.5 - 38.5 | 8.0 - 9.5 | 8.7 | <100 | 1.04 |
| Alkali Soluble Resins | | | | | | | | | |
| Rhoplex® 1531C | Outstanding Leveling, Colorless, High Gloss, All Acrylic | N/A | None | Yes | 38.0 - 39.0 | 4.8 - 6.0 | 8.9 | <100 | 1.06 |



Floor Polish Recommendations from The Dow Chemical Company

| Facility | Typical Maintenance System | Key Product Feature | Recommended Polymer | Features |
|---|---|--------------------------------|---------------------|---|
| Low Maintenance | | | | |
| Managed Care Facilities, Schools, Offices, Small Locations or Rooms | Mop/Scrub/Recoat; Infrequent Spray Buffing or Burnishing (1-2 times/week) | Best durability | Duraplus® 2 | Best for durability; benchmark for mark and scuff resistance; excellent gloss and removability; low ammonia odor and foam. |
| | | All acrylic | Rhoplex® B-924 | Excellent mark and scuff resistance; Very good gloss. All Acrylic Polymers |
| | | Best gloss | Duraplus® 3 | Best for gloss retention; excellent durability; low ammonia odor and foam. Can be formulated to comply with 2010 CARB 310 VOC regulations |
| | | Durable & metal free | Duragreen® MF-1 | Metal Free Polymer, Excellent Durability; benchmark for detergent and oil resistance. GreenSeal and DFE certified. |
| Medium Maintenance | | | | |
| Grocery Stores, Shopping Malls, Hospitals, Managed Care Facilities, Airports, Universities, Schools, Office Buildings, Lobbies, Small Retail Stores | Spray Buffing or High Speed Burnishing (2-4 times/week) | Best durability | Duraplus® 3 | Best for gloss retention; excellent durability; low ammonia odor and foam. Can be formulated to comply with 2010 CARB 310 VOC regulations |
| | | Zinc Free | Duragreen® 4373 | High initial gloss, very good durability, outstanding soil resistance and removability. Ability to comply with leading green label requirements. |
| | | Ultra high solids formulations | Duraplus Advantage® | Excellent Durability, Very Good Gloss, Formulated up to 30% solids for low to high maintenance. Can be formulated to comply with 2010 CARB 310 VOC regulations. |
| | | Optically Brightened | Rhoplex® 3829 | Excellent lay-down gloss with very good durability; very good buff and burnish response; low foam. |
| | | Best Value | Rhoplex® 3479 | Excellent lay-down gloss with very good durability; very good buff and burnish response; low foam. |
| High Maintenance | | | | |
| Supermarkets, Large Non-food Retail, Office Buildings, Lobbies, etc. | High Speed or Ultra High Speed Burnishing (4-7 times/week) | "Wet Look" Gloss | Rhoplex® 4336 | Outstanding ultra high-speed burnish response; "wet-look" gloss; low ammonia odor; excellent foam control. Optically Brightened |

Floor Sealer Recommendations by Substrate from The Dow Chemical Company

| Floor Substrate | Product/Formulation | Features |
|-----------------------------|--|---|
| Sealer Finish | Low Cost | Rhoplex® 1421 Economically priced; excellent protective properties; good adhesion. |
| | High Durability | Duraplus® 3 Premium product with excellent durability and gloss; excellent adhesion, buffing and burnishing response. |
| Vinyl Tile | Low Cost / Removable | Rhoplex® 1421 Economically priced; excellent protective properties; good adhesion. |
| | High Gloss / Removable | Duraplus® 3 Premium product with excellent durability and gloss; excellent adhesion, buffing and burnishing response. |
| | Chemical Resistant / Selectively Removable | Rhoplex® 2133 Outstanding adhesion; very good chemical resistance; formulations can be pigmented zinc free. |
| Stain Resistant / Removable | | Rhoplex® NTS-2923 Excellent protective properties as a resilient tile sealer, particularly against staining; zinc-free. |
| | Low Cost | Rhoplex® 1421 Economically priced; excellent protective properties; good adhesion. |
| Terazzo | High Durability | Duraplus® 3 Premium product with excellent durability and gloss; excellent adhesion, buffing and burnishing response. |
| Non-resilient Tile | Exterior | Rhoplex® CS-4000 Excellent water-blushing resistance; formulations can be pigmented zinc free. |
| | Interior | Rhoplex® 2133 Outstanding adhesion; very good chemical resistance; formulations can be pigmented zinc free. |
| | Interior | Rhoplex® CS-4000 Excellent water-blushing resistance; formulations can be pigmented zinc free. |

Michem® Emulsions, Michem® Dispersions & Michem® Lube from Michelman

| Product | Description | %NV | pH | Abrasion Resistance | Black Heel Resistance | Block Resistance | Durability | Gloss | Mar Resistance | Scratch Resistance | Slip Resistance | Water Resistance | Buffability | Hardness |
|-----------|---|-------------|------------|---------------------|-----------------------|------------------|------------|-------|----------------|--------------------|-----------------|------------------|-------------|----------|
| MD91530 | Acrylic resin dispersion | 24.0 - 26.0 | 8.2 - 9.7 | | | | | x | x | | | | x | |
| ME62330 | Anionic paraffin/polyethylene emulsion | 29.5 - 30.5 | 9.4 - 10.4 | | | | | | | | | x | | |
| ME71235 | Anionic paraffin/polyethylene co-emulsion | 35.0 - 36.0 | 9.0 - 11.0 | | | x | | | | | | x | | |
| ME67235 | High density polyethylene emulsion | 34.5 - 35.5 | 9.7 - 11.0 | x | | x | | | x | | x | | x | x |
| ME94340 | Nonionic polypropylene emulsion | 39.5 - 40.5 | 7.5 - 9.0 | x | | x | x | | | x | x | | | |
| ME95440 | Nonionic copolymer emulsion | 39.5 - 40.5 | 9.5 - 10.5 | | x | | | | | | x | | x | |
| ML126 | Anionic polyethylene emulsion | 24.5 - 25.5 | 8.7 - 9.7 | | | x | | | | | | x | | |
| ML156 PFP | Nonionic carnauba wax emulsion | 24.5 - 25.5 | 4.5 - 7.5 | | | x | | | | x | | | | |
| ML160 PFP | Anionic carnauba wax emulsion | 24.5 - 25.5 | 4.0 - 7.5 | | | x | | | x | x | | | x | |



Polyurethanes from Chase

Solvent-Free Polyurethanes

| Product | Description | Viscosity | % Solids | Specific Gravity | Wt/Gallon | pH | VOC (g/L) | Heat Age (125°F 28 days) | Freeze-Thaw (0°F 5 cycles) | Sward Hardness | Gloss @ 60% |
|---------|---|--------------|----------|------------------|------------|-----------|-----------|--------------------------|----------------------------|----------------|-------------|
| SF18™ | Solvent-free, aliphatic, self-cross-linking | 25 - 400 cps | 34 - 36% | 1.06 ± 0.01 | 8.75 ± 0.2 | 7.0 - 8.5 | < 50 | Pass* | Pass | 25 | 90 |
| SF27™ | Solvent-free, aliphatic polyester dispersion | 25 - 400 cps | 34 - 36% | 1.06 ± 0.01 | 8.75 ± 0.2 | 7.0 - 8.5 | < 50 | | | 27 | |
| SF5000™ | Solvent Free, Water Based Hydroxyl Functional Resin | 10 - 200 | 37 - 39% | | 8.8 | 7.0 - 8.5 | <20 | Pass* | Pass | 45 | 85 |

| Product | Wood Coatings | | | | | Plastic Coatings | | | Specialty Coatings | | | |
|---------|---------------|-----------------------------|-----------------|------------------|-----------------|------------------|----------------|-----------------------|--------------------|----------------------|-------------------------|---------|
| | DIY Varnish | Professional Floor Finishes | Sports Flooring | Stains & Sealers | Wood Components | Vinyl Rigid | Vinyl Flexible | Automotive Components | Floor Polish | Adhesives & Sealants | Flexible Film Adhesives | Binders |
| SF18™ | x | x | x | x | x | x | x | x | x | x | x | x |
| SF27™ | | | | x | x | x | x | x | x | | x | |
| SF5000™ | | x | x | | x | | | | x | | | |

Moisture Cure Polyurethanes

| Product | Description | Viscosity | % Solids | VOC lbs/gal (g/l) | % NCO | Sward Hardness | Tensile psi | Elongation | Solvent |
|---------|--|--------------|----------|-------------------|-----------|----------------|-------------|------------|-------------------|
| MC40P™ | Aromatic, hard coating for wood & concrete | 70 - 120 cps | 39 - 41% | 4.86 (585) | 2.7 - 3.0 | 38 | 5,000 | 85% | Xylol/PM acetate |
| MC53-1™ | Aromatic, hard coating for wood & concrete, <350 g/l VOC | 70 - 130 cps | 40 - 43% | 2.48 (298) | 2.8 - 3.7 | 40 | 4,500 | 80% | Exempt/PM Acetate |
| MC75™ | Aromatic, hard coating for wood & concrete | 60 - 125 cps | 39 - 41% | 4.81 (576) | 2.5 - 3.1 | 38 | 5,000 | 85% | Xylol |

| Product | Wood Coatings | | | Specialty Applications |
|---------|-----------------------------|-----------------|-----------------|------------------------|
| | Professional Floor Finishes | Sports Flooring | Wood Components | Binders |
| MC40P™ | x | x | x | |
| MC53-1™ | x | x | x | |
| MC75™ | x | x | x | |



Floor Care Plasticizers

| Product | Specific Gravity @ 20°C/20°C | Viscosity mPa.s @ 25°C | Refractive Index @ 25°C | Freezing Point | Solubility in Water @ 25°C | Odor | APHA Color | Vapor Pressure torr @ 20°C | Molecular Weight | Flash Point |
|-----------------|------------------------------|--------------------------|-------------------------|----------------|----------------------------|------|------------|----------------------------|-------------------|------------------------------|
| Phosflex TBEP | 1.02 | 12 | | | | | <75 | | | |
| Benzoflex® 2088 | 1.16 | 71 | 1.54 | <16°C | Slightly soluble | Mild | 25 - 40 | <0.00001 | 332 (Theoretical) | 202°C (Setaflash Closed Cup) |
| Benzoflex® 131 | 0.95 | 8 | 1.49 | <-25°C | | Mild | 10 - 40 | <0.001 | 262 (Typical) | 167°C (Setaflash Closed Cup) |
| TXIB | 0.942 - 0.948 | 9 cP @ 25°C (Brookfield) | 1.43 | -70°C | 0.42 g/l @ 20°C | | | | 286.4 | 143°C (Cleveland Open Cup) |

Preservatives from Arxada

| Product | Chemistry | Description | Effective pH | Use | Active Wt% | CAS No. | Typical Use Levels (wt%) | Cleaners | | | Waxes & Polishes | |
|------------------|--|---|--------------|----------------------------|----------------------|--|--------------------------|----------|------------|---------|------------------|---|
| | | | | | | | | Low pH | Neutral pH | High pH | | |
| Mergal™ 530 | 2,2-Dibromo-3-nitropropionamide | Clear colorless to amber liquid Quick-kill, fast-dissipating biocide | 25 - 4.5 | Biocide | 20 | 10222-01-2 | varies | | | x | | |
| TroyGuard™ BC11 | Benzisothiazolinone (BIT) Chloromethylisothiazolinone (CMIT) Methylisothiazolinone (MIT) | White to off-white liquid dispersion Fast acting with long-term protection | 3 - 12 | Antibacterial | 10.1 0.50 0.16 | 2634-33-5; 26172-55-4; 2682-20-4 | 0.05 - 0.20 | | | x | x | x |
| TroyGuard™ B20G | Benzisothiazolinone (BIT) | Clear colorless glycol solution Stable, long-term protection | 3 - 12 | Antibacterial & Antifungal | 19.18 | 2634-33-5 | 0.1 - 0.2 | | | | x | x |
| TroyGuard™ B20F | Benzisothiazolinone (BIT) | White to off-white aqueous dispersion Stable, long-term protection CleanGredients™ approved | 3 - 12 | Antibacterial & Antifungal | 19.18 | 2634-33-5 | 0.1 - 0.2 | | | | x | x |
| TroyGuard™ B20W | Benzisothiazolinone (BIT) | White to off-white aqueous dispersion Stable, long-term protection | 3 - 12 | Antibacterial & Antifungal | 19.18 | 2634-33-5 | 0.1 - 0.2 | | | | x | x |
| TroyGuard™ CM1.5 | Chloromethylisothiazolinone (CMIT) Methylisothiazolinone (MIT) | | | Antibacterial & Antifungal | 1.14 0.36 | 26172-55-4; 2682-20-4 | 0.05 - 0.10 | x | | x | | x |

Defoamers from Elkem

| Product | Appearance | Actives, % | Emulsifier Type | pH | Diluents | Viscosity, cps |
|-----------------|-------------|------------|-----------------|-----|----------|----------------|
| Silcolapse® 621 | Milky white | 30 | Non-ionic | 7.0 | Water | 1,100 |
| Silcolapse® 721 | Milky white | 10 | Non-ionic | 7.0 | Water | 900 |