

DUROMAR[®]

Registered to ISO 9001:2000



coating solutions

**ZERO VOC 100% SOLIDS COATINGS
NON-HAZARDOUS TO THE USER
NON-TOXIC TO THE ENVIRONMENT**

Protection Against Erosion/Corrosion

Engineered Polymeric Systems
Since 1968

Repair and Maintenance Products
High Performance Coatings
Epoxy Flooring Systems



Since 1968 Duromar®, Inc. has been heavily involved with erosion, corrosion and process control problems. Erosion and corrosion acting together are many times beyond the resistance capabilities of most metals and concrete. Direct experience with these problems coupled with the limited performance of available protective materials, encouraged Duromar® to search for new engineering solutions through the use of “state of the art” polymeric materials.

Duromar® recognized early that the key to solving these erosion and corrosion problems, would be in the selection and use of 100% solids, zero VOC, polymeric materials. These new products, while outperforming conventional solvent based or hazardous polymeric coatings, would also be safe for the applicator to use, and be non-toxic to the environment.

During these early years, Duromar® also realized that developing new materials which would perform in the laboratory was only part of the solution. The final solution was to develop new materials, which would not only perform in the field, but which could also be easily applied in the field. Products which were difficult to apply in an industrial environment, and hard for local technicians or plant maintenance people to use, were of little value. Many times the solution was found not only with the development of new materials, but also in the development of new application techniques and equipment.

Today Duromar® continues to pioneer in the field of applied polymeric technology. It offers a wide variety of zero VOC, 100% solids materials for use in a broad spectrum of industrial applications. It manufactures rebuilding, resurfacing, and specialty products for industrial maintenance; concrete repair and flooring systems; high performance linings for the severest corrosive and abrasive environments; and structural adhesives. It's production facilities and quality control procedures are registered to ISO 9001:2000 standards in order to provide “state of the art” products which meet today's stringent requirements for quality and performance.

Trained technical and application personnel are available throughout the world to assist our sales staff and customers in the proper use and application of our products. “Protecting Your Technology with Ours” expresses Duromar®'s dedication to our customers with both new and proven innovative solutions to erosion and corrosion problems.

“Protecting Your Technology With Ours”

Table of Contents

PRODUCT SELECTION GUIDES	2
POWER PLANTS	2
FLUE GAS DESULFURIZATION SYSTEMS	2
OIL, GAS & PETROCHEMICAL INDUSTRIES	3
MINING	3
MARINE	4
PAPER & PROCESS PLANTS	4
WASTEWATER TREATMENT SYSTEMS	5
FLOORS & CONCRETE SURFACES	5
 HIGH PERFORMANCE LININGS	6
ZERO VOC	
 REPAIR & MAINTENANCE PRODUCTS	8
RESURFACING PRODUCTS	
REBUILDING PRODUCTS	
 REPAIR & MAINTENANCE PRODUCTS	10
SPECIALTY SYSTEMS	
Caulks	
Underwater Repair	
Rubber Repair	
Emergency Repair	
 EPOXY FLOORING & CONCRETE FLOORING SYSTEMS	12
LINING PRODUCTS	
Including Safety/Non-Skid Products	
REPAIR PRODUCTS	
Resurfacing	
Rebuilding	
Patching	
SPECIALTY COATING PRODUCTS	
 HYDROFLOR[®] CONCRETE COATING SYSTEMS	14
 CHEMICAL RESISTANCE GUIDE	16
 SURFACE PREPARATION & APPLICATION GUIDE	17



Listed are the product recommendations for the
Resurfacing, **Rebuilding**, and **Lining** of the most common areas of usage.

Product Selection Guide

POWER PLANTS

FLUE GAS DESULFURIZATION SYSTEMS

Application	Products			Application	Products		
	Resurface (page 8)	Rebuild (page 8)	Lining (page 6)		Resurface (page 8)	Rebuild (page 8)	Lining (page 6)
<u>Ash Slurry Tanks</u>	EAC	SAR	2221	<u>Baghouses</u>	EAC-FE	SAR	2221
<u>Ash Hoppers</u>	EAC	SAR	2201	<u>De-watering Tanks</u>	EAC	SAR	1110
<u>Boiler Seal Skirts</u>	EXP	EXP- Thixset	4300	<u>Demister Sections</u>	EAC	SAR	2221
<u>Cation Tanks</u>	EXP	SAR	4310	<u>Effluent Lines</u>	EAC	SAR	2510
<u>Circulating Water Lines</u>	EAC	SAR	2510	<u>Lime/Limestone Storage Tanks</u>	EAC	SAR	2131
<u>Clinker Grinders</u>	EAC	HAR	2131	<u>Main Header Slurry Piping</u>	EAC	HAR	2133
<u>Coal Bunkers</u>	EAC	SAR	2221	<u>Make-up Water Tanks</u>	EAC	SAR	2510
<u>Coal Chutes</u>	EAC-FE	UltraBuild	2221	<u>Outlet Ductwork</u>	EXP	EXP- Thixset	4320
<u>Coal Exhausters</u>	EAC-FE	HAR	2201	<u>Precipitators</u>	EAC-FE	SAR	2221, 4310
<u>Condenser Waterboxes & Doors</u>	EAC	SAR	2510	<u>Process Floors</u>	❖	❖	❖
<u>Cooling Tower Basins</u>	❖	❖	❖	<u>Reaction Tanks</u>	EAC-FE	SAR	2131
<u>Cooling Tower Fans</u>	EAC-FE	SAR	2221	<u>Recirculation Pumps</u>	EAC	SAR	2221
<u>Deaerator Tanks</u>	EXP	SAR	4310	<u>Reheat Areas</u>	EXP	SAR	4310
<u>Demineralizing Floors</u>	❖	❖	❖	<u>Scrubber Vessels</u>	EAC-FE	SAR	2131
<u>Demineralizer Tanks</u>	EXP	EXP- Thixset	4310	<u>Spray Dryers</u>	EAC-FE	SAR	2221
<u>Ductwork</u>	EXP	SAR	4310	<u>Stack Linings</u>	EXP	EXP- Thixset	4310
<u>Fuel Storage Tanks</u>	EAC	SAR	2510	<u>Thickeners</u>	EAC	SAR	2221
<u>Heat Exchangers</u>	EAC	SAR	2201	<u>Valves</u>	EAC	SAR	2221
<u>Hydro Flood Tunnels</u>	EAC	SAR	2510	<u>Venturi Sections</u>	EAC	SAR	2221
<u>Hydro Scroll Cases</u>	EAC-FE	SAR	2221	<u>Wear Plates</u>	EAC	SAR	2131
<u>Hydro Penstocks</u>	EAC	SAR	2510	❖ See Floors & Concrete Surfaces Selection Guide (Page 5)			
<u>Hydro Wheels</u>	EAC-FE	SAR	2221	■ Ask Duomar®			
<u>Hydro Wicket Gates</u>	EAC-FE	SAR	2221				
<u>Intake/Outtake Basins</u>	EAC-UW	SAR-UW	2510-UW				
<u>Main Circulating Pump Housing</u>	EAC	SAR	2221				
<u>Stacks</u>	EXP	SAR	4310				
<u>Strainers</u>	EAC-FE	SAR	2221				
<u>Traveling Water Screens</u>	EAC	SAR	2221				

Note: All Application uses should be discussed and approved by Duomar®, Inc.. Product recommendations may change based on operating conditions, temperatures, chemicals, and pressures.



OIL, GAS & PETROCHEMICAL INDUSTRIES



MINING

Application	Products		
	Resurface (page 8)	Rebuild (page 8)	Lining (page 6)
<u>Acid/Chemical Storage Tank</u>	EXP	EXP-Thixset	■
<u>Accommodation Modules</u>	EAC	SAR	2510, 6310
<u>Anti-Slip Floors</u>	◆	◆	◆
<u>Brine Ponds</u>	EAC	SAR	2510
<u>Cantilevers</u>	EAC	SAR	2510, 6310
<u>Desulfurization Systems</u>	EXP	SAR	2131, 4310
<u>Heat Exchangers/ Condensers</u>	EAC	SAR	2510
<u>Mud System Tanks</u>	EAC-FE	SAR	2131, 2221
<u>Offshore Legs (below waterline)</u>	EAC	SAR	2510
<u>Offshore Legs (above waterline)</u>	EAC	SAR	6300
<u>Offshore Platform Decks</u>	◆	◆	◆
<u>Offshore Platform Tanks</u>	EAC	SAR	2510
<u>Pipeline - Exterior</u>	EAC	SAR	2510/2221
<u>Pipeline - Interior</u>	EAC	SAR	2510
<u>Process Vessels</u>	■	■	■
<u>Pumps</u>	EAC-FE	SAR	2221
<u>Storage Tanks - Exterior</u>	EAC	SAR	1110/6300
<u>Storage Tanks - Interior Oil/Gas/Water</u>	EAC	SAR	2131/2510
<u>Secondary Containment</u>	◆	◆	◆
<u>Underwater Repairs</u>	EAC-UW	SAR-UW	2510-UW
<u>Water Injection System</u>	EAC	SAR	2510

Application	Products		
	Resurface (page 8)	Rebuild (page 8)	Lining (page 6)
<u>Acid Tanks/Vessels</u>	EXP	EXP-Thixset	■
<u>Conditioning Tanks</u>	EAC	SAR	2221
<u>Deaeration Vessels</u>	EXP	EXP-Thixset	4310
<u>Evaporators</u>	EXP	EXP-Thixset	4310
<u>Flash Cooling Towers</u>	EAC	SAR	2510
<u>Leaching Circuit</u>	EAC	SAR	2221, 4310
<u>Loading/Hauling Equip.</u>	EAC-FE	HAR	2221
<u>Secondary Containment</u>	◆	◆	◆
<u>Slurry Pipes</u>	EAC-FE	HAR	2221
<u>Slurry Tanks</u>	EAC-FE	HAR	2221
<u>Solvent Extraction Pipes</u>	EXP	EXP-Thixset	4310
<u>Fuel/Oil Storage Tanks (mild chemical resistance)</u>	EAC	SAR	2510
<u>Raw Material Storage Tanks (extra abrasion resistance)</u>	EAC	HAR	2221
<u>Chemical Storage Tanks</u>	EXP	EXP-Thixset	■
<u>Stacks</u>	EXP	EXP-Thixset	4310
<u>Stairs</u>	◆	◆	◆
<u>Structural Steel</u>	EAC	SAR	1110
<u>Surge Tanks</u>	EAC-FE	HAR	2133, 2221
<u>Thickener Tanks</u>	EAC-FE	HAR	2133, 2221
<u>Underwater/Wet Repairs/Coating</u>	EAC-UW	SAR-UW	2510-UW



◆ See Floors & Concrete Surfaces
Selection Guide (Page 5)

■ Ask Duomar®

DUOMAR



MARINE

Product Selection Guide



PAPER & PROCESS PLANTS

Application	Products			Application	Products		
	Resurface (page 8)	Rebuild (page 8)	Lining (page 6)		Resurface (page 8)	Rebuild (page 8)	Lining (page 6)
<u>Bulbous Noses</u>	EAC-LV	SAR	2221	<u>Acid Storage Tanks</u>	EXP	EXP-Thixset	■
<u>Bow & Stern Thrusters</u>	EAC-LV	SAR	2221	<u>Baghouse Hoppers & Walls</u>	EAC	SAR	2201
<u>Ballast Tanks</u>	EAC	SAR	2510	<u>Black Liquor Tanks</u>	EXP	SAR	4310
<u>Bilges</u>	GMC	SAR	2510	<u>Centrifuges</u>	EACX	SAR	2221
<u>Cargo Tanks</u>	EAC	SAR	2510	<u>Condensers</u>	EAC	SAR	2510
<u>Chain Lockers</u>	EAC-FE	SAR	2131	<u>Cooling Towers</u>	EAC	SAR	2510
<u>Condensers</u>	EAC	SAR	2510	<u>Dust Collector Hoppers</u>	EAC	SAR	2201
<u>Corroded/Cavitated Wet Liners</u>	EAC-FE	SAR	2221	<u>Green Liquor Tanks</u>	EAC	SAR	2510
<u>Discharge Pipes</u>	EAC	SAR	2221	<u>Heat Exchangers</u>	EAC	SAR	2201
<u>Evaporators</u>	EXP	EXP-Thixset	4310	<u>Hydro Pulpers</u>	EAC	SAR	2201
<u>Foam Tanks</u>	EAC	SAR	2510	<u>Non-Skid Surfaces</u>	◆	◆	◆
<u>Gas Fan Castings</u>	EXP	SAR	4310	<u>Oil Storage Tanks</u>	EAC	SAR	2510
<u>Gas Scrubbers</u>	EXP	SAR	4310	<u>Penstock Lines</u>	EAC	SAR	2510
<u>Hull Rivets</u>	EAC	SAR	2221	<u>Product Chutes</u>	EAC	HAR	2221
<u>Hull Anodes</u>	EAC	SAR	2221	<u>Pump Casings</u>	EAC	SAR	2221
<u>Kort Nozzle Surfaces</u>	EAC-FE	SAR	2221	<u>Pump Impellers</u>	EAC	SAR	2221
<u>Non-Skid Deck Surfaces</u>	◆	◆	◆	<u>Rail Cars</u>	EAC	SAR	2221
<u>Oil Coolers</u>	EAC	SAR	2510	<u>Reagent Storage Tanks</u>	EXP	SAR	4310
<u>Rudder/Rudder Stocks</u>	EAC	SAR	2510	<u>Recovery Boiler Ductwork</u>	EXP	SAR	4310
<u>Sea Chests & Scoops</u>	EAC-FE	SAR	2201	<u>Screw Conveyors</u>	EAC	HAR	2133
<u>Seawater Strainers</u>	EAC	SAR	2221	<u>Secondary Containment Tanks</u>	◆	◆	◆
<u>Sewage Tanks</u>	EAC	SAR	2221	<u>Stock Chests</u>	EAC	SAR	2221
<u>Shafts</u>	EAC	MGF	2510	<u>Valves</u>	EAC	SAR	2221
<u>Sluice Gates</u>	EAC-FE	SAR	2221	<u>White Liquor Tanks</u>	EAC	SAR	2510
<u>Stern Post Erosion & Cavitation</u>	EAC-FE	SAR	2221				
<u>Valve Body Surfaces</u>	EAC-FE	SAR	2221				



See Floors & Concrete Surfaces
Selection Guide (Page 5)



Ask Duromar®



Note: All Application uses should be discussed and approved by Duromar®, Inc.. Product recommendations may change based on operating conditions, temperatures, chemicals, and pressures.



WASTEWATER TREATMENT SYSTEMS



FLOORS & CONCRETE SURFACES

Application	Products			Application	Products		
	Resurface (page 8)	Rebuild (page 8)	Lining (page 6)		Resurface (page 12)	Rebuild (page 12)	Lining (page 12-15)
<u>Aeration Tanks</u>	EAC	SAR	2510, 2221	<u>Anti-Slip Surfaces</u>	Chemcrete	DuroFil	HydroFlor /SureGrip
<u>Digestors</u>	EAC	SAR	2510, 3320	<u>Acid/Chemical Resistant Floors</u>	Chemcrete Super	DuroFil	4301
<u>Anti-Slip Surfaces</u>	❖	❖	❖	<u>Cooling Tower Basins</u>	Chemcrete	DuroFil	HydroFlor
<u>Acid/Chemical Storage Tanks</u>	EXP	EXP- Thixset	■	<u>Damp Areas</u>	Chemcrete	DuroFil	HydroFlor
<u>Clarifier Tanks</u>	EXP	EXP- Thixset	2510, 4310	<u>Decorative Floors</u>	Chemcrete	DuroFil	■
<u>Demineralized Water Tanks</u>	EXP	EXP- Thixset	4310	<u>Deck Surfaces Non-Skid</u>	NA	NA	SureGrip
<u>De-watering Tanks</u>	EAC	SAR	2510	<u>Demineralizer Areas</u>	Chemcrete Super	DuroFil	4301
<u>Distribution Chambers</u>	EAC, EXP	SAR	2510, 4310	<u>FDA/USDA Floors</u>	Chemcrete	DuroFil	HydroFlor
<u>Effluent Lines</u>	EAC	SAR	2510	<u>General Flooring</u>	Chemcrete	DuroFil	1310, HydroFlor
<u>Grit Chambers</u>	EAC-FE	HAR	2131, 2221	<u>Hydrostatic Pressure Problem Floors</u>	NA	NA	HydroFlor
<u>Influent Collection Channel</u>	EAC-FE	SAR	2131, 2221	<u>Industrial/Warehouse Floors</u>	Chemcrete	DuroFil	1310. HydroFlor
<u>Pumps</u>	EAC-FE	SAR	2221	<u>Non-Skid Surfaces</u>	NA	NA	1310, SureGrip
<u>Secondary Containment</u>	❖	❖	❖	<u>Offshore Platform Decks</u>	NA	NA	6300, SureGrip
<u>Sedimentation Tanks</u>	EAC-FE	SAR	2221	<u>Process Floors</u>	Chemcrete Super	DuroFil	1310, 4301
<u>Sewer Lines/Pipes/ Tunnels</u>	EAC	SAR	2131, 2510	<u>Secondary Containment</u>	Chemcrete Super	DuroFil	4301
<u>Sludge Thickeners</u>	EAC-FE	SAR	2131, 2221	<u>Water Parks (wave pools, etc.)</u>	Chemcrete	DuroFil	HydroFlor
<u>Structural Steel</u>	EAC	SAR	1110, 6300				
<u>Sumps</u>	EXP	EXP- Thixset	4310				
<u>Trenches</u>	EXP	EXP- Thixset	4310				
<u>Underwater & Wet Repairs</u>	EAC-UW	SAR-UW	2510-UW				



❖ See Floors & Concrete Surfaces
Selection Guide (Page 5)

■ Ask Duomar®

DUOMAR

High Performance, Zero VOC, Linings

100% SOLIDS SYSTEMS

Coverage = 40ft²/40mils DFT (1m²/l@1mm DFT)

	Product/Description	Pot Life minutes	Density g/ml	Mix Ratio by Wt ¹	Mix Ratio by Vol ¹
HPL-1110	A flexible, low viscosity, easy to use coating system, used on structural steel, tank exteriors or other areas where extra corrosion resistance is required. It is shipped DOT non-corrosive.	45	1.25	2.7:1	2:1
HPL-1110-PW	A low viscosity coating used in potable water tanks. It is certified to the ANSI/NSF 61 standard. It may be used on concrete or steel tanks.	45	1.27	3.3:1	2.6:1
HPL-1510	A low viscosity holding primer for steel surfaces allowing for extremely long overcoat windows.	45	1.07	2:1	1.8:1
HPL-2131	A trowelable material which is designed to rebuild and/or protect tanks subject to <i>severe</i> erosion and corrosion. It is best applied using a mastic or grout pump.	45	1.6	2:1	2:1
HPL-2201	A low temperature, fast curing, moderately low viscosity product with outstanding abrasion and chemical resistance. It can be used for process vessels, baghouse or precipitator walls, coal bunkers, or flooring. It is designed to be applied by hand or with plural component spray equipment.	20	1.67	5:1	2.7:1
HPL-2221	A medium viscosity product with outstanding abrasion resistance, impact resistance, and flexibility. It can be used for rail cars, ash hoppers, slurry tanks, secondary containment, traveling water screens, or anywhere requiring flexibility, abrasion and chemical resistance. It is designed to be applied by hand or with plural component spray equipment.	25	1.61	4:1	2:1
HPL-2310	A low viscosity, long potlife, coating with excellent chemical resistance in an ambient cured material. It is designed to be applied by brush, roller or with conventional airless equipment.	45	1.27	2.6:1	2:1
HPL-2510	An outstanding, versatile and easy to use 100% solids material. It can be used for circulating water pipe, sewage treatment systems, or process water tanks. It can be applied by brush, roller or with conventional spray equipment. <i>Also available in FDA compliant versions.</i>	45	1.24	2.4:1	1.8:1
HPL-2510-UW	A moisture tolerant version of the HPL-2510 which can be used on dams, oil rigs, steel or concrete structures. It can be applied underwater or on very wet surfaces.	40	1.18	3:2	6:5
HPL-3320	A fast curing bis-phenol F epoxy used primarily for secondary containment where excellent chemical resistance to sulfuric and other inorganic acids is required at ambient cure temperatures	30	1.29	2.1:1	3:2
HPL-4300	A high-temperature, abrasion resistant, trowel applied product for boiler skirts, incinerator outlets or anywhere requiring resistance to abrasive elements at high temperatures.	30	1.81	2.5:1	2:1
HPL-4310	A high functionality, 100% solids novolac material, which can be applied by conventional airless spray equipment. It can be used in power plant outlet ducts, utility systems, petrochemical and acid storage tanks, or anywhere requiring outstanding chemical resistance in a easy to apply coating system.	45	1.32	3.6:1	2.5:1
HPL-4320	A high functionality, 100% solids novolac material, designed for concentrated sulfuric acid and other inorganic acid service. It can be applied by hand but is most efficiently applied over large areas by plural component airless.Requires elevated temperature cure.	20	1.31	2.5:1	2:1
HPL-4320-XC	A more chemical resistant version of the HPL-4320 designed for constant immersion in high concentrations of sulfuric and other inorganic acids. Although it can be applied by hand in small areas, it is most efficiently applied using plural component spray equipment.Requires elevated temperature cure.	20	1.32	2.7:1	2:1
HPL-4321	A special version of the HPL-4320 designed for methylene chloride and other solvents. Requires elevated temperature cure.	25	1.33	4.7:1	3.4:1
HPL-4323	A flexibilized version of the HPL-4320 used for secondary containment, ductwork or anywhere requiring better flexibility with extremely good chemical resistance.	35	1.29	3:1	2:1
HPL-4330	A trowellable, 100% solids novolac lining with outstanding chemical resistance. It is primarily used in areas requiring the ultimate in chemical and abrasion resistance. It is most efficiently applied by grout pump. It can also be applied by trowel or squeegee.	30	1.61	2:1	2:1
HPL-6310	A clear lining with outstanding color stability and UV resistance. It also offers moderate chemical and abrasion resistance. It is used primarily as a UV resistant topcoat on systems where no yellowing or discoloration can be tolerated. It can be cured at temperatures as low as 40°F with proper procedures.	40	1.10	2.4:1	2.1:1

¹ Base:hardener
PartB:Part A

² Functional Cure is the time required to obtain a minimum chemical resistance and develop mechanical properties sufficient for movement @ 70°F. Contact technical department for details.

³ Most common method of surface preparation (see page 17 for details).

100% SOLIDS SYSTEMS

<u>Min/Max Thick/Coat mils</u>	<u># of Coats</u>	<u>Recoat Time Min/Max hours</u>	<u>Max DFT mils</u>	<u>Min Appl Temp F°/C°</u>	<u>Max Dry Operating Temp F°/C°</u>	<u>Dry to Touch hours</u>	<u>Functional Cure ² hours</u>	<u>Full Cure hours</u>	<u>Repair System</u>	<u>Surface Prep ³</u>	<u>Application Procedure ⁴</u>	<u>pH Range ⁵</u>
10-25	2-3	8/120	75	40/4	275/135	10	60	120	EAC	SSPC-6	1,3	2.5-14
8-15	2-3	8/72	45	60/15	250/122	9	60	120	SELF	SSPC-5	1,3	3.0-12
2-5	1	6/120	5	50/10	300/150	6	36	120	SELF	SSPC-10	1,3	2.5-14
30-90	1-2	6/36	250	55/13	375/190	6	36	120	SAR	SSPC-10	1,2,5	2.5-14
10-30	2-3	3/24	90	40/4	375/190	3	18	120	EAC	SSPC-10	1,4	1.5-14
10-30	2-3	3/24	90	40/4	375/190	4	24	120	EAC	SSPC-10	1,4	1.5-14
10-30	2-3	8/72	90	40/4	300/150	8	48	120	EAC	SSPC-10	1,3	1.0-14
10-30	2-3	6/120	90	60/15	275/132	8	48	120	EAC	SSPC-10	1,3	2.0-14
10-30	2-3	4/24	90	50/10	250/122	6	72	120	SAR-UW	SSPC-6	1	2.5-14
10-30	2-3	6/48	60	40/4	325/163	7	42	120	EXP	SSPC-10	1,4	0.5-14
40-80	1-2	3/24	125	65/18	450/232	3	48	168	EXP- Thixset	SSPC-5	2	0.5-14
10-30	2-3	8/72	80	65/18	350/175	8	72	168	EXP	SSPC-10	1,3	0.5-14
10-30	2-3	3/24	60	65/18	375/190	3	48	168	EXP	SSPC-5	1,4	0.5-14
10-30	2-3	3/24	60	65/18	375/190	3	48	168	EXP	SSPC-5	1,4	0.5-14
10-30	2-3	3/24	60	65/18	375/190	3	48	168	EXP	SSPC-5	1,4	0.5-14
10-30	2-3	6/48	60	65/18	350/175	6	72	168	EXP	SSPC-10	1,4	0.5-14
40-80	1-2	3/8	125	65/18	425/217	3	48	168	EXP	SSPC-5	2	0.5-14
2-10	1-3	3/24	40	50/10	300/150	5	24	120	SELF	SSPC-5	1,3	2.0-12

⁴ 1=Brush or Roller, 2=Trowel or Squeegee,
3=Single Component Airless with Inline Heater,
4=Plural Component Airless, 5=Grout Pump

⁵ See Chemical Resistance Chart on Page 16 or
contact technical department for details.

Note: All cure times
are @ 70°F /21°C.



Repair & Maintenance Products

RESURFACING PRODUCTS

	<u>Product/Description</u>	<u>Working Time</u> minutes	<u>Density</u> g/ml	<u>Coverage</u> in 3/kg	<u>Mix Ratio</u> by Wt ¹
GMC	An excellent all around epoxy maintenance paint. It is used primarily on small projects where resistance to environmental pollutants, spills or leaks are required. Typical applications are on exterior pump casings, fans, valves or vessels.	45	1.26	39	2.5:1
EAC	A brushable and versatile maintenance material which has excellent resistance to both acids and caustics as well as having excellent abrasion resistance. It is primarily used to resurface any component requiring both abrasion and chemical resistance such as tanks, heat exchangers, valve or pump internals.	30	1.88	32	5:2
EAC-FE	A brushable more resilient version of EAC used to enhance fluid flow, resist cavitation, or anywhere requiring more impact resistance in a thin film product.	30	1.61	42	4:1
EXP	A higher chemical and temperature resistant version of the EAC used in the most aggressive of chemical environments.	30	1.7	33	2:1

1 Base:hardener
PartB:Part A

2 Functional Cure is the time required to obtain a minimum chemical resistance and develop mechanical properties sufficient for movement @ 70°F. Contact technical department for details.

3 Most common method of surface preparation (see page 17 for details).



REBUILDING PRODUCTS

	<u>Product/Description</u>	<u>Working Time</u> minutes	<u>Density</u> g/ml	<u>Coverage</u> in 3/kg	<u>Mix Ratio</u> by Wt ¹
SAR	A versatile easy to use rebuilding putty with excellent abrasion and chemical resistance. This product is heavily filled with aluminum oxide and can be built up to an inch in thickness or more. Typical applications are for rebuilding of pump casing, slurry tanks, weld seams or anywhere requiring the restoration of metal components.	50	1.98	31	2:1
HAR	A more abrasion resistant putty than SAR, which is used primarily in areas requiring more resistance to fine slurries either in liquid or powder form. Common applications are in coal mills, chutes, ash hoppers or deflector plates in FGD systems.	45	1.94	31	2:1
EXP-Thixset	A more chemical and higher temperature resistant version of either SAR or HAR used primarily in areas operating at higher temperatures and requiring better chemical resistance. Applications include acid tank repair, boiler skirts or refinery evaporator vessels.	30	1.68	36	2:1
UltraBuild	A rugged, durable, trowel grade product filled with ceramic beads and other abrasion resistant fillers. It is used primarily in areas where abrasion resistance to both small and coarse slurries are required over large areas. It is typically used in the mining industry on chutes, hoppers, classifiers or mills. It can be built up to 2 inches in thickness or more in a single coat.	35	2.12	29	3:1
MG-F	A stainless steel filled putty which is engineered for use where final precision machining is required. Typical applications include shaft repairs, pump parts, bearing housings, or anywhere requiring final machining to close tolerances.	25	1.62	38	3:1

1 Base:hardener
PartB:Part A

2 Functional Cure is the time required to obtain a minimum chemical resistance and develop mechanical properties sufficient for movement @ 70°F. Contact technical department for details.

3 Most common method of surface preparation (see page 17 for details).

RESURFACING PRODUCTS

Mix Ratio By Vol ¹	Min/Max Thick/Coat mils	# of Coats	Recoat Time Min/Max hours	Min Appl Temp F ⁰ /C ⁰	Max Dry Operating Temp F ⁰ /C ⁰	Dry to Touch hours	Functional Cure ² hours	Full Cure hours	Surface Prep ³	Application Procedure ⁴	pH Range ⁵
2:1	10/30	1-2	6/120	50/10	250/122	8	48	120	SSPC-3,11	1	2.0-14
2:1	10/30	1-2	3/24	40/4	400/205	3	18	120	SSPC-3,11	1	1.0-14
2:1	15-30	1-2	3/24	40/4	375/190	4	24	120	SSPC-3,11	1	1.5-14
1.7:1	10/30	1-2	3/24	65/18	425/217	3	48	168	SSPC-3,11	1	0.5-14

⁴ 1=Brush or Roller, 2=Trowel or Squeegee,
3=Single Component Airless with Inline Heater,
4=Plural Component Airless, 5=Grout Pump

⁵ See Chemical Resistance Chart on Page 16
or contact technical department for details.

*Note: All cure times are
@ 70°F/21°C*



REBUILDING PRODUCTS

Mix Ratio By Vol ¹	Min/Max Thick/Coat mils	# of Coats	Recoat Time Min/Max hours	Min Appl Temp F ⁰ /C ⁰	Max Dry Operating Temp F ⁰ /C ⁰	Dry to Touch hours	Functional Cure ² hours	Full Cure hours	Surface Prep ³	Application Procedure ⁴	pH Range ⁵
2:1	40/1000	1	2/6	50/10	425/218	4	24	120	SSPC-3,11	2	1.5-14
2:1	40/250	1	2/6	50/10	500/260	4	24	120	SSPC-3,11	2	1.5-14
2:1	40/250	1	1/3	65/18	500/260	3	48	168	SSPC-3,11	2	0.5-14
2.6:1	60/2000	1	2/6	55/13	500/260	4	24	120	SSPC-3,11	2	2.0-14
3:1	30/500	1	1/3	40/4	300/150	2	24	120	SSPC-3,11	2	1.5-14

⁴ 1=Brush or Roller, 2=Trowel or Squeegee,
3=Single Component Airless with Inline Heater,
4=Plural Component Airless, 5=Grout Pump

⁵ See Chemical Resistance Chart on Page 16
or contact technical department for details.

*Note: All cure times
are @ 70°F/21°C*



Repair & Maintenance Products

SPECIALTY SYSTEMS

	<u>Product/Description</u>	<u>Working Time</u> minutes	<u>Density</u> g/ml	<u>Coverage</u> in ³ /kg	<u>Mix Ratio</u> by Wt ¹
DuroCaulk	An elastomeric epoxy urethane caulk which combines the flexibility of a urethane with the chemical resistance and adhesion of an epoxy.	40	1.09	52	3.6:1
DuroStik	An extremely fast curing putty material, packaged in a single tube for easy mixing and use. Ideal for storing in toolboxes to make quick repairs or to stop leaks in steel, aluminum, fiberglass or concrete.	2	1.9	30	N/A
EAC-UW	An underwater version of the EAC used for resurfacing or painting underwater vessels, pilings or other similar items.	40	1.6	36	1.5:1
SAR-UW	An underwater curing version of SAR used for rebuilding areas underwater or where the component needs to be put back into underwater service before full cure. Applicable to both fresh and saltwater service.	40	1.59	31	2.6:1

¹ Base:hardener
PartB:Part A

² Functional Cure is the time required to obtain a minimum chemical resistance and develop mechanical properties sufficient for movement @ 70°F.

³ Most common method of surface preparation (see page 17 for details).



SPECIALTY SYSTEMS

Mix Ratio By Vol ¹	Min/Max Build/Coat mils	# of Coats	Recoat Time Min/Max hours	Min Appl Temp F ⁰ /C ⁰	Max Dry Operating Temp F ⁰ /C ⁰	Dry to Touch hours	Functional Cure ² hours	Full Cure hours	Surface Prep ³	Application Procedure ⁴	pH Range ⁵
3.6:1	30/1000	1	6/24	40/4	250/122	8	36	120	SSPC-3,11	2	2.0-14
N/A	30/500	1	20 MINUTES	32/0	300/150	20 MINUTES	20 MINUTES	1 HOUR	SSPC-3,11	2	1.5-14
1:1	10/30	2-3	4/24	50/10	250/122	6	72	120	SSPC-3,11	1	2.5-14
1.4:1	40/1000	1	4/24	50/10	250/122	6	72	120	SSPC-3,11	2	2.5-14

⁴ 1=Brush or Roller, 2=Trowel or Squeegee,
3=Single Component Airless with Inline Heater,
4=Plural Component Airless, 5=Grout Pump

⁵ See Chemical Resistance Chart on Page 16 or
contact technical department for details.

Note: All cure times
are @ 70°F/21°C



Epoxy Flooring & Concrete Coating Systems

LININGS PRODUCTS

	<u>Product/Description</u>	<u>Working Time</u> minutes	<u>Density</u> g/ml	<u>Coverage</u> Ft ² /gal.
DF-1302	A clear, 100% solids concrete sealer with excellent flexibility and moderate chemical resistance. It is used primarily to seal the concrete prior to the application of additional topcoats and to restore the mechanical properties of old concrete. It can be cured at temperatures as low as 40° F and can be applied to damp concrete.	60	1.05	320@5 mils
DF-1310	A general purpose epoxy floor coating with good low temperature curing characteristics, excellent flexibility and impact resistance, and good adhesion to damp concrete. Although not recommended for strong acids or solvent protection, it does however have good chemical resistance to dilute and mild inorganic acids as well as water, sea-water and de-mineralized water.	45	1.15	80@20 mils
DF-3710	An elastomeric 100% solids epoxy, which is designed to be used as a flexible topcoat, crack bridging membrane, or joint filler. This flexible layer provides protection to the upper layers when the concrete moves and shifts. It can be overcoated with any of the other Duromar linings or maintenance products.	45	1.18	40@40 mils
DF-4301	A 100% solids, novolac floor coating with outstanding chemical resistance to acids, bases and solvents. It can be applied by brush, roller, or plural component spray equipment. It is best used in secondary containment areas and floors subject to chemical splashes and spills.	25	1.32	40@40 mils
SureGrip	An extremely rugged anti-slip floor coating system, which is completely self-contained requiring no additional sand or broadcasting of material. The texture of the surface can be varied from a form suitable for shower rooms to one which will provide slip resistance for industrial fork lift traffic by simply switching the nap of the rollers.	45	1.69	27@60 mils

REPAIR PRODUCTS

	<u>Product/Description</u>	<u>Working Time</u> minutes	<u>Density</u> g/ml	<u>Coverage</u>
Chemcrete	A specially formulated 100% solids epoxy flooring compound, used for the thick-film coating of industrial floors and secondary containment structures. Floors coated with Chemcrete are tough, abrasion and chemically resistant to a wide range of environments. Chemcrete may be overcoated with a wide range of DuroFlor products for additional chemical resistance where necessary.	45	1.25	100ft ² /Kit
Chemcrete Super	A specially formulated, 100% solids, epoxy novolac flooring material, used for thick-film floors where additional chemical resistance is required. Chemcrete Super can be topcoated with DF-4301 to provide additional chemical resistance to a wide range of chemical environments.	25	1.24	100ft ² /Kit
Chemcrete Regular	A rugged and durable trowel grade material designed for the patching, filling or the rebuilding of concrete, stone or other cementitious types of material. It provides excellent abrasion and chemical resistance and can be applied at a thickness of up to two inches. Greater thickness can be obtained by using additional fill material.	30	2.1	29in ³ /kg
CrackFil	A fast curing, 100% solids epoxy, which is designed to be used as a crack sealing compound. It is used primarily to fill and repair cracks in order to create a flat surface. It can be overcoated with any of the other DuroFlor linings or maintenance products.	8	1.08	30in ³ /0.5kg
DuroFil	A specially formulated 100% solids epoxy grout and rebuilding product for filling holes and rebuilding severely chemically attacked concrete floors and secondary containment areas. DuroFil provides an excellent base for other DuroFlor products, such as Chemcrete , DF-4301 , etc., where more acid resistance or a smoother finish is required.	30	2.21	0.5ft ³ /gal
DuroCaulk	An elastomeric epoxy urethane system which is designed to be used with epoxy systems as a flexible repair and caulking compound. It is used primarily to fill expansion joints and cove joints. It can be overcoated with other Duromar linings or maintenance products to enhance physical or chemical properties, if required.	40	1.09	32in ³ /kg

1 Base:hardener
PartB:Part A

2 Functional Cure is the time required to obtain a minimum chemical resistance and develop mechanical properties sufficient for movement @ 70°F.
Contact technical department for details.

3 Most common method of surface preparation (see page 17 for details).

SPECIALTY COATING PRODUCTS

	<u>Product/Description</u>
DuroBrite	An architectural floor system which offers a variety of colored finishes while providing protection to the flooring below. This decorative finish is achieved by broadcasting colored quartz and covering with a clear topcoat.
Vertical Additive	A special vertical additive that allows a coating to hang at up to 1" and it is ideal for filling "bug holes" in concrete walls and ceilings. It is very easy to apply using a hand trowel or plastic applicator.



LININGS PRODUCTS

Mix Ratio by Wt ¹	Mix Ratio by Vol ¹	Min/Max Thick/Coat mils	# of Coats	Recoat Time Min/Max hours	Min Appl Temp F ⁰ /C ⁰	Max Dry Operating Temp F ⁰ /C ⁰	Dry to Touch hours	Functional Cure ² hours	Full Cure hours	Surface Prep ³	Application Procedure ⁴	pH Range ⁵
6:5	1:1	AS REQUIRED	1	6/72	35/2	250/122	8	48	120	SSPC-1,3,7	1,2,3	3.0-13.0
3:2	6:5	10/125	1-2	6/72	35/2	NA	12	48	96	SSPC-1,3,7	1,2,3	2.5-13.0
1:1	0.7:1	20/80	1-2	5/72	60/15	250/122	6	48	120	SSPC-1,3,7	1,2,3	3.0-12.0
3.1:1	2.3:1	10/60	1-2	2/30	65/18	300/150	4	48	120	SSPC-1,3,7	1,2,3	0.5-14.0
5.6 :1	3:1	40-150	1	NA	60/15	275/132	8	48	120	SSPC-1,3,7	1,2	2.0-14.0

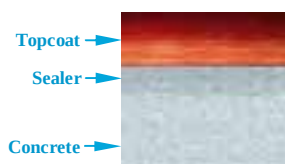
REPAIR PRODUCTS

Mix Ratio by Wt ¹	Mix Ratio by Vol ¹	Min/Max Thick/Coat mils	# of Coats	Recoat Time Min/Max hours	Min Appl Temp F ⁰ /C ⁰	Max Dry Operating Temp F ⁰ /C ⁰	Dry to Touch hours	Functional Cure ² hours	Full Cure hours	Surface Prep ³	Application Procedure ⁴	pH Range ⁵
2.7:1	2:1	125/500	1	8/120	40/4	250/122	10	60	120	SSPC-1,3,7	2	2.5-14.0
4:1	3:1	125/500	1	3/120	65/18	350/176	3	48	168	SSPC-1,3,7	2	0.5-14.0
2.7:1	2:1	125/2000	1	3/24	40/4	250/122	6	30	96	SSPC-1,3,7	2	1.5-14.0
3:2	5:4	AS REQUIRED	1	1/24	40/4	250/122	2	8	48	SSPC-1,3,7	2	2.0-14.0
3.6:1	3:1	500/6000	1-2	2/48	50/10	250/122	4	36	120	SSPC-1,3,7	2	2.5-14.0
3.6:1	3.6:1	250/2000	1-2	6/72	40/4	250/122	8	36	120	SSPC-1,3,7	2	2.0-14.0

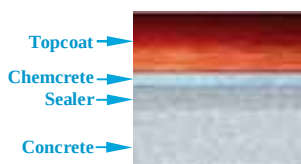
⁴ 1=Brush or Roller, 2=Trowel or Squeegee,
3=Single Component Airless with Inline Heater,
4=Plural Component Airless, 5=Grout Pump

⁵ See Chemical Resistance Chart on Page 16
or contact technical department for details.

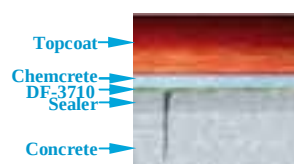
Note: All cure times are
@ 70°F/21°C



For protection and appearance
of the surface of new or good
condition concrete.



For protection, appearance, and
resurfacing of damaged concrete
surfaces.



For protection, appearance,
resurfacing and flexibility over
cracks in concrete surfaces.



For protection, appearance,
resurfacing and filling of deeply
damaged concrete surfaces.



HydroFlor® Concrete Coating Systems

BREATHABLE, ZERO VOC, EPOXY FLOORING SYSTEM

	<u>Product/Description</u>	<u>Working Time</u> minutes	<u>Density</u> g/ml	<u>Coverage</u> Ft ² /gal.
HydroFlor® Sealer	An outstanding, zero VOC, epoxy floor primer, to be used in conjunction with Duromar's HydroFlor® systems or other concrete coatings. The Sealer is used to seal the surface and to prevent outgassing.	45	1.07	160@10 mils
HydroFlor®	An innovative, zero VOC, epoxy floor coating. It has a unique breathable structure, which allows moisture vapor to escape from the concrete. The coating is extremely easy to apply, requiring little or no surface profiling. HydroFlor® has a matte, anti-slip finish.	45	2.04	50@30 mils
HydroFlor® Topcoat	A 100% solids, clear, epoxy flooring topcoat. It is used to provide a glossy, easy to clean surface. When used with the HydroFlor®, it is applied at a thickness of 1-3 mils maximum. This ensures that the breathability of the system is maintained.	45	1	800@2 mils
HydroFlor® Resurfacer	An excellent, zero VOC, concrete resurfacer. It may be used to protect vertical and horizontal surfaces from moderate wear and/or chemical attack. It is a fast curing material which is extremely easy to apply. HydroFlor® Resurfacer has a matte, smooth finish.	45	1.9	80@20 mils

1 Base:hardener
PartB:Part A

2 Functional Cure is the time required to obtain a minimum chemical resistance and develop mechanical properties sufficient for movement @ 70°F. Contact technical department for details.

3 Most common method of surface preparation (see page 17 for details).

HydroFlor®

HydroFlor® is a zero VOC, epoxy floor coating that has a unique molecular structure which allows moisture vapor to escape from the concrete. The coating is extremely easy to apply (brush, roller, or squeegee), requires little or no surface profiling, and has very little odor. It has excellent resistance to physical and impact abuse. It may also be applied to damp, clean concrete. HydroFlor® may be overcoated to create a glossy finish.

A major problem for many concrete floors, is the excessive hydrostatic pressure created from ground water below. This moisture vapor pressure will push a typical floor coating right off the concrete. Our breathable HydroFlor®, however, will maintain it's excellent adhesion to the substrate, continuing to protect the concrete while releasing the hydrostatic pressure that rises from below.



- BREATHABLE SYSTEM
- ZERO VOC, SOLVENT FREE
- NO ODOR OR FUMES
- NON-TOXIC TO ENVIRONMENT
- NON-HAZARDOUS TO USER
- MINIMAL SURFACE PREP REQUIRED
- OUTSTANDING ADHESION TO SMOOTH, UNPROFIED CONCRETE
- MAY BE APPLIED TO DAMP CONCRETE
- OUTSTANDING RESISTANCE TO PHYSICAL & IMPACT ABUSE
- ANTI-SLIP
- EASY TO CLEAN
- MATTE FINISH

Mix Ratio by Wt ¹	Mix Ratio by Vol ¹	Min/Max Thick/Coat mils	# of Coats	Recoat Time min/max hours	Min Appl Temp F°/C°	Max Dry Operating Temp F°/C°	Dry to Touch hours	Functional Cure ² hours	Full Cure hours	Surface Prep ³	Application Procedure ⁴	pH Range ⁵
2:5	2:5	3/10	1	6/96	50/10	250/122	2	24	120	SSPC-1	1	2.5-14.0
1.5:10	1:5	20/125	1-2	24/96	50/10	250/122	6	24	120	SSPC-1	1,2	1.5-14.0
1.7:1	1.6:1	1/3	1-2	12/96	50/10	250/122	12	24	168	SSPC-1	1	2.5-14.0
1:5	1:4	5-25	1-2	6/96	40/4	250/122	6	30	96	SSPC-1	1,2	1.5-14.0

⁴ 1=Brush or Roller, 2=Trowel or Squeegee,
3=Single Component Airless with Inline Heater,
4=Plural Component Airless, 5=Grout Pump

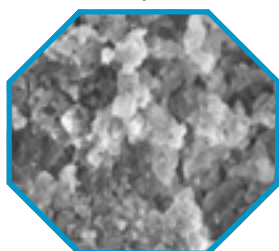
⁵ See Chemical Resistance Chart on Page 16
or contact technical department for details.

*Note: All cure times are
@ 70°F/21°C*

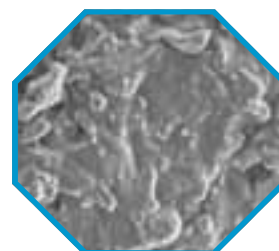


Chemical Description

Multifunctional epoxy, with a uniquely modified amine hardener



Microscopic photo of **HydroFlor®** coating showing crystalline structure which allows water vapor to pass through.



Microscopic photo of typical 100% solids floor coating showing solid molecular composition which traps water vapor beneath.



Chemical Resistance Guide

Product	Acids										Alkaline					Hydrocarbons					Solvents			Misc.										
	Hydrochloric Acid 37%	Hydrochloric Acid 20%	Nitric Acid 67%	Nitric Acid 30%	Nitric Acid 20%	Phosphoric Acid 85%	Phosphoric Acid 40%	Phosphoric Acid 20%	Sulfuric Acid 98%	Sulfuric Acid 50%	Sulfuric Acid 20%	Ammonium Hydroxide	Calcium Chloride	Calcium Hydroxide	Calcium Carbonate	Sodium Carbonate	Sodium Hydroxide 50%	Sodium Hydroxide 30%	Potassium Hydroxide	Mineral Spirits	Kerosene	JP-5	Gasoline	Fuel Oil	Cude Oil	Acetone	Benzene	Methylene Chloride	Methyl Ethyl Ketone	Toluene	Beer	Demineralized Water	Seawater	Sodium Hypochlorite
HIGH PERFORMANCE LININGS																																		
HPL-1110	■	◆	■	◆	◆	■	■	◆	■	■	◆	■	■	■	■	■	◆	■	■	■	■	■	■	■	■	■	■	■	■	■	◆	◆	■	■
HPL-1110-PW	■	◆	■	◆	◆	■	■	◆	■	■	◆	■	■	■	■	■	◆	■	■	■	■	■	■	■	■	■	■	■	■	■	◆	◆	■	■
HPL-1510	■	◆	■	◆	◆	■	■	◆	■	■	◆	■	■	■	■	■	◆	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
HPL-2131	◆	■	◆	◆	◆	◆	◆	■	◆	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
HPL-2201	◆	■	◆	◆	◆	◆	◆	■	◆	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
HPL-2221	■	■	◆	◆	◆	◆	◆	■	◆	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
HPL-2310	◆	■	◆	◆	◆	◆	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
HPL-2510	◆	■	■	◆	◆	◆	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	◆
HPL-2510-UW	◆	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	◆	◆	■	■	■	■	■	■	■	■	■
HPL-3320	◆	■	◆	◆	◆	◆	■	■	◆	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
HPL-4300	◆	■	◆	◆	◆	◆	■	■	◆	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
HPL-4310	◆	■	◆	◆	◆	◆	■	■	◆	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
HPL-4320	■	■	◆	◆	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
HPL-4320-XC	■	■	◆	◆	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
HPL-4321	◆	■	◆	◆	◆	◆	■	■	◆	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
HPL-4323	◆	■	◆	◆	◆	◆	■	■	◆	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
HPL-4330	■	■	◆	◆	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
HPL-6310	◆	■	■	◆	◆	◆	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	◆
RESURFACING																																		
GMC	■	■	■	◆	◆	■	◆	◆	■	◆	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
EAC	■	■	◆	◆	■	◆	◆	■	◆	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
EAC-FE	■	■	◆	◆	■	◆	◆	■	◆	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
EXP	■	■	◆	◆	■	■	■	■	◆	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
REBUILDING																																		
SAR	◆	■	◆	◆	■	◆	◆	■	◆	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
HAR	◆	■	◆	◆	■	◆	◆	■	◆	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
EXP-THIXSET	■	■	◆	◆	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
ULTRA-BUILD	◆	■	◆	◆	■	◆	◆	■	◆	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
MG-F	◆	■	◆	◆	■	◆	◆	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
SPECIALTY SYSTEMS																																		
DUROCAULK	◆	■	■	■	◆	■	■	■	■	◆	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
SAR-UW	■	■	■	■	■	■	■	◆	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
EAC-UW	■	■	■	■	■	■	■	◆	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
DUROSTIK	■	■	◆	◆	■	■	■	■	◆	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
FLOORING & CONCRETE COATING SYSTEMS																																		
DF-1302	■	◆	■	◆	◆	■	◆	◆	■	◆	■	■	■	■	■	■	◆	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
DF-1310	■	◆	■	◆	◆	■	◆	◆	■	◆	■	■	■	■	■	■	◆	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
DF-3710	■	◆	■	◆	◆	■	◆	◆	■	◆	■	■	■	■	■	■	◆	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
DF-4301	◆	■	◆	◆	◆	■	■	■	◆	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
SUREGRIP	◆	■	■	◆	◆	◆	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
CHEMCRETE	■	◆	■	◆	◆	◆	◆	◆	■	◆	◆	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
CHEMCRETE SUPER	◆	■	◆	◆	◆	■	■	■	◆	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
CHEMCRETE REGULAR	◆	■	◆	◆	◆	◆	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
CRACKFIL	◆	■	◆	◆	◆	◆	◆	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
DUROFIL	■	■	■	■	◆	■	■	■	■	◆	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
DUROCAULK	◆	■	■	■	◆	■	■	■	■	◆	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
HYDROFLOR	◆	■	◆	◆	◆	◆	■	■	■	◆	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
HYDROFLOR SEALER	◆	■	■	■	◆	■	■	■	■	◆	■	■	■	■	■	■	■	■	■															

Suitable for Immersion Service @ 70°F
 Suitable for Splash/Spills & Secondary Containment
 Not Recommended

16 All Duromar® products are formulated and tested for long term effectiveness in a variety of environments. The information given here is a compilation of over twenty years of laboratory tests, material supplier data, field installations and technical publications. As such, it should be used in conjunction with good engineering judgement to properly select the optimum coating system. Because field conditions, application techniques and surface conditions vary widely, the only true reliable test is one that is in actual operation. Duromar® will make available at no charge samples of materials for that testing purpose. Therefore, no warranties either expressed or implied as to the performance of these products is given.

Surface Preparation & Application Guide

SURFACE PREPARATION

Next to the proper selection of a coating system, surface preparation is the most important procedure in the use of industrial coatings. Although, many of the coatings listed in this brochure are "surface tolerant, moisture insensitive or underwater coatings", the overriding factor is that the **better the surface preparation, the better and longer lasting the performance.**

The following methods have been established by the Steel Structures Painting Council, and others, as levels of cleanliness prior to coating:

1. SSPC-SP 1. Solvent Cleaning — Removal of oil, grease, dirt, soil, salts, and contaminants by cleaning with solvent, vapor, alkali emulsion or steam.
2. SSPC-SP 2. Hand Tool Cleaning — Removal of loose rust, loose mill scale, and loose paint to degree specified, by hand chipping, scraping, sanding, and wire brushing.
3. SSPC-SP 3. Power Tool Cleaning — Removal of loose rust, loose mill scale, and loose paint to degree specified, by power tool chipping, descaling, sanding, wire brushing and grinding.
4. SSPC-SP 5. White Metal Blast (NACE 1, SA 3) — removal of all visible rust, mill scale, paint, and foreign matter by blast cleaning with sand, grit or shot.
5. SSPC-SP 6. Commercial Blast (NACE 3, SA 2) — Grit blasting to a high, but not perfect degree of cleanliness. Blast cleaning until two-thirds of the surface area is free of all visible residue.
6. SSPC-SP 7. Brush Off Blast (NACE 4) — Blast cleaning of all except tightly adhering residues of mill scale, rust and coatings, exposing numerous evenly distributed flecks of underlying material.
7. SSPC-SP 8. Pickling (Acid Etching) — Complete removal of rust and mill scale using sulfuric, hydrochloric or phosphoric acids, followed by a water wash to remove any residue. Can also be used in diluted form for preparing concrete.
8. SSPC-SP 10. Near White Blast (NACE 2, SA 21/2) Blast cleaning to White Metal Cleanliness, until 95% of the surface is free of all visible residues.
9. SSPC-SP 11. Power Tool Cleaning to Bare Metal — Power tool cleaning to obtain bare metal surface and to produce or retain a profile. This procedure goes beyond SSPC-SP 3 in that it requires complete removal of all visible traces of oil, dirt, grease, rust, mill scale, paint or other corrosion products and foreign matter. If the original surface is pitted, slight residues of rust and paint may be left in lower portions of the pits. If the surface needs to be roughened, the profile produced shall not be less than one mil in depth and suitable for the material selected.

SURFACE PROFILE

In conjunction with surface cleanliness is surface profile, which is defined as the measurement of roughness which results from blast cleaning. The profile depth is a measurement from the lowest valleys to the tops of the highest peaks. The profile depth is dependent on the size, type and hardness of the blast media selected, as well as the velocity, pressure and hardness of the surface. In general, for thin film coatings up to 30 mils/coat, a profile depth of at least 3 mils is required. For thicker trowel grade materials a profile depth of at least 4 mils is required.

MIXING

Proper mixing is essential for achieving a consistent and uniform coating. The following procedures will help insure proper mixing:

1. Pour the two components into a clean container of ample size to properly mix the materials without spilling. Use care to insure that all of the material is removed from each container.
2. Mix the materials until a consistent, uniform and streak free consistency is obtained by the use of a paddle, spatula or power mixer.
3. Pour this mix into another clean or original container (if applicable), scraping all of the mixed material into this container and re-mix.
4. Repeat the above procedure 2-3 times before using.

APPLICATION

In general, once the surface has been properly prepared, it should be checked to insure that it is free from moisture, above the minimum application temperature for the material and that the surface is at least 5°F(3°C) above the dew point. Coating can then proceed by airless spray, rolling, brushing, or trowel as specified for the product.

OVERCOATING

When applying more than one coat, it is extremely important that overcoat windows are followed. In addition, the surface should also be checked for moisture, dust, dirt or other contamination as well as for amine blush. Although most Duromar® materials are resistant to amine blush, anytime you have high humidity or low temperatures, this phenomena may occur. Amine blush is evidenced by a glossy and somewhat greasy exudate on the surface, which may dry to a chalky white color. It is easily removed by using a 2% solution of hydrochloric acid or MEK.

FORCE CURING

Force cures are recommended for severe service conditions as both physical and chemical properties are enhanced. It can also be used to reduce the time to "full cure". A general guideline of 4 hours at 180°F(80°C) will completely cure any of the Duromar® products. Force cure should not start until material has firmly set.

For a complete guide to the use and application of Duromar®'s 100% solids, zero VOC materials, send for the complete **Engineering and Application Procedures Guide.**

DUROMAR®





Distributed By:



35 Pond Park Road, Hingham, Massachusetts, USA 02043

Tel 781 749-6992, Fax 781 749-0021

www.duromar.com