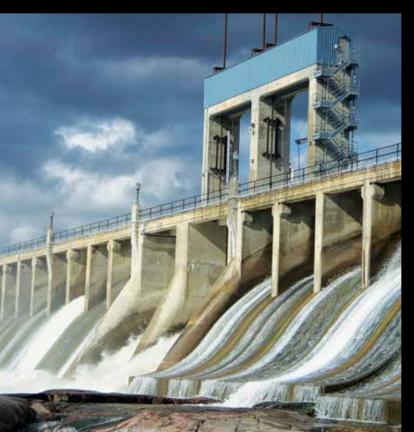






Specification Guide









Specification Guide

Specification Guide Index

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The following pages contain a guide to the selection of the right coating system for the project at hand. Simply identify the project environment from the index on this page to determine the appropriate degree of surface preparation and the coating system to use.

Each page allows you a choice of a more economical system for moderate environments and a better performing system for severe environments.

Your Cloverdale Sales representative is qualified to help you in your selection, and can also provide you with advice for coating specifications not listed in this index.



Interior and Exterior Steel - General Purpose

Service Conditions

Severe

	Product Type	Product	DFT (mils)	% Volume Solids	Surface Prep Minimum	Surface Prep Recommended
1	Epoxy Primer	ClovaPrime 21	2 - 3 mils	60%	SP3	SP6
2	Urethane	837 / 839 ArmourShield	2 - 3 mils	60%	N/A	N/A

This system will provide the best possible long term performance exhibiting superior gloss retention, and providing enhanced corrosion and abrasion resistance. Not recommended for immersion service or extremely high corrosion areas. (Armour Shield acrylic urethane is V.O.C compliant at less than 360 gm/l).

Service Conditions

Moderate

	Product Type	Product	DFT (mils)	% Volume Solids	Surface Prep Minimum	Surface Prep Recommended
ſ	Alkyd Primer 1 OR	Rustex 710 Series	1.5 - 2 mils	37%	SP3	SP6
ı	Phenolic Alkyd	71044 / 46 / 47	1 - 4 mils	55%	SP3	SP6
I	2 Alkyd Enamel	74 / 76 / 111 Series	1.5 - 2.5 mils	39%	N/A	N/A

This high quality, moderately fast drying gloss enamel system provides an economic full gloss finish with excellent impact resistance and weatherability. Topcoat is available in a wide range of stock and custom colors. Not recommended for immersion service or high corrosion areas.

Service Conditions

Moderate

Flash Weld Primer

Product Type	Product	DFT (mils)	% Volume Solids	Surface Prep Minimum	Surface Prep Recommended
1 Polyvinyl Butyl	71009 Primer	.575 mils	12%	SP6	SP6

This is a fast dry shop primer designed to give temporary protection to shot or sandblasted steel. It provides excellent adhesion and abrasion resistance and good weathering protection for up to 9 months. This primer can be welded with no effect on weld integrity or toxic emissions.



Steel Exposed to Chemical Fumes or Humidity

Service Conditions

Severe

	Product Type	Product	DFT (mils)	% Volume Solids	Surface Prep Minimum	Surface Prep Recommended
1	Organic Zinc Rich Primer	ClovaZinc 3	2 - 3 mils	58%	SP6	SP10
2	High Build Epoxy	ClovaGuard 83150	4 - 6 mils	57%	N/A	N/A
3	Urethane	837 / 839 ArmourShield	2 - 3 mils	60%	N/A	N/A

This System will provide superior corrosion resistance and is recommended for severely corrosive or high humidity environments and also provides good abrasion resistance. The Armour Shield component may be omitted for interior use (Armour Shield acrylic urethane is V.O.C compliant at less than 360 gm/l). Not recommended for chemical immersion.

Service Conditions

Moderate

	Product Type	Product	DFT (mils)	% Volume Solids	Surface Prep Minimum	Surface Prep Recommended
1	Epoxymastic	83110 ClovaMastic	6 - 10 mils	80%	SP3	SP6
2	Urethane	837 / 839 ArmourShield	2 - 3 mils	60%	N/A	N/A

An economical anticorrosive Epoxy / Urethane system exhibiting excellent resistance to corrosion and high humidity. For interior application, a second coat of ClovaMastic may be substituted for the Armour Shield coat. Not recommended for chemical immersion. (83110 ClovaMastic can cure to -18°C and is V.O.C compliant at 173 gm/l).



High Temperature Steel Substrates

Expected Temperature

Up to 650°C (1200°F)

Product Type	Product	DFT (mils)	% Volume Solids	Surface Prep Minimum	Surface Prep Recommended
Silicone Polymer OR	83203 Aluminum	1 - 1.5 mils	26%	SP10	SP5
Silicone Polymer	70020 Black	1 - 1.5 mils	16%	SP10	SP5

Requires heat curing to develop full film properties.

Expected Temperature

Up to 420°C (790°F)

Product Type	Product	DFT (mils)	% Volume Solids	Surface Prep Minimum	Surface Prep Recommended
1 Silicone	ClovaTherm 8322 Series	1.5 - 3 mils	52%	SP10	SP5

Provides good corrosion resistance and is self priming without the need for heat cure.

Expected Temperature

Up to 216°C (420°F)

	Product Type	Product	DFT (mils)	% Volume Solids	Surface Prep Minimum	Surface Prep Recommended
ı	1 Silicone Acrylic Enamel	Heat Resistant Enamel 83206	1 - 1.5 mils	35%	SP10	SP10

For best results, a second coat may be required. This product has a full gloss finish.

Expected Temperature

Primer for increased protection

Up to 400°C (752°	F)
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	Product Type	Product	DFT (mils)	% Volume Solids	Surface Prep Minimum	Surface Prep Recommended
1	Inorganic Zinc	ClovaZinc 2	2 - 3 mils	58%	SP6	SP10

ClovaZinc 2 is heat resistant on its own to 400°C / 752°F. It may be used as a primer for the above systems for superior corrosion protection.



Steel Surfaces Exposed to Abrasion

Service Conditions

Severe

	Product Type	Product	DFT (mils)	% Volume Solids	Surface Prep Minimum	Surface Prep Recommended
1	Epoxy Novolac	83375 Lining	12 - 16 mils	75%	SP10	SP5

83375 Tank Lining may be applied in one or two coats to achieve the 12-16 mils dft. For use in abrasive / chemically exposed environments where gloss and color retention are not important. This will provide maximum protection to the steel substrate in a 1 or 2 coat system. (Contact a Cloverdale Technical Representative for chemical resistance information).

Service Conditions

Moderate to Severe

_						
	Product Type	Product	DFT (mils)	% Volume Solids	Surface Prep Minimum	Surface Prep Recommended
1	Epoxy Primer	ClovaPrime 21	2 - 3 mils	60%	SP3	SP6
2	High Build Epoxy	ClovaGuard 83150	4 - 6 mils	57%	N/A	N/A
3	Urethane	837 / 839 ArmourShield	2 - 3 mils	60%	N/A	N/A

For use when maximum abrasion and UV resistance is required. This system provides a high gloss finish and is resistant to corrosion when tested to ASTM D4060, system exhibits a loss of less than 85 mg.

Service Conditions

Moderate

	Product Type	Product	DFT (mils)	% Volume Solids	Surface Prep Minimum	Surface Prep Recommended
1	Epoxy Primer	ClovaPrime 21	2 - 3 mils	60%	SP3	SP6
2	Urethane	837 / 839 ArmourShield	2 - 3 mils	60%	N/A	N/A

For use in moderate abrasive conditions when UV resistance is important. This system also provides good corrosion control.



Service Conditions

Aluminum or Galvanized Surfaces

Severe

	Product Type	Product	DFT (mils)	% Volume Solids	Surface Prep Minimum	Surface Prep Recommended
1	Surface Conditioner	78100 ClovaClean	N/A	N/A	SP7	SP6
2	Epoxy Primer	ClovaPrime 21	2 - 3 mils	60%	N/A	N/A
3	Urethane	837 / 839 ArmourShield	2 - 3 mils	60%	N/A	N/A

Provides excellent adhesion to aluminum or galvanized metal and also long term durability for both interior and exterior applications.

Service Conditions

Moderate - 1

	Product Type	Product	DFT (mils)	% Volume Solids	Surface Prep Minimum	Surface Prep Recommended
1	Surface Conditioner	78100 ClovaClean	N/A	N/A	SP2	SP3
2	Waterborne Primer	703 Ecologic Rustex	1.5 - 2 mils	40%	N/A	N/A
3	Waterborne Enamel	Ecologic 704 Series	2 - 2.5 mils	36%	N/A	N/A

For less severe environments related to long term durability. Provides excellent adhesion to aluminum or galvanized metal in an economical low V.O.C package.

Service Conditions

Moderate - 2

	Product Type	Product	DFT (mils)	% Volume Solids	Surface Prep Minimum	Surface Prep Recommended
I	1 Surface Conditioner	78100 ClovaClean	N/A	N/A	SP2	SP3
l	2 Acrylic Elastomeric	71007 ClovaBond	.13 mils	10%	N/A	N/A
I	3 Waterborne Enamel	Ecologic 704 Series	2 - 2.5 mils	36%	N/A	N/A

Intended primarily for Architectural use on metal flashings, downspouts, gutters, metal and fiberglass doors, aluminum window frames, Q-Deck ceilings etc.



Steel Immersed in Water

Service Conditions

Severe

	Product Type	Product	DFT (mils)	% Volume Solids	Surface Prep Minimum	Surface Prep Recommended
I	1 Epoxy Novolac	83375 Tank Lining	12 - 16 mils	75%	SP10	SP5
1	2 Hybrid Epoxy	83376 Tank Lining	20 - 50 mils	95%	SP10	SP5

83375 Tank Lining may be applied in one or two coats to achieve the 12-16 mils dft. For use in IMMERSION environments, including salt water where

gloss and colour retention are not important.

83376 Tank Lining is a New generation technology ultra-high solids epoxy hybrid immersion coating that provides excellent chemical resistance in a wide range of immersion environments. Single-coat application and fast cure, provides rapid return to service with good flexibility and impact resistance in in an in an analysis of the processing equipment and produced water including concentrated brine, chemical storage, mining and waste water. (Contact a Cloverdale Technical Representative for chemical resistance information). Not to be used for potable water applications.

Service Conditions

Moderate to Severe

	Product Type	Product	DFT (mils)	% Volume Solids	Surface Prep Minimum	Surface Prep Recommended	
	1 Epoxy Mastic OR	83110 ClovaMastic	6 - 10 mils	80%	SP10	SP5	
1	Coal Tar Epoxy OR	ClovaTar 22	16 - 18 mils	80%	SP10	SP5	
ı	3 Immersion Epoxy	83275 Lining	12 - 16 mils	75%	SP10	SP5	

Either system provides excellent corrosion protection to steel immersed in water. Surface preparation is important in the case of continuous immersion service.



Chemically Immersed Steel - Tank Linings

Service Conditions

Moderate to Severe

P	Product Type	Product	DFT (mils)	% Volume Solids	Surface Prep Minimum	Surface Prep Recommended
1	Epoxy Novolac	83375 Tank Lining	12 - 16 mils	75%	SP5	SP5
2	Hybrid Epoxy	83376 Tank Lining	20 - 50 mils	95%	SP5	SP5

83375 Tank Lining may be applied in one or two coats to achieve the 12-16 mils dft. A two coat system reduces the risk of pinholes leading to failures. Originally designed for the oil and gas industry, 2800 fertilizer storage tanks and other chemical and petroleum storage tank interior linings. 83376 Tank Lining is a new generation technology ultra-high solids epoxy hybrid immersion coating that provides excellent chemical resistance in a wide range of immersion environments. Single-coat application and fast cure, provides rapid return to service with good flexibility and impact resistance. For use in oil and petroleum storage tanks, oil processing equipment and produced water including concentrated brine, chemical storage, mining and waste water. Please consult your local Cloverdale Paint Technical Representative for complete chemical resistance compatibility.

Service Conditions

Moderate to Severe

Tank Lining Patch Kit - Girth Weld Coating

	Product Type	Product	DFT (mils)	% Volume Solids	Surface Prep Minimum	Surface Prep Recommended
1	Epoxy Novolac	83324 Patch Kit	as required	100%	SP2	SP3

Designed as a patch kit for spot repairs over new (pin holes) and existing tank linings. Also used as a girth weld coating for pipeline service. Cure time for immersion service is 3 hours at ambient conditions.





Insulated Piping / Storage Tanks

Service Conditions

Severe - High Temperatures

Product Type	Product	DFT (mils)	% Volume Solids	Surface Prep Minimum	Surface Prep Recommended
1 Catalyzed Epoxy	83270 Micaceous Iron Oxide Epoxy	3 - 6 mils	64%	SP6	SP10

This epoxy material is applied directly to the exterior steel surface of the tank/piping. Insulation material is then applied directly over the cured Epoxy. This system is suitable for temperatures up to 200°C / 390°F.

Service Conditions

Moderate - Lower Temperatures

	Product Type	Product	DFT (mils)	% Volume Solids	Surface Prep Minimum	Surface Prep Recommended
1	Anti-Corrosive Primer	Rustex 710 Series	1.5 - 2 mils	37%	SP3	SP6
2	Elastomeric Acrylic Waterborne	Toerthon 20100	22 - 24 mils	55%	N/A	N/A

Rustex primer is applied directly to the steel exterior. A foam insulation layer should then be applied over the primer with the elastomeric topcoat then being applied on top of the foam layer. This system is suitable for temperatures up to 92°C (200°F).



Tank Farm Exteriors

Service Conditions

Severe

Product Type		Product	DFT (mils)	% Volume Solids	Surface Prep Minimum	Surface Prep Recommended
1	Epoxy Primer	ClovaPrime 21	2 - 3 mils	60%	SP3	SP6
2	Urethane	837 / 839 ArmourShield	2 - 3 mils	60%	N/A	N/A

This system will provide best possible long term performance exhibiting superior gloss retention, and providing enhanced corrosion resistance. Not recommended for immersion service or extremely high corrosion areas. (AmourShield acrylic urethane is V.O.C compliant at less than 3.5 lbs gallon).

Service Conditions

Moderate

Product Type		Product	DFT (mils)	% Volume Solids	Surface Prep Minimum	Surface Prep Recommended
1	Alkyd Primer	Rustex 710 Series	1.5 - 2 mils	37%	SP3	SP6
2	Alkyd Enamel	74 / 76 / 111 Series	1.5 - 2 mils	39%	N/A	N/A

This high quality, moderately fast drying gloss enamel system provides a full gloss with excellent impact resistance and weatherability. Topcoat is available in a wide range of stock and custom colors. Not recommended for immersion service or high corrosion areas.



Fleet and Transport Systems

Service Conditions

Severe

	Product Type	Product	DFT (mils)	% Volume Solids	Surface Prep Minimum	Surface Prep Recommended
1	Polymide Epoxy	86850 DuraPrime	2 - 3 mils	50%	SP2/3	SP6
2	Urethane	837 / 839 ArmourShield	2 - 3 mils	60%	N/A	N/A
3	Optional Clear Coat Urethane for increased UV Resistance	83953 Clear Coat	2 - 3 mils	60%	N/A	N/A

DuraPrime is a heavy duty, high performance epoxy primer that provides excellent corrosion resistance over blasted or power tool cleaned steel. DuraPrime has a low gloss finish and good flexibility with aging.

The Armour Shield® line of coatings are tightly cross linked interpenetrating polymer networks of acrylic and polyester urethanes. They are low HAP, low V.O.C(under 3.5 lbs/gallon), high performance, two component urethanes that provide superior gloss and colour retention, excellent chemical resistance, outstanding abrasion resistance and a very high gloss (wet look) finish. They are available in white, black, coloured bases and metallic's permitting a match to most colours. permitting a match to most colours.





Concrete Secondary Containment

Service Conditions

Moderate to Severe

	Product Type	Product	DFT (mils)	% Volume Solids	Surface Prep Minimum	Surface Prep Recommended
I	1 Epoxy Novolac	83375 Tank Lining	12 - 16 mils	75%	SP13	SP13
	2 Hybrid Epoxy	83376 Tank Lining	20 - 50 mils	95%	SP13	SP13

83375 Tank Lining may be applied in one or two coats to achieve the 12-16 mils dft. Use when surface may be exposed to chemicals and solvents. New concrete must be aged a minimum of 28 days and tested for moisture. Please contact your Cloverdale Paint Technical Representative for complete chemical resistance compatibility.

83376 Tank Lining is a new generation technology ultra-high solids epoxy hybrid immersion coating that provides excellent chemical resistance in a wide range of immersion environments. Single-coat application and fast cure, provides rapid return to service with good flexibility and impact resistance. For use in oil and petroleum storage tanks, oil processing equipment and produced water including concentrated brine, chemical storage, mining and waste water. Please consult your local Cloverdale Paint Technical Representative for complete chemical resistance compatibility.

Service Conditions

Moderate

	Product Type	Product	DFT (mils)	% Volume Solids	Surface Prep Minimum	Surface Prep Recommended
1	Epoxy Mastic	83110 ClovaMastic	6 - 10 mils	80%	SP13	SP13
2	Urethane	837 / 839 ArmourShield	2 - 3 mils	60%	N/A	N/A

Use when continuous exposure to chemicals or solvents is not a primary concern but gloss and UV stability is. New concrete must be aged a minimum of 28 days and tested for moisture.



Concrete Floors

Service Conditions

Severe - High Abrasion

	Product Type	Product	DFT (mils)	% Volume Solids	Surface Prep Minimum	Surface Prep Recommended
	1 Penetrating Sealer	NSP 100	1.5 - 2 mils	50%	SP13	SP13
1	2 High Build Epoxy	NSP 122	10 - 12 mils	100%	N/A	N/A

A self leveling high build epoxy coating that is resistant to solvents, acids, alkalis and other chemicals. New concrete should be aged a minimum of 28 days and tested for moisture, then acid etched. Surface hardened concrete must be mechanically abraded.

Service Conditions

Moderate - Severe

	Product Type	Product	DFT (mils)	% Volume Solids	Surface Prep Minimum	Surface Prep Recommended
1	High Build Epoxy	ClovaCoat 300	4 - 6 mils	60%	SP13	SP13
2	High Build Epoxy	ClovaCoat 300	4 - 6 mils	60%	N/A	N/A

A hard, durable thin film economical epoxy coating that is resistant to solvents, acids, alkalis and other chemicals. New concrete should be aged a minimum of 28 days and tested for moisture, then acid etched. Surface hardened concrete must be mechanically abraded.

Non-Skid Floors

Service Conditions

Moderate - Severe

Product Type	Product	DFT (mils)	% Volume Solids	Surface Prep Minimum	Surface Prep Recommended
1 Anti-Slip Epoxy	ClovaGrip 83365	13 - 16 mils	70%	SP13	SP13

A high performance epoxy coating designed for application to horizontal surfaces and exhibiting excellent solvent/chemical resistance and non skid properties. New concrete should be aged a minimum of 28 days and tested for moisture, then acid etched. Surface hardened concrete must be mechanically abraded.



Exterior Concrete Block

Service Conditions

Moderate

	Product Type	Product	DFT (mils)	% Volume Solids	Surface Prep Minimum	Surface Prep Recommended
Ī	Vinyl Acrylic	05700 Block Filler	7 - 12 mils	55%	See data sheet	See data sheet
	Waterborne Acrylic	EcoLogic 70603	1.5 - 2 mils	36%	N/A	N/A

For use on exterior concrete block. Surface must be clean dry and free of contaminants. Fill cracks and crevices with suitable caulking compound. For best results 2 coats of the 70603 Ecologic are recommended.

Interior Concrete Block

Service Conditions

Severe - High Humidity/ Contaminants

Product Type	Product	DFT (mils)	% Volume Solids	Surface Prep Minimum	Surface Prep Recommended
1 Ероху	83065 Epoxy Block Filler	7 - 14 mils	65%	See data sheet	See data sheet
2 High Build Epoxy	ClovaCoat 300	4 - 6 mils	60%	N/A	N/A

Use whenever there is a need to eliminate absorption of contaminants such as in chemical plants, food plants, restaurants, etc. or excessive moisture is present. Surface must be clean, dry and free from contaminates. Provides a smooth tile like finish. Fill cracks and crevices with a suitable caulking compound. For best results 2 coats of the ClovaCoat 300 are recommended.

Service Conditions

Moderate - Non Humid

Product Type		Product	DFT (mils)	% Volume Solids	Surface Prep Minimum	Surface Prep Recommended See data sheet	
1	Vinyl Acrylic	05700 Block Filler	7 - 12 mils	55%	See data sheet	See data sheet	
2	Waterborne Acrylic	EcoLogic 70603	1.5 - 2 mils	36%	N/A	N/A	

For use on interior concrete block. Surface must be clean dry and free of contaminants. Fill cracks and crevices with suitable caulking compound.



Previously Painted Aged Alkyd Surfaces

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Severe

	Product Type	Product	DFT (mils)	% Volume Solids	Surface Prep Minimum	Surface Prep Recommended
I	1 Epoxy Mastic	83110 ClovaMastic	6 - 10 mils	80%	SP3	SP3
	2 Urethane	837 / 839 ArmourShield	2 - 3 mils	60%	N/A	N/A

This system will provide maximum long term durability when removal of existing coating or sandblasting is not practical. Pressure washing is advisable to remove surface contaminants.

Service Conditions

Moderate

Product Type		Product	DFT (mils)	% Volume Solids	Surface Prep Minimum	Surface Prep Recommended	
1	Barrier Primer	Universal Primer 83040	1.5 - 2 mils	40%	SP3	SP3	
2	Alkyd Enamel	74 / 76 / 111 Series Enamel	1.5 - 2 mils	38%	N/A	N/A	

This system provides an economical alternative when removal of existing coating or sandblasting is not practical. Pressure washing is advisable to remove surface contaminants.



Cold Weather Cure Epoxy

Service Temperature

as low as -18°C (0°F)

	Product Type Product		DFT (mils)	% Volume Solids	Surface Prep Minimum	Surface Prep Recommended
1	Epoxy Mastic	83110 Clova Mastic	6 - 10 mils	80%	SP2/3	SP6

This is a low V.O.C (173gm/l) high performance, surface tolerant mastic coating. It exhibits excellent chemical and rust inhibiting properties. Ideal for cold weather application, this product will cure at temperatures as low as -18°C (0°F). It can also be applied directly to steel where abrasive blasting is not practical.

Dry-Fall Epoxy / Urethane System

Service Conditions

Mild - Moderate Atmospheric Conditions

I	Product Type	Product	DFT (mils)	% Volume Solids	Surface Prep Minimum	Surface Prep Recommended
	1 Epoxy Primer	Dry Fall Epoxy Primer	4 - 6 mils	57%	SP6	SP6
	2 Acrylic Urethane	Dry Fall Urethane	2 - 3 mils	47%	N/A	N/A

This series is a high performance two component epoxy / urethane system designed for dry-fall applications. The overspray will dry to a powder within 10-20 feet from the spray location, allowing painting to continue without getting paint overspray on nearby equipment, vehicles, or structures. The Dry-Fall Urethane series will give a high gloss finish with excellent durability, weathering, & gloss retention. The Dry-Fall Epoxy Primer is designed to be used in conjunction with the Dry-Fall Urethane. **Important Note:** To guarantee Dry-Fall properties, the Technical Data instructions must be followed.





Surface Tolerant Coatings

Service Conditions

Moderate - Severe

ı	Product Type	Product	DFT (mils)	% Volume Solids	Surface Prep Minimum	Surface Prep Recommended
I	Calcium Sulfonate Penetrating Sealer	ClovaCorr 83183	Job Specific	55%	SP1	SP2/3
١	Calcium Sulfonate Topcoat	ClovaCorr 83180	8 - 12 mils	60%	N/A	N/A

This is a surface tolerant system designed to be used in conjunction with each other or separately. The 83183 is a one component, surface tolerant, calcium sulfonate based penetrating sealer specifically designed to protect from corrosion and packout rust in areas such as joints, overlaps, connections, crevices and other areas of difficult access in steel structures. The 83180 is a Self-priming, surface tolerant, calcium sulfonate type topcoat, designed for the long term protection of aged galvanized and rusted steel. This is a high build coating designed specifically for use where only limited degrees of surface preparation can be achieved. ClovaCorr is a soft coating with excellent flexibility properties. Ideal for topcoating old lead-based paints which can not be removed for environmental reasons. This system is also approved by Alberta Transportation and the British Columbia Ministry of Transport. Recommended for Bridges, Power Transmission and Distribution Towers, Transformer Sub Stations, Steel Structures, Storage Tanks, Metal Buildings, Utility Towers and other applications.





Waterborne Low VOC Coatings - Primers

Service Conditions

Mild - Moderate Atmospheric Conditions

	Product Type	Product	VOC (g/L)	DFT (mils)	% Volume Solids	Surface Prep Minimum	Surface Prep Recommended
Ī	Waterborne Alkyd	70275	50	2 - 2.5	50%	SP2/3	SP6
ŀ	Water Reduced Alkyd	71331	350	1.5 - 2	27%	SP2/3	SP6
I	Acrylic EcoLogic Rustex	70324	100	1.5 - 2	40%	SP2/3	SP6

Contact your Cloverdale Paint Representative for a Primer recommendation for your application.

Waterborne Low VOC Coatings - Topcoats

Service Conditions

Mild - Moderate Atmospheric Conditions

Product Type		Product	VOC (g/L)	DFT (mils)	% Volume Solids	Surface Prep Minimum	Surface Prep Recommended
1	Water Reduced Alkyd	702 Series	350	1.5 - 2	27%	SP2/3	SP6
2	Waterborne Alkyd	703 Series	100	2 - 2.5	40%	SP2/3	SP6
3	Waterborne Acrylic	704 Series	198	2 - 2.5	36%	SP2/3	SP6

All three of these topcoat series may be used in direct to metal applications. However increased corrosion protection will be obtained with the selection of a suitable primer. Contact a Cloverdale Paint Representative for a system recommendation.

Service Conditions

Mild - Moderate

Product Type		Product	VOC (g/L)	DFT (mils)	% Volume Solids	Surface Prep Minimum	Surface Prep Recommended
1	Acrylic Epoxy	70503	150	1.5 - 2	36%	Job Specific	Job Specific

EcoLogic Waterborne Epoxy is a two-component Acrylic Epoxy with a performance profile approaching that of conventional solvent-borne epoxies. This product features excellent gloss retention, yellowing resistance, low odour and low VOC's combined with good chemical, stain and solvent resistance. It also has excellent scrub and mar resistance. Approved by the Master Painter's Institute under category # 115. Available in full, semi and satin gloss finishes.



MPI Approved Products List - Industrial Coatings

MPI#	Listing Manufacturer	Label	Product Name	Product Code	E Range	EPR	GPS-1	GPS-2
4	Cloverdale Paint	Premium Classic	Interior/Exterior Latex Block Filler	05700	3		~	()
9	Cloverdale Paint	Cloverdale	Gloss Marine Enamel	111 Series	1			
18	Cloverdale Paint	High Performance	ClovaZinc 1	83001	0			
19	Cloverdale Paint	High Performance	ClovaZinc 2	83002	1			
20	Cloverdale Paint	High Performance	ClovaZinc 3	83003	2			
21	Cloverdale Paint	High Performance	Heat Resistant Enamel	832 Series	1			
22	Cloverdale Paint	High Performance	Hi Heat Aluminum	83203	2			
25	Cloverdale Paint	Cloverdale	ClovaClean	78100	3		~	()
40	Cloverdale Paint	Towerthon	Elastomeric Coating	20150	2		/	
48	Cloverdale Paint	Cloverdale	Gloss Marine Enamel	11103	1			
62	Cloverdale Paint	Flame Control	Fire Retardant Clear	129/166	2		/	
63	Cloverdale Paint	Flame Control	Flat Intumescent	10/10	1			
72	Cloverdale Paint	High Performance	ClovaThane	834 Series	2		/	
72	Cloverdale Paint	Cloverdale	Gemini ArmourShield	839 Series	2		/	
76	Cloverdale Paint	Cloverdale Paint	H.S. Non-Lifting Primer Red Oxide	71046	2			
76	Cloverdale Paint	Cloverdale Paint	H.S. Non-Lifting Primer Grey	71044	2			
76	Cloverdale Paint	Cloverdale Paint	Rustex Primer Yellow	71025	2			
76	Cloverdale Paint	Cloverdale Paint	Rustex Metal Primer	71024/29/34	0			
76	Cloverdale Paint	Cloverdale Paint	Q.D. Shop Primer Grey	71019	2			
77	Cloverdale Paint	High Performance	ClovaCoat 300	83300	1		/	



MPI Approved Products List - Industrial Coatings

	MPI#	Listing Manufacturer	Label	Product Name	Product Code	E Range	EPR	GPS-1	GPS-2
I	78	Cloverdale Paint	ArmourShield	ArmourShield Clear Finish Coat	83953A/83953B	2		V	
	78	Cloverdale Paint	High Performance	ClovaThane Clear Coat	83453	2			
d	79	Cloverdale Paint	Cloverdale Paint	Metal Primer Grey	71309	2		~	
ĺ	79	Cloverdale Paint	Cloverdale	Grey Dipping Primer	71035	0			
	79	Cloverdale Paint	Cloverdale Paint	Metal Primer Red	71307	0			
I	81	Cloverdale Paint	Cloverdale	Semi-Gloss Speed Enamel	76311	0			
	82	Cloverdale Paint		ClovaGrip Anti-Slip Grey	83365	1			
I	96	Cloverdale Paint	Cloverdale	Speed Enamel	76 Series	1			
	98	Cloverdale Paint	High Performance	300 Epoxy High- Gloss Enamel White	83300	1		V	
	101	Cloverdale Paint	Cloverdale Paint	ClovaPrime 21 Epoxy Primer Grey	83021	2			
	107	Cloverdale Paint	Performance Plus	EcoLogic Rustex Primer	703 Series	3	3	~	
	108	Cloverdale Paint	High Performance	ClovaGuard	83150	1			
I	109	Cloverdale Paint	Flame Control	Clear Exterior Fire Retardant Coating	10	3		~	
	111	Cloverdale Paint	Flame Control	Class B Fire Retardant Varnish	129/130	1			
	113	Cloverdale Paint	Towerthon	Elastomeric Coating	20150	2			
	115	Cloverdale Paint	Performance Plus	EcoLogic Waterborne Epoxy	70503A/70503B	2		~	
	116	Cloverdale Paint	High Performance	Epoxy Block Filler	83065	1			
	134	Cloverdale Paint	Performance Plus	EcoLogic Rustex Primer	703 Series	3	3	~	
	215	Cloverdale Paint	WeatherOne	EcoLogic Waterborne Epoxy Semi-Gloss	70503A/70503B	2		>	



CFIA Approved Products List - Industrial Coatings

The Canadian Food Inspection Agency has given a letter of no objection for use of the following products in Registered Establishments. Please note all of the uses are indirect contact.

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Product#	Product Name	Use	83100B	ClovaMastic Epoxy Mastic Activator	d1, d2, d3
03240	Super Eggshell Latex White	d1, d2, d3	83110A	ClovaMastic Low Temperature Cure Epoxy - White	d1, d2, d3
03241	Super Eggshell Latex Deep Base	d1, d2, d3	83110B	ClovaMastic Low Temperature Cure Epoxy - Activator	d1, d2, d3
03243	Hi Hide Eggshell latex White	d1, d2, d3	83300	Hi-Build Epoxy Enamel	d1, d2, d3
03244	Super Eggshell Latex Clear Base	d1, d2, d3	83400A	ClovaThane Acrylic Urethane Enamel White	d1, d2, d3
036XX	Kitchen & Bath	d1, d3	83400B	ClovaThane Acrylic Urethane Enamel Activator	d1, d2, d3
05130	Acrylic Latex Primer	d1, d2, d3	83401A	ClovaThane Acrylic Urethane Enamel Deep Base	d1, d2, d3
05135	Latex Dry Fall Semi Gloss	d1, d3	83403A	ClovaThane Acrylic Urethane Enamel Clear Base	d1, d2, d3
05137	Latex Dry Fall Flat Black	d1, d3	83453A	ClovaThane Acrylic Urethane Enamel Clear Coat	d1, d2, d3
05138	Latex Dry Fall White	d1, d3	83700A	Armour Shield XP White	d1, d2, d3
05250	Hi-Hide Latex Primer	d1, d2, d3	83701A	Armour Shield Urethane Deep Base	d1, d2, d3
05700	Latex Block Filler	d1	83703A	Armour Shield Urethane Clear Base	d1, d2, d3
09100	Hog & Dairy Enamel	d1, d2, d3	83ARMB	Armour Shield Urethane Activator	d1, d2, d3
09200	Hog & Dairy Enamel	d1, d2, d3	83800A	Acrylic Epoxy Enamel White	d1, d2, d3
09300	Hog & Dairy Enamel	d1, d2, d3	83800B	Acrylic Epoxy Enamel Activator	d1, d2, d3
11101	Marine Enamel Deep Base	d1, d2, d3	83803A	Acrylic Epoxy Enamel Clear	d1, d2, d3
11103	Marine Enamel White	d1, d2, d3	83953A	Armour Shield Clearcoat	d1, d2, d3
11104	Marine Enamel Clear Base	d1, d2, d3	86850A	DuraPrime Polyamide Epoxy Primer Grey	d1, d2, d3
12480	Urethane Floor Enamel White	d1, d2, d3	86850B	DuraPrime Epoxy Primer Activator	d1, d2, d3
13183	Alkyd Dry Fall Enamel White	d1	87400A	DuraGloss Urethane Enamel White	d1, d2, d3
13453	Melamine Alkyd Enamel White	d1, d2, d3	87400B	DuraGloss Urethane Activator	d1, d2, d3
15197	Rustex Primer Red Oxide	d3	A70000	Advantage 700 Epoxy Concrete Sealer	d2
18100	Dairy White Enamel	d1, d2, d3	A700B	Advantage 700 Curing Agent	d2
20-150	Towerthon Elastomeric Coating	d1, d3	A70100	Advantage 701 High Solids Epoxy Concrete Sealer	d2
20-200	Towerthon II	d1, d3	A701B	Advantage 701 Curing Agent	d2
43051	Super Acrylic II Eggshell Enamel	d1, d2, d3	A72277	Advantage 722 Standard Grey	d2
44051	Super Acrylic II Semigloss Enamel	d1, d2, d3	A722B	Advantage 722 Curing Agent	d2
70275	Ecoprime Shop Primer Grey	d1, d3	A72577	Epoxy Resurfacer Grey	d2
70324	EcoLogic Rustex Primer Grey	d1, d3	A725B	Epoxy Activator	d2
70327	Grey Waterborne Shop Primer	d1, d2, d3	A75000	Advantage 750 Joint & Crack Filler	d2
70329	Ecologic Rustex Primer Red	d1, d3	A750B	Advantage 750 Curing Agent	d2
70503 (A)	EcoLogic W/B Epoxy White "A" Base	d1, d2, d3	A75277	Advantage 752 Standard Grey	d2
70503 (B)	EcoLogic W/B Epoxy Gloss "B" Activator	d1, d2, d3	A752B	Advantage 752 Curing Agent	d2
70504 (B)	EcoLogic W/B Epoxy Semi-Gloss "B" Activator	d1, d2, d3	T99	Shop Metal Primer Q.D. – Grey	d1, d2, d3
70505 (B)	EcoLogic W/B Epoxy Satin "B" Activator	d1, d2, d3	T101Q2	QD Dark Grey Metal Primer	d1, d2, d3
706XX	EcoLogic Water-Borne Acrylic Enamels	d1, d2, d3	T113	Ind. Q. D. Non-Lifting Phenolic Primer	d3
71024	Rustex Primer Grey	d1, d3 d1, d2, d3	T6850	Polyamide Epoxy Primer Grey	d3
71024	Rustex Primer Red Oxide	d1, d2, d3	T7400	Series Hi-Build Urethane Enamels	d3
71025	Grey Dipping Primer	d1, d2, d3 d1, d2, d3	T8250	Hi-Build Hi-Solids Epoxy	d1, d2, d3
71033	Grey Shop Primer	d1, d2, d3		TW, QR, MO, UO, RO, YO, CY,	u 1, uz, us
71039	HS Non-Lifting Primer Grey	d1, d2, d3	044 Colorants.	MY, PG, PB, LB, QV, OY	d1, d2, d3
71044	HS Non-Lifting Primer Red Oxide	d1, d3	Colorizer	,	a., a <u>-</u> , ao
71309			Colorants:	AXN, B, C, D, E, F, I, KX, L, M, S, T	d1, d2, d3
	Metal Primer Grey	d1, d2, d3	all the same		
71358	Red Oxide Dipping Primer	d1, d2, d3	NSP Specialty	Products	
74001	Industrial Enamel Clear Base	d1, d2, d3	NSP 152PL	Pro Line Industrial/Commercial Floor Coating	d2
74002	Industrial Enamel White Base	d1, d2, d3	NSP 122	Industrial Floor Coating	d2
74811	Industrial Enamel White Base	d1, d2, d3	NSP 120	High Performance Epoxy Coating	d3
76001	Speed Enamel Deep Base	d1, d2, d3			
76002	Speed Enamel Clear Base	d1, d2, d3	d1 - walls and	ceilings	
76811	Speed Enamel White Base	d1, d2, d3	d2 - floors		
83040	C-113 Phenolic Primer Non-lifting	d1, d2, d3	d3 - structural	members	
83100A	ClovaMastic Epoxy Mastic White	d1, d2, d3	20 011 4014141		



Surface Preparation Standards

You should always designate the degree of surface preparation required for the materials you are using. The basic standards for preparing metal substrates are a joint effort between the Society for Protective Coatings (SSPC) and the National Association of Corrosion Engineers International (NACE).

SSPC-SP1 Solvent Cleaning

Removal of all visible oil, grease, soil, drawing and cutting compounds, and other soluble contaminants from steel surfaces with solvent, vapor, cleaning compound, alkali, emulsifying agent, or steam.

SSPC-SP2 Hand Tool Cleaning

Removes all loose mill scale, loose rust, loose paint, and other loose detrimental foreign matter by hand chipping, scraping, sanding, and wire brushing.

SSPC-SP3 Power Tool Cleaning

Removes all loose mill scale, loose rust, loose paint, and other loose detrimental foreign matter by power wire brushing, power sanding, power grinding, power tool chipping, and power tool descaling.

SSPC-SP5 / NACE 1 White Metal Blast Cleaning

When viewed without magnification, the surface shall be free of all visible oil, grease, dust, dirt, mill scale, rust, coating, oxides, corrosion products and other foreign matter.

SSPC-SP6 / NACE 3 Commercial Blast Cleaning

When viewed without magnification, the surface shall be free of all visible oil, grease, dust, dirt, mill scale, rust, coating, oxides, corrosion products and other foreign matter of at least 66-2/3% of unit area, which shall be a square 3 in. x 3 in. (9 sq. in.). Light shadows, slight streaks, or minor discolorations caused by stains of rust, stains of mill scale, or stains of previously applied coating in less than 33-1/3% of the unit area is acceptable.

SSPC-SP7 / NACE 4 Brush-Off Blast Cleaning

When viewed without magnification, the surface shall be free of all visible oil, grease, dirt, dust, loose mill scale, loose rust, and loose coating. Tightly adherent mill scale, rust, and coating may remain on the surface. Mill scale, rust, and coating are considered tightly adherent if they cannot be removed by lifting with a dull putty knife.

SSPC-SP10 / NACE 2 Near-White Blast Cleaning

When viewed without magnification shall be free of all visible oil, grease, dust, dirt, mill scale, rust, coating, oxides, corrosion products and other foreign matter of at least 95% of each unit area. Staining shall be limited to no more than 5 percent of each unit area, and may consist of light shadows, slight streaks, or minor discolorations caused by stains of rust, stains of mill scale, or stains of previously applied coatings. Unit area shall be approximately 3 in. x 3 in. (9 sq. in.).



Surface Preparation Standards

SSPC-SP11 Power Tool Cleaning to Bare Metal

When viewed without magnification, the surface shall be free of all visible oil, grease, dirt, dust, mill scale, rust, paint, oxides, corrosion products, and other foreign matter. Slight residues of rust and paint may be left in the lower portion of pits if the original surface is pitted. The surface profile shall not be less than 1 mil (25 microns).

SSPC-SP12 / NACE 5 Surface Preparation and Cleaning of Steel and Other Hard Materials by High- and Ultra High- Pressure Water Jetting Prior to Recoating

This standard requires water jetting at high- or ultra high-pressure to prepare a surface for recoating using pressure above 10,000 psi. Water jetting will not produce a profile; rather, it exposes the original abrasive-blasted surface profile. Water jetting shall be performed to meet four conditions: WJ-1, WJ-2, WJ-3, and WJ-4, and a minimum acceptable surface shall have all loose rust, loose mill scale, and loose coatings uniformly removed.

SSPC-SP13 / NACE 6 Surface Preparation of Concrete

Provides requirements for surface preparation of concrete by mechanical, chemical, or thermal methods prior to the application of bonded protective coating or lining systems.

SSPC-SP14 / NACE 8 Industrial Blast Cleaning

Removal of all visible oil, grease, dust and dirt, when viewed without magnification. Traces of tightly adherent mil scale, rust, and coating residues are permitted to remain on 10% of each unit area of the surface if they are evenly distributed. Shadows, streaks, and discoloration caused by stains of rust, stains of mill scale, and stains of previously applied coating may be present on the remainder of the surface.



The Industrial Protective Coatings Division of Cloverdale Paint Inc.

Cloverdale Paint manufactures and distributes protective coatings for use in the Oil & Gas, Pulp & Paper, Petro-Chemical, Mining, Forestry and other industrial environments including OEM Markets. The company has grown and positioned itself as Canada's largest, privately owned coatings manufacturer and one of North America's leading regional producers. One of the cornerstones of the company's success has been its key focus on high performance corrosion resistant protective and maintenance industrial products.



Manufacturing and Distribution

Cloverdale Paint owns and operates 4 regional manufacturing facilities and distributes its coatings through over 100 company owned wholesale outlets. What this means to you is that Cloverdale's industrial and protective coatings are readily available and easy to acquire.

Research and Development / Quality Control

Continued growth and success requires a commitment to keeping abreast with and using the industries latest technologies to develop new and improved coatings. Cloverdale employs world class chemists and technicians to develop leading products and coatings systems.

Global Organizations

Cloverdale participates in several coatings associations including NOVA, and organization providing a framework within which leading global coatings manufacturers exchange technology and expertise in maintaining leading edge product development positioning.



Cloverdale's industrial plants are ISO Certified and committed to maintaining a standard of excellence, continuous improvement and consistency in quality performance.

Largest NACE Certified Sales Force in Western Canada

Developing a knowledgeable sales and service team is how we provide best value to our customers. Cloverdale sponsors all their Industrial Division Representatives in NACE (National Association of Corrosion Engineers) certification education programs. Cloverdale industrial professionals are NACE Certified coatings inspectors, the highest recognition the organization offers.

This means Cloverdale industrial and protective coatings specifiers and users receive more than the quality "coating in the can", they get the problem solving abilities of an educated NACE Certified Specialist who can provide solutions and coating recommendations for all industrial applications.







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Cloverdale Industrial Coatings Bay 3, 7667-50 Avenue, Red Deer, Alberta T4P 1M6 403-343-2040

Cloverdale Industrial Coatings 740 Nairn Ave., Winnipeg, Manitoba R2L 0X7 204-958-5450 Cloverdale Industrial Coatings 1668 Nicholson Street, Prince George, British Columbia V2N 1V6 250-563-7588

> Cloverdale Industrial Coatings 16411-118th Avenue, Edmonton, Alberta T5V 1H2 780-453-5700

Cloverdale Industrial Coatings 2902 Miners Avenue, Saskatoon, Saskatchewan S7K 4Z7 306-653-7205

Guertin Coatings 50 Panet Road, Winnipeg, Manitoba R2J 0R9 204-237-0241

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