HEGGEL® Coat 112

Epoxy Amine Immersion-Engineered Protective Coating

You Build, We Protect!

Description:

HEGGEL Coat 112 is a two-component ultra-high solids epoxy amine engineered specifically for immersion service in ballast tanks, oil tanks, and refi ned fuel storage tanks. The high build, edge-retentive properties of **HEGGEL Coat 112** provide superior protection compared to conventional epoxies.

Applications:

- For use over prepared steel or concrete surfaces in industrial and marine exposures
- Oil storage tank interiors, refined fuel storage tanks, potable water tanks, water pipes
- Water and waste treatment plants, buried pipe applications, primary and secondary containment areas
- Where edge protection film build properties are required

Technical Data:

Mixing Ratio (Parts by Volume)	A : B = 4 : 1			
Finish	Glossy			
Colour	Light Gray, White, Light Green			
Flash Point	>93°C, PMCC, mixed			
Volume Solids	98% ± 2% mixed			
VOC	<100 g/L (EPA Method 24)			
Reducer	Not recommended			
Clean Up	MEK or HEGGEL Reducer			
@Temperature	**4.5°C**	**13°C**	**25°C**	**38°C**
Pot Life Standard Hardener	-	30-45 min	30-45 min	20-30 min
Pot Life Low Temp. Hardener	20 min	20 min	10 min	-
Sweat-in-Time Standard Hardener	-	15 min	-	-
Sweat-in-Time Low Temp. Hardener	5 min	-	-	-

Note: Pot life is dependent upon temperature and mass.

Application Data:

Recommended Spreading Rates-Microns Per Coat				
Type	One-coat system		Two-coat system	
	Min	Max	Min	Max
Dry (microns)	450	550	250	300
Wet (microns)	450	550	250	300
Coverage (m^2/L) per ct.	1.76	2.2	32	3.9
Theoretical Coverage (m^2/L) @25 microns DFT	38.4			

Note: Brush or roll application recommended for stripe coating and repair only. Standard hardener preferred for brush & roll due to pot life.

Average Drying Time @ 250-550 microns, 50% RH				
With Standard Hardener		**13°C**	**25°C**	**38° C**
	To touch	12 hrs	5 hrs	3 hrs
	To handle	48 hrs	14 hrs	8 hrs
	To recoat	min 48 hrs max 21 days	min 14 hrs max 14 days	min 8 hrs max 14 days
	Full cured	10 days	4 days	24 hrs
	Heat cure	8 hrs @ambient, then 16 hrs @60°C		
With Low Temperature Hardener		**4.5°C**	**13°C**	**25°C**
	To touch	24 hrs	5 hrs	3 hrs
	To handle	48 hrs	24 hrs	8 hrs
	To recoat	min 48 hrs max 30 days	min 24 hrs max 21 days	min 8 hrs max 14 days
	Full cured	7 days	5 days	3 days
	Heat cure	8 hrs @ambient, then 16 hrs @60°C		

Note: Drying time is temperature, humidity, and film thickness dependent. Material should be at least 10°C for optimal performance. If maximum recoat time is exceeded, abrade surface before recoating.

Packaging:

1. ± 0.02 Kg/L, mixed

Storage:

36 months unopened. Store indoors at 4.5°C to 38°C. Protect from heat and freeze!

1. Recommended Systems

Steel, Immersion (Potable Water)
1 Ct. / HEGGEL Coat 112 / 400 - 1250 µm
or
2 Cts. / HEGGEL Coat 112 / 200 - 625 µm
or
3 Cts. / HEGGEL Coat 112 / 150 - 400 µm

Steel, Immersion & Atmospheric
2 Cts. / HEGGEL Coat 112 / 150 - 175 µm
or
1 Ct. / HEGGEL Coat 112 / 450 - 550 µm
or
2 Cts. / HEGGEL Coat 112 / 250 - 300 µm

Steel, with Hold Primer
1 Ct./ HEGGEL Pox 485 / 25 - 37 µm
1 Ct./ HEGGEL Coat 112 / 450 - 550 µm

The systems listed above are representative of the product's use, other systems may be appropriate.

2. Surface Preparation

Surface must be clean, dry, and in sound condition. Remove all oil, dust, grease, dirt, loose rust, and other foreign material to ensure adequate adhesion.

IRON AND STEEL

Atmospheric: SSPC-SP6/NACE 3/ ISO8501-1:2007 Sa 2, 2 mil (50 micron) profile or SSPC-SP12/NACE No. 5, WJ-3/NV-2

Immersion: SSPC-SP10/NACE 2/ISO8501-1:2007 Sa 2.5, 2-3 mil (50-75 micron) profile or SSPC- SP12/NACE No. 5, WJ-2/NV-2 (marine exterior hull only)

CONCRETE AND MASONRY

Atmospheric: SSPC-SP13/NACE 6, or ICRI No. 310.2R CSP 2-3

Immersion: SSPC-SP13/NACE 6-4.3.1 or 4.3.2, or ICRI No. 310.2R CSP 2-3

3. Application Conditions

Temperature (air & surface):
Standard Hardeners:
10°C min, 43°C max
Low Temp Hardener:
4.5°C min, 25°C max
(At least 2.8°C above dew point)
Material should be 21°C to 29°C for optimal performance.
Relative humidity: 85% maximum

4. Application Equipment

Airless spray

Unit: 74:1 pump, minimum
Pressure: 6000 psi minimum (415 bar)
Hose: 3/8" ID (9.5 mm)
Tip: 019"-.021" (0.48-0.53 mm)
Filter: 30 mesh

In order to avoid blockage of airless spray equipment and hose, flush equipment with MEK or HEGGEL Reducer at least once every 30 minutes when using the Standard Hardener and after each kit when using the Low Temperature Hardener, and before periods of extended downtime.

Plural Component: Acceptable

Brush: Nylon/Polyester or Natural Bristle, for stripe coating and repair only.

Roller: Cover 3/8" woven with solvent resistant core, for stripe coating and repair only.

5. Additional Notes

Do not tint Part A.

Clear Hardeners may be tinted with up to 1½ oz. per gallon with Maxitoner Colorant, Phthalo Green or Black ONLY.

Stripe coat all crevices, welds, and sharp angles to prevent early failure in these areas.

Do not mix previously catalyzed material with new.

Guidance on techniques and required equipment to inspect a coating system incorporating Opti-Check OAP Technology can be found in SSPC-TU 11.

Note: Recommended application procedure direct to steel: Apply a 125 – 150 micron coat to the substrate. Allow material to "wet" the surface. Then apply additional material, to bring total film thickness to the recommended range.

Suitable for use with cathodic protection systems.

6. Safety Measures

Observe the precautionary notices on the container label, and read the Material Safety Data Sheet before use.

HEGGEL GmbH
Huttropstr. 60
45138 Essen
Germany
Tel: +49 201 17003 270
Fax: +49 201 17003 277
E-Mail: info@heggel.de
Web: www.heggel.de