HEGGEL

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HEGGEL Flake 730

Anti-Corrosion Glass Flake Epoxy Coating

Description:

HEGGEL Flake 730 is a high solids 2-component epoxy containing micronised glass flake and anti-corrosive pigments.

Application:

Corrosion protection of blast cleaned steel and cathodically protected steel.
Possess excellent abrasion resistance and has excellent resistance to immersion in sea water and a range of chemicals also compatible with cathodic protection.
Aluminium **HEGGEL Flake 730** mastic version available for high build brushing maintenance specifications.

Recommended thickness:

Dry film thickness: 400 microns
Wet film thickness: 482 microns
Theoretical coverage: 2.1 m^2/ltr*
* This figure makes no allowance for surface profile, uneven application, overspray or losses in containers and equipment. Film thickness will vary depending on actual use and specification.

Technical data:

Flash Point	Base: 9°C
	Additive: 23°C
Volume Solids %	83 ± 4% (ASTM-D2697-03(2014))
Mixing Ratio	3 parts base to 1 part additive by volume
Colour Availability	Limited Range
Pot Life	3hrs @ 5°C 1½hrs @ 15°C 1hr @ 23°C
VOC	143 gms/litre determined practically in accordance with UK Regulations PG/23
	167gms/litre calculated from formulation to satisfy EC Solvent Emissions Directive
	107gms/kilo content by weight from formulation, to satisfy EC Solvent Emissions Directive

Details for application:

Practical Application Rates-Microns Per Coat		
	Airless spray	Brush
Dry	400*	250
Wet	482	302

* Maximum sag tolerance typically 1200µm wet (1000µm dry) by airless spray.

Average Drying Time			
	At 5°C	At 15°C	At 23°
To touch	12 hours	6 hours	4 hours
To recoat	6 hours	4 hours	3 hours
To handle	30 hours	16 hours	8 hours

These figures are given as a guide only. Factors such as air movement and humidity must also be considered.

Recommended Primers:

Primers are optional. **HEGGEL Flake 730** can be applied directly onto steel.
HEGGEL POX 401 Blast Primer
HEGGEL POX 402 Blast Primer
HEGGEL POX 403 Wet Blast Primer
Please consult HEGGEL for guidance on alternative primers.

Topcoats:

Indefinitely self overcoatable provided the coating has been suitably cleaned. For optimum intercoat adhesion with other epoxy topcoats, overcoating should occur within 14 days. Where atmospheric exposure is required, consult HEGGEL to recommend a suitable topcoat.

Packaging:

A two component material supplied in separate containers to be mixed prior to use.
Pack Size: 20 litre and 4 litre units when mixed
Weight: 1.59 kg/litre (may vary with shade)

Shelf Life:

2 years from date of batch manufacture

1. Surface Preparation

Blast clean to Sa2½ ISO 8501-1:2007 using angular grit. Average surface profile in the range 50-100 microns.

For agreed maintenance specifications, **HEGGEL Flake 730** may be applied onto manually prepared surfaces to a minimum standard of St3 ISO8501-1:2007 Part A1. Please consult HEGGEL to confirm specification.

Ensure surfaces to be coated are clean, dry and free from all surface contamination.

HEGGEL POX 401 should be specified where there is a requirement for a blast primer. Other blast primers should not be used without reference to HEGGEL.

2. Application Conditions and Overcoating

In conditions of high relative humidity, ie. 80-85% good ventilation conditions are essential. Substrate temperature shall be at least 3°C above the dew point and always above 0°C.

At application temperatures below 10°C, drying and curing times will be significantly extended, and spraying characteristics may be impaired.

Application at ambient air temperatures below 5°C is not recommended.

If it is desired to overcoat outside the times stated on the data sheet, please seek advice of HEGGEL.

3. Application Equipment

Airless spray

Nozzle size: 0.38-0.53mm (15-21 thou)

Fan Angle: 65°

Operating Pressure: 210 kg/cm² (3000psi)

The airless spray details given above are intended as a guide only. Details such as fluid hose length and diameter, paint temperature and job shape and size all have an effect on the spray tip and operating pressure chosen. However, the operating pressure should be the lowest possible consistent with satisfactory atomisation. As conditions will vary from job to job, it is the applicators' responsibility to ensure that the equipment in use has been set up to give the best results. If in doubt HEGGEL should be consulted.

Brush

HEGGEL Flake 730 is capable of being applied by brush at 250 microns DFT.

It is possible to apply **HEGGEL Flake 730** onto a damp substrate (no running or pooled water) by brush application. Ensure that the paint fully displaces any water on the substrate.

HEGGEL Flake 730 may be applied by brush onto hot surfaces up to 120°C. Multiple coats will be necessary to achieve required film build. Ensure good ventilation and adequate PPE due to rapid vapourisation of solvent from the film at high temperatures.

4. Additional Notes:

Drying times, curing times and pot life should be considered as a guide only.

The curing reaction of epoxies commences immediately the two components are mixed, and since the reaction is dependent on temperature, the curing time and pot life will be approximately halved by a 10°C increase in temperature and doubled by a 10°C decrease in temperature.

Material is not suitable for force drying above 50°C.

Epoxy Coatings - Colour Stability:

Variable colour stability is a feature of epoxy materials which tend to yellow and darken with age. Therefore any areas touched-up and repaired with the same colour at a later date may be obvious due to this colour change.

When epoxy materials are exposed to ultra-violet light a surface chalking effect will develop. This phenomenon results in loss of gloss and a fine powder coating at the surface which may give rise to colour variation depending on the aspect of the steelwork. This effect in no way detracts from the performance of the system.

Epoxy Coatings - Tropical Use:

Epoxy paints at the time of mixing should not exceed a temperature of 35°C. At this temperature the pot life will be approximately halved. Use of these products outside of the pot life may result in inferior adhesion properties even if the materials appear fit for application. Thinning the mixed product will not alleviate this problem.

The maximum air and substrate temperature for application is 50°C providing conditions allow satisfactory application and film formation. If the air and substrate temperatures exceed 50°C and epoxy coatings are applied under these conditions, paint film defects such as dry spray, bubbling and pinholing etc. can occur within the coating.

Numerical values quoted for physical data may vary slightly from batch to batch.

5. Health and Safety:

Consult Product Health and Safety Data Sheet for information on safe storage, handling and application of this product.

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