

SIGMAFAST HS ENAMEL

4 pages

August 2012
Revision of November 2004

Description one component, modified acrylic based, air drying industrial enamel

PRINCIPAL CHARACTERISTICS

- fast drying
- good exterior durability
- excellent gloss and colour retention
- VOC compliant as a finish

COLOURS AND GLOSS Wide range of colours, lead free: BS 4800, BS381C, RAL – gloss

BASIC DATA AT 20 °C (1 g/cm³ = 8.35 lb/US gal; 1 m²/l = 40.7 ft²/US gal)

Mass density 1.1 - 1.3 g/cm³ (depending on colour)

Volume solids 53% ± 2%

VOC (UK PG 6/23(92) appendix 3) max. 420 g/l (approx. 3.5 lb/gal)
(UK PG 6/23(92) Appendix 3)

Recommended dry film thickness 25 - 40 µm (can be achieved by a single coat application or using a "wet on wet" technique)

Theoretical spreading rate 21.2 m²/l for 25 µm
13.3 m²/l for 40 µm *

Touch dry after 40 min. at 20 °C

Overcoating interval see overcoating table *

Shelf life (cool and dry place) at least 12 months

RECOMMENDED SUBSTRATE CONDITIONS AND TEMPERATURES

- can be applied on most sound clean paint systems or onto clean bare metal which has been primed with a suitable primer
- application temperature range 5 - 30 °C
- substrate temperature should be at least 3°C above dew point
- maximum relative humidity during application and curing is 85%

INSTRUCTIONS FOR USE

- stir well before use
- the temperature of the paint should preferably be above 15°C, otherwise extra thinner may be required to obtain application viscosity
- too much solvent results in reduced sag resistance
- adequate ventilation must be maintained during application and curing (please refer to sheets 1433 and 1434)
- addition of thinner may increase the VOC value of the product to greater than 420 g/litre

AIR SPRAY

Recommended thinner no extra thinner should be required but if necessary Thinner 21-06 can be added to the mixed components

Volume of thinner 0 - 5%, depending on required thickness and application conditions

Nozzle orifice 1.5 - 2 mm

Nozzle pressure 0.3 - 0.4 MPa (= approx. 3 - 4 bar; 44 - 58 p.s.i.)

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AIRLESS SPRAY

Recommended thinner

no extra thinner should be required but if necessary Thinner 21-06 can be added to the mixed components

Volume of thinner

0 - 5%, depending on required thickness and application conditions

Nozzle orifice

approx. 0.33 - 0.43 mm (= 0.013 - 0.017 in)

Nozzle pressure

15 - 28 MPa (= approx. 2176 - 4061 p.s.i.)

BRUSH/ROLLER

Recommended thinner

no extra thinner is required but if necessary Thinner 21-06 can be added if desired to mixed components

Volume of thinner

0 - 5% if required

Overcoating table for SigmaFast HS Enamel for dft up to 25 µm

with itself

substrate temperature	5°C	20°C	30°C
minimum interval	8 hours	5 hours	2 hours
maximum interval	30 hours	24 hours	16 hours

– wrinkling of the topcoat may occur if overcoating takes place between the times stated

Curing**Drying table**

substrate temperature	touch dry	full cure	dry to handle
5°C	75 min.	24 hours	120 min.
20°C	40 min.	24 hours	60 min.
30°C	30 min.	12 hours	50 min.

Worldwide availability

Whilst it is always the aim of Sigma Coatings to supply the same product on a worldwide basis, slight modification of the product is sometimes necessary to comply with local or national rules/circumstances.

Under these circumstances an alternative product data sheet is used.

REFERENCES

Conversion labels	see information sheet 1410
Explanation to product data sheets	see information sheet 1411
Safety indications	see information sheet 1430
Safety in confined spaces and health safety	
Explosion hazard - toxic hazard	see information sheet 1431
Safe working in confined spaces	see information sheet 1433
Directives for ventilation practice	see information sheet 1434
Cleaning of steel and removal of rust	see information sheet 1490
Relative humidity - substrate temperature - air temperature	see information sheet 1650

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SAFETY PRECAUTIONS

- for paint and recommended thinners see safety sheets 1430, 1431 and relevant material safety data sheets
- this is a solvent borne paint and care should be taken to avoid inhalation of spray mist or vapour as well as contact between the wet paint and exposed skin or eyes

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