HENSOTHERM®



Technical Data Sheet

HENSOGRUND 1K AK

Solvent based, single pack primer based on alkyd resin for structural steel members derusted by hand or blasted

SUBSTRATES / PROPERTIES

Substrates: Steel (Sa 2 ½, St 2), cast iron (Sa 2 ½)

- VOC approx. 370 g/l
- Free from zinc phosphate
- Good penetration on steel surfaces derusted by hand

PRODUCT DATA

HENSOGRUND 1K AK

Colour: red brown, matt | Packaging: 6 kg, 13 kg and 25 kg in one-way pails

Preparation: Stir well before use!

Thinning and/or Cleaning with HENSOTHERM® V45

Shelf life: 12 months in unopened original pails at ambient temperatures in dry conditions

HENSOGRUND 1K AK / Reference values (theoretical values without losses)

Specific gravity (g/ml)	Coverage rate (m²/kg)	Volume solid (%)
1.37	4.6	57
Consumption rate (kg/m²)	Wet film thickness (μm)	Dry film thickness (μm)
0.220	140	80

APPLICATION INSTRUCTIONS

Recommendation at temperatures of approx +20 °C







Roller / Brush

Airless

Nozzle size (inch)	0.013	
Operation pressure (bar)	150-250	•
DFT* per layer (µm)	80	60-80
Thinning (%)	3-5	0

^{*}DFT = Dry film thickness

Drying time at 60 µm DFT	Ambient temperature +20 °C
Dust dry: Ready for overcoating: Ready for overcoating with HENSOTHERM®:	after approx 20 minutes after approx 4–5 hours after 24 hours

Each layer must be dried through (fingernail test positive) before the next application!

APPLICATION INSTRUCTIONS

Surface preparation

Steel and cast iron surfaces

- Blasting to surface preparation level Sa 2.5 according to DIN EN ISO 12944-4, surface roughness medium (G) according to DIN EN ISO 8503-1
- If sand blasting is not possible, than mechanical preparation St 3, metallically bright, surface roughness must exist
- Remove all bond damaging substances by e.g. cleaning, washing
- Manual rust removal of rusted surfaces e.g. with a wire brush or prepared by machine (minimum requirement PSt 2 / St 2) or sweep blasting
- The coverage rate does not consider the correction factor for rough surfaces according to ISO 19840.

Before overcoating with HENSOTHERM®

Before the application of the HENSOTHERM® fire protection coating all bond damaging substances shall be removed completely. All bond damaging substances shall be removed completely by sweep blasting in case of later use outdoors or in areas with increased relative humidity; adjustment of the dry film thickness if required.

Note: For dry film thicknesses (DFT) > $100 \,\mu m$ (max $160 \,\mu m$) and low temperatures, the drying time may be exceeded up to a minimum of 7 days (!) before overcoating with HENSOTHERM[®].



Air and surface temperatures: The temperature of the steel surface and the ambient temperature must remain between +15°C up to +25°C during the coating procedure. Not below +10°C or above +30°C! During the application, the surface temperature of the coated part must be at least +5°C above the dew point of the ambient temperature!



Relative humidity max. 80%

COATING SYSTEMS

Products

Primer	HENSOGRUND 1K AK
Fire protection coating	HENSOTHERM® 410 KS, HENSOTHERM® 421 KS, HENSOTHERM® 310 KS, HENSOTHERM® 320 KS
Top coats depending on the system	HENSOTOP SB, HENSOTOP WB, HENSOTOP 2K PU (in RAL and DB colour shades or in individual colour shades available)

PRECAUTIONS FOR SAFETY USE



Use HENSOGRUND 1K AK in accordance with all applicable local and national regulations. **Giscode: BS60**

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RUDOLF HENSEL GMBH

Lack- und Farbenfabrik

