TECHNICAL APPLICATION GUIDE

ColorWest®

# KH13 0001

## Synthetic paints — Single-layer Synthetic Paint

**Trade name / Product code**

**KH13 / 0001**

**Material base**

Alkyd resin

**Glossiness level**

Semi-matte

**Thinner**

**SR05 / AR10**

**Processing data**

**Air spraying**

| | |
|---|---|
| Thinner: | SR05, AR10 |
| Application viscosity: | 20 to 40 s / 4 mm cup DIN / 20 °C |
| Jet: | 1.3 - 1.6 mm |
| Pressure: | 3 - 5 bar |

**Airless / airmix spraying**

| | |
|---|---|
| Thinner: | SR05, AR10 |
| Application viscosity: | 40 to 80 s / 4 mm cup DIN / 20 °C |
| Jet: | 0.28 - 0.33 mm airless / E311, E411 airmix |
| Pressure: | 120 - 150 bar airless<br>80 – 120 bar / 1.8 - 2.2 bar airmix |

**Brush**

| | |
|---|---|
| Thinner: | SR05, AR10 |
| Application viscosity: | 20 to 80 s / 4 mm cup DIN / 20 °C |

**Dipping**

| | |
|---|---|
| Thinner: | SR05, AR10 |
| Application viscosity: | 20 to 30 s / 4 mm cup DIN / 20 °C |

**Processing**

**The minimum temperature of the paint before processing should be 5 - 25 °C!** Mix the paint thoroughly after opening the package. Thin the paint to the viscosity value needed for the specific application with thinner SR05 or AR10.

**Drying times at 20 °C Wet thickness 50 µm**

| | |
|---|---|
| Dustproof / 20 °C: | 20 minutes |
| Touch dry / non-sticking / 20 °C: | 40 minutes |
| Recoatable / 20 °C: | 120 minutes |
| Workable / 20 °C: | 4 hours |

The rate of cure and the time of achieving the final properties vary depending on the climatic conditions and coat film thickness.

**Additional drying:** after solvents have vaporized away (approx. 20 - 30 minutes after application).

**Additional drying temperature:** max. 60 °C

**Technical data**

| | |
|---|---|
| **Colour:** | RAL, ČSN |
| **Supplier viscosity, 20 °C:** | thixotropic |
| **Density, paint, 20 °C:** | 1.40 to 1.60 g/cm$^3$ depending on colour |
| **Dry matter content, paint:** | approx. 74 % by weight<br>approx. 53 % by volume |
| **VOC content, paint:** | approx. 260 g/kg<br>approx. 390 g/l |
| **Total organic carbon TOC content:** | 300 g/kg |
| **Theoretical spreading rate:** | |
| Dry film thickness 40 µm | 8 to 10 m$^2$/kg |

Consumption depends on object shape, surface roughness, and application technique and conditions.

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**Maximum thinning to 500 g VOC in 1 l of processed mix**

150 g SR05 per kg of paint.
According to Regulation No. 415/2012 Coll.

**Application data**

**Application conditions**

| | |
|---|---|
| Air temperature: | +5 to +25 °C |
| Paint temperature: | +5 to +25 °C |
| Object surface temperature: | min. 5 °C<br>min. 3 °C above dew point |
| Relative humidity of air: | max. 70 % |
| Number of coats: | 1 - 3 |
| Wet film thickness: | min. 125 µm<br>recommended: 150 - 175 µm |
| Dry film thickness: | min. 60 µm<br>recommended: 80 µm |

The thickness of a coat applied in a single working step on a vertical surface depends on object shape, surface roughness, and application technique and conditions.

Overcoatability: The paint can be overcoated with the same paint.

The next coat has to be applied “wet on wet” after 40 minutes up to 8 hours of spraying the first coat.

**If a coat cannot be overcoated within 8 hours, the next coat should be applied not earlier than after 48 hours!**

**Application**

Outdoor coating of metal products (except hot-dip galvanized), such as structures, containers, machine guards, lighting poles, door frames, metal pallets. The paint provides very good corrosion resistance and first-class adhesion to the substrate. It excels in fast curing rate. It is suitable as a single-layer paint or in combination with a suitable primer.

**Surface preparation Steel**

Any grease, scale, old coats, corrosion products and dust have to be removed thoroughly from the metal surface at least to St 3 or Sa 2 to 2½. This method of surface preparation allows achieving the optimum anticorrosive properties of the coats. Problematic spots such as edges, welds, joints, etc. should be pre-treated by strip coating with a brush or a roller. Paint application should be started within 6 hours of blasting at the latest to avoid flash corrosion occurrence!

**Utility properties**

The coating system is suitable for normal atmospheric loads.

| | |
|---|---|
| **Cross-cut test** (steel): | degree 0 to 1 |
| **Final curing time:** | 10 days / 60 µm / 20 °C |
| **Temperature resistance:** | |
| Short term (max. 60 minutes, dry): | 100 °C |

For more details please contact our technical department.

**Cleaning and maintenance**

The mixing and application tools should be cleaned as soon as possible with thinner C6000 or AR10, SR05.

**Packages**

Metal packages from 1 kg to 200 kg as agreed.

**Shelf life**

Paint - 24 months from the date of manufacture if kept in the original closed packages in a dry room, out of direct sunlight and at a temperature from +5 to +25 °C. The storage areas should meet all the conditions for storage of hazard class II combustibles.

**Documentation**

Material Safety Data Sheet Construction-technical certificate

ColorWest®

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Synthetic paints

## Single-layer Synthetic Paint

| | |
|---|---|
| | Product certificate Certification Result Protocol<br>Declaration of Conformity |
| **Waste disposal** | Coating composition N 08 01 11 Waste paints<br>Empty packages N 15 01 10 Packages containing residues of hazardous substances |
| **Disclaimer** | The product data provided in this Technical Application Guide results from the current level of production, laboratory and application tests. The manufacturer reserves the right to make revisions according to the state of development. As the product is used frequently beyond our control, we cannot guarantee anything else than the quality of the product as such. We are not liable for any mistakes occurring due to wrong application, application past the shelf life or improper storage.<br>This document only provides non-binding information that has to be concretized by the end user for the specific product type. On no account this document supersedes the identification data of this product specified in the material safety data sheet. |
| **Date of issue** | 31.8.2015 |
| **Revision date** | 31.8.2015 |

**Before starting works with this product, ALWAYS read thoroughly the relevant material safety data sheet and the material safety data sheet of the applicable thinner! Observe the safe handling and occupational safety instructions. The product is a hazard class II combustible liquid.**

**For more detailed information please contact our technical department.**