

Technical Data Sheet



Edition dated: 13.08.07

Replaces Edition dated:

Data sheet Nr. W3990

AVKOTE SM

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|-----------------------------|--|--|--|
| Product description | A solvent based 2K varnish with an elegant interior surface finish and easy application over open pore and closed pore woods. | | |
| Binding Agent | Polyurethane resin | | |
| Areas of Application | High-quality varnish for interior wood used in furniture manufacture and general joinery woodwork. Can be used as a finishing varnish over painted surfaces to achieve a high quality surface. It is peroxide resistant when coating bleached woods. Test standard compliance: DIN 68861 Part 1B (Chemical Resistance) DIN 4102 B1 (low Flammability) DIN EN 71-3 (Migration behaviour) | | |
| Form of Supply | Colours | Clear | |
| | Gloss Level | Matt Matt – G3%; Dull Matt – G6%; Matt – G15%; Satin Matt – G25%; Satin – G35%; Satin Gloss – G50%; Gloss – G67% | |
| Hardener | Avkote Hardener 279 | | |
| Packing | Coating | 1 and 5 Litre disposable containers | |
| | Hardener | 1 Litre disposable containers | |

Technical Data


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|--|---|-------------------|----------------------------------|-------------------|----------------|-------------------|----------|
| The data is valid for Avkote SM. The values can change for other gloss levels. | | | | | | | |
| | Coating | | Hardener | | Mixture | | |
| Specific Gravity (23 °C) | 0.94 | g/cm ³ | 0.99 | g/cm ³ | 0.96 | g/cm ³ | |
| Solids content | 23 | ± 1 Weight-% | 45 | ± 1 Weight-% | Appr 25 | Weight-% | |
| Organic Solvent Content. | 77 | ± 2 Weight-% | 55 | ± 1 Weight-% | Appr 75 | Weight-% | |
| VOC Content (CH / EU) | 73 | % | 730 | g/lt | 54.7 | % | 547 g/lt |
| Shelf life at 20 °C | 12 Months | | 6 Months in well shut containers | | | | |
| Theoretical Coverage | 120 g/m ² 7-8 m ² /kg for | | 28 µm dry layer thickness | | | | |













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|-----------------------------------|---------------------|--------|---------------------|---------|
| Safety Data | Coating | | Hardener | |
| Flash point | 0 °C | | 0 °C | |
| Transport ADR/RID | Class: 3 | VP: II | Class: 3 | VP: III |
| Poison classification (EU) | | | | |
| VVS disposal code (EU/CH) | 08, 08 01, 08 01 11 | | 08, 08 01, 08 01 11 | |

Application Recommendations

| Substrate | No. of Coats | Product | Dry Film thickness | Data sheet |
|---|--------------|------------------------------|--------------------|------------|
| Open Pore Wood | 1 x Stain | Aquakote Stain (if required) | | 8650 |
| | 1 x Varnish | Avkote SM | 30 - 40µm | W3990 |
| | 1 x Top Coat | Avkote SM | 30 - 40µm | W3990 |
| Closed Pore Wood | 1 x Stain | Aquakote Stain (if required) | | 8650 |
| | 1 x Varnish | Avkote SM | 30 - 40µm | W3990 |
| | 1 x Top Coat | Avkote SM | 30 - 40µm | W3990 |
| Please contact our technical staff for further application suggestions. | | | | |

Preparation

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|---|------------------------|--|
|  | Substrate | Every substrate must be thoroughly cleaned, grease and oil-free, and dry before paint application commences. |
| | Wood substrates | Apply Avkote SM to freshly sanded substrates. Sand with 150 – 180 grit sand paper |
| | Bare MDF Substrate | Sand with 180 – 220 grit sand paper |
| | Plain MDF Panels | Sand with 180 – 220 grit sand paper |
| | MDF | Primed edges/Routed edges - seal with Avkote 207 Sealer or Aquakote MT. |
| | Special Tropical Woods | Prime edge and surfaces with 1 x 207 Sealer Primer. |

| Processing | | | | | | |
|---|-------------------------------|--|-----------------|---------------|---------------------------------------|--------------------|
|  | Preventative measures | We recommend the wearing of protective clothing even if not stipulated by law. The national and regional health and safety regulations for work hygiene and equipment are to be observed. Pay attention to our safety data sheet Nos. W39900 and 279H00. | | | | |
|  | Stir | Before use ensure contents are stirred together well with hardener if applicable. | | | | |
|  | Mixing Ratio | 10 : 1 by volume with Avkote 279 hardener | | | | |
| | Pot life at 20 °C | Ideally 8 Hrs. Max 48 Hrs but with increasingly reduced quality. | | | | |
|  | Thinners | Dilute with Avkote 13000 Thinners 0–20 % depending on the application. | | | | |
|  | brush | Not recommended | | | | |
|  | Roll | Not recommended | | | | |
| | | Viscosity DIN-4 | Thinners | Nozzle | Pressure | Spray coats |
|  | Gravity Feed Spray-gun | 33 - 38 secs | 0 - 20 % | 1.8 mm | 2 – 3 bar | 2 |
|  | Suction-spray-gun | 33 - 38 secs | 0 - 20 % | 1.8 mm | 2 – 3 bar | 2 |
|  | Airless-(Airmix)-Spray | 33 - 38 secs | 0 - 20 % | 11/40 | 3 – 4 bar Atomising air 1.5 - 2 | 2 |
|  | HVLP paint gun | 33-38 s | 0-20 % | 1.8 mm | 2-3 bar | 2 |
|  | Evaporation time | Prior to drying at temperatures over 40 °C allow an evaporation time of 20 minutes. | | | | |
|  | Drying time | For 28 µm dry coating at 20 °C and 65% of relative humidity | | | | |
| | At 20 °C | Tack-Dry | after: | 15 | Minutes | Primary Coat |
| | | Touch – Dry | after: | 30 | Minutes | |
| | | Dried (Can be sanded) | after: | 3 | Hour | |
| | | Suitable for re-coating | after: | 3 | Hours | |
| | | Completely Dry | after: | 10 | days | |
| | At 40 °C | Dry | after: | 45 | Minutes | |

Important references

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|--|--|----|--|
| Specific restrictions | Do not dispose of varnish residue into the sewage system. | | |
| Minimum application- and drying temperature | 15 | °C | Do not apply at temperatures below the dew point |
| Coating removal | With paint stripper | | |
| Equipment cleaning | Clean immediately after use with Avkote Gun Wash Thinners. | | |

Important Recommendations

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| | Please observe our Material Safety Data Sheets for all products used as well as the instructions on the tin label. |
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This data sheet is for your reference and information only. The above data are correct to the best of our knowledge. We offer no guarantees for use and exclude any liability. This applies in particular to consequential damage. We are not liable for any advice given by our employees. Our employees give non-binding information only. Site supervision, compliance with handling regulations and adherence to recognized engineering rules are the responsibility of the manufacturer, even if our employee was on site during handling. Modifications due to technical developments may be made. The latest version of this information is applicable. In special cases, please request separate technical specifications.