

# Technical Data Sheet



Edition dated: 05.11.2009

Replaces Edition dated: 26.06.2009

Data sheet Nr. 6328

## AVKOTE Universal-ST

<b>Product description</b>	A 2K special effect structured coating. This coating is highly elastic with a wear and coolant resistant structure. For interior application only. Meets the EU Decorative Paint regulation level 2. Meets DIN 68861, 1B Chemical Resistance standard.		
<b>Binding Agent</b>	2-K polyurethane resin		
<b>Areas of Application</b>	Suitable for coating switchgear, machinery as well as MDF, foiled and raw chip board.		
<b>Form of Supply</b>	Colours	RAL colour card Other Colours available on request	
	Gloss Level	Satin Gloss	
<b>Hardener</b>	Avkote 9145 Hardener (for metal) Avkote 1070/1 Hardener (for wood) The mixture with hardener is ready to spray		
<b>Packing</b>	Coating	1, 3 and 5 Litre disposable containers	
	Hardener	1 Litre disposable containers	

### Technical Data


The data is valid for Avkote Universal-ST RAL 9010. The values can change for other colours.							
	<b>Coating</b>		<b>Hardener 9145</b>		<b>Mixture</b>		
<b>Specific Gravity (23 °C)</b>	1.5	g/cm <sup>3</sup>	1.07	g/cm <sup>3</sup>	1.42	g/cm <sup>3</sup>	
<b>Solids content</b>	76	± 2 Weight-%	61	± 2 Weight-%	Appr 73	Weight-%	
<b>Organic Solvent Content.</b>	24	± 2 Weight-%	39	± 2 Weight-%	Appr 27	Weight-%	
<b>VOC Content (CH / EU)</b>	36.6	%	366	g/lt	40.9	%	409 g/lt
<b>Shelf life at 20 °C</b>	12 Months		6 Months in well shut containers				
<b>Theoretical Coverage</b>	124	g/m <sup>2</sup>	8.1	m <sup>2</sup> /kg for	50	µm dry layer thickness	

<b>Safety Data</b>	<b>Coating</b>		<b>Hardener 9145</b>	
<b>Flash point</b>	27 °C		-1 °C	
<b>Transport ADR/RID</b>	Class: 3	VP: III	Class: 3	VP: II
<b>Poison classification (EU)</b>				
<b>VVS disposal code (EU/CH)</b>	08, 08 01, 08 01 11		08, 08 01, 08 01 11	



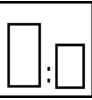
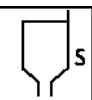
**Application Recommendations**









Substrate	No. of Coats	Product	Dry Film thickness	Data sheet
Steel	2 x Top Coat	Avkote Universal-ST	40 - 60 µm	6328
Aluminium	1 x Primer	Avkote 2250 Primer	30 - 40 µm	EA9000
	1 x Top Coat	Avkote Universal-ST	40 - 60 µm	6328
Foil-coated chipboard	1 x Top Coat	Avkote Universal-ST	40 - 60 µm	6328
MDF Board	1 x Primer	Avkote 242 Furniture		242001F
See preparation	2 x Top Coat	Avkote Universal-ST	40 - 60 µm	6328
For further application proposals please ask our technical department.				

**Preparation**

	<b>Substrate</b>	Every substrate must be clean, dry and free of grease and oil-free.
	Steel	Sandblast or sand, clean
	Aluminium	Sand or pad-rub (coarse Scotch Brite), clean Or chemical treatment (chromating), clean
	Aluminium Profile	Sand well or dust blast, clean Or chemical treatment (chromating), clean
	Foil-coated chipboard	Sand
	MDF	In general, the MDF board profile edges and cut surfaces need to be hardened with Avkote 242 Furniture (spraying or brush painting)  Finishing: 1 x coat Avkote Universal-ST with Avkote 1070/1 Hardener. (15-30% thinner with Avkote 13000 thinner) light intermediate sanding after drying overnight. Then apply 1 x coat Avkote Universal-ST with Avkote 1071/1 Hardener.

**Processing**

	<b>Preventative measures</b>	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. 539100 and 279H00.
	<b>Stir</b>	Before use ensure contents are stirred together well with hardener if applicable.
	<b>Mixing Ratio</b>	4 : 1 by weight with Avkote 9145 hardener 5 : 1 by weight with Avkote 1070/1 hardener
	<b>Pot life at 20 °C</b>	Approx 4 hr. Balance the increase in viscosity with thinners 95 or 13000.
	<b>Thinners</b>	Dilute with thinners 95 (slow) or 13000 (fast) if required. The addition of thinner depends on the desired structure. An addition of higher amounts of thinner with the same spray pressure and the same nozzle size causes a 'flutter' structure

	<b>brush</b>	Not recommended				
	<b>Roll</b>	No recommended				
		<b>Viscosity DIN-4</b>	<b>Thinners</b>	<b>Nozzle</b>	<b>Pressure</b>	<b>Spray coats</b>
	<b>Gravity Feed Spray-gun</b>	According to desired structure	Thinners 95 or 13000	According to desired structure		
	<b>Suction-spray-gun</b>	According to desired structure	Thinners 95 or 13000	According to desired structure		
	<b>Airless-(Airmix)-Spray</b>	According to desired structure	Thinners 95 or 13000	According to desired structure		
	<b>HVLP paint gun</b>	According to desired structure	Thinners 95 or 13000	According to desired structure		
	<b>Evaporation time</b>	Prior to drying at temperatures over 40 °C allow an evaporation time of 15 minutes.				
	<b>Drying time</b>	For 50 µm dry coating at 23°C and 65 % relative humidity				
	At 20 °C	Tack-Dry	after:	20	Minutes	
		Touch – Dry	after:	4	Hours	
		Dried (Can be sanded)	after:	12	Hours	
		Suitable for re-coating	after:	16	Hours	
		Completely Dry	after:	16	days	

**Important references**

<b>Specific restrictions</b>	Relative humidity max. 75 %				
<b>Minimum application- and drying temperature</b>	15	°C	Do not apply at temperatures below the dew point		
<b>Coating removal</b>	Sand blast and/or paint stripper				
<b>Equipment cleaning</b>	Clean immediately after use with thinners 95 or U Cleaner.				

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.