

# Technical Data Sheet



Edition dated: 16.01.15

Data sheet Nr. 1409

## AVKO MIRROR

<b>Product description</b>	Special Mirror effect paint
<b>Areas of Application</b>	Glass / acrylic and PMMA sheets Please take note of our important recommendations on page 4
<b>Form of Supply</b> Colours	Mirror Finish
Gloss Level	60° (100° looking through the glass)
<b>Hardener</b>	AVKOTE 1049 Hardener
<b>Packing</b> Coating	250g, 500g, 1 kilo and 4 kilo tins
Hardener	50g pot, 100g pot and 1 kilo tins

### Technical Data


The data is valid for AVKO Mirror							
	<b>Coating</b>		<b>Hardener</b>		<b>Mixture</b>		
<b>Specific Gravity (20 °C)</b>	0.897	Kg/L	1.075	Kg/L	0.904	Kg/L	
<b>Solids content</b>	2 +	1 Weight-%	100 +	1Weight-%	3.9		
<b>VOC Content (CH / EU)</b>	98	%	886 Kg/m <sup>3</sup>	0 %	0,01 Kg/m <sup>3</sup>	98 %	886 Kg/m <sup>3</sup>
<b>Shelf life at 20 °C</b>	6 Months		6 Months in well shut containers				
<b>Theoretical Coverage</b>	100 g/m <sup>2</sup> for 15 µm dry layer thickness						

<b>Safety Data</b>	<b>Coating</b>		<b>Hardener</b>	
<b>Flash point</b>	25 °C		Non Flammable (>60 °C)	
<b>Transport ADR/RID</b>	Class: 3	VP: III	Not Applicable	
<b>VVS disposal code (EU/CH)</b>	08 01 11		08 01 99	



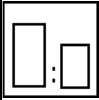



**Application Recommendations**

Substrate	No. of Coats	Product	Dry Film thickness	Data sheet
Glass / acrylic and PMMA sheets	3 x Very Light Coats	AVKO Mirror	15 microns (All three coats)	1409
For further application proposals please ask our technical department.				

**Preparation**

	<b>Substrate</b>	Every substrate must be thoroughly cleaned, grease and oil-free, and dry before paint application commences.
	Glass	The glass must be well cleaned using Avkote Glass Cleaner, ensuring that the surface is crystal clean and smear free. Avkote Glass Cleaner must be used to clean the glass as some glass cleaners may leave a residue on the glass which could affect the adhesion. Since there are different types of glass, it is recommended always to do a small test prior to the complete application.
	Acrylic / PMMA sheets	Cleaner surface thoroughly with AVKOTE Glass Cleaner, ensuring the surface is crystal clean and smear free.

**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. 1049Mirror and 1049H				
	<b>Stir</b>	Before use ensure contents are stirred together well with hardener. Stirring is to be done 5 minutes prior to product being used.				
	<b>Mixing Ratio</b>	Add 4% AVKOTE 1049 Hardener to AVKO Mirror				
	<b>Pot life at 20 °C</b>	Approx: 8 hours				
		<b>Viscosity DIN-4</b>	<b>Thinners</b>	<b>Nozzle</b>	<b>Pressure</b>	<b>Spray coats</b>
	<b>Gravity Feed Spray-gun</b>	11 secs	N/A	1-1.2mm	3 Bar	3
	<b>Evaporation time</b>	Prior to drying at temperatures over 20°C allow an evaporation time of 5 minutes.				
	<b>Drying time</b>	For 15 µm dry coating				
	<b>Drying Before Applying th Backing Foil</b>					
	All heating methods other than catalytic or Infrared (IR) need to have heat and air flow across the surface of the mirror coated side. This is essential for a good consistent finish. It should be noted that the hotter the temperature and the longer the heat is applied, the more durable and hard the overall mirror finish will be.					

There are 4 different drying methods we recommend for this product.

**1. Drying at 35-45 degrees with air flow**

After applying 3 light coats as set out in the application section, the coated glass should be placed in a drying room where air will pass over the coated surface. After 15 minutes the haze in the mirror finish should be gone and the coated surface will have gone from a matt finish to a glossy finish. It should then be dried for a further 15 minutes and left for a further 16-24 hours in a temperature of around 18-20 degrees. Once this has been completed, a silver foil backing should be applied.

**2. Drying at 45-60 degrees with air flow**

After applying 3 light coats as set out in the application section, the coated glass should be placed in a drying room where the air will pass over the coated surface. After 15 minutes the haze in the mirror finish should be gone and the coated surface will have gone from a matt finish to a glossy finish. It should then be dried for a further 15 minutes and left for a further 12-18 hours in a temperature of around 18-20 degrees. Once this has been completed, a silver foil backing should be applied.

**3. Drying at 120-160 degrees without air flow- oven**

After applying 3 light coats as set out in the application section, the coated glass should be placed in an oven. After 2-3 hours the haze in the mirror finish should be gone and the coated surface will have gone from a matt finish to a glossy finish. It should then be left for a further 1-2 hours in a temperature of around 18-20 degrees. Once this has been completed, a silver foil backing should be applied.

**4. Catalytic Dryer must be medium to long wavelength**

**Drying at 35-45 degrees using a catalytic drier which is at 150 degrees at the surface of the drier**

After applying 3 light coats as set out in the application section, the coated glass should be placed under the catalytic drier, with a distance of 30cm between the surface of the glass and the dryer. Heated air will pass over the coated surface. After 15 minutes the haze in the mirror finish should be gone and the coated surface will have gone from a matt finish to a glossy finish. It should be left for a further 1-2 hours in a temperature of around 18-20 degrees. Once this has been completed, a silver foil backing should be applied.

**Important references**

<b>Specific restrictions</b>	Relative humidity max. 70%		
<b>Minimum application- and drying temperature</b>	20	°C	Do not apply at temperatures below the dew point
<b>Equipment cleaning</b>	Clean immediately after use with Gun Wash Thinners.		

**Important Information**

1. Use a gravity gun to avoid waste product. Air cap and jet should be no bigger than 1-1.2mm.
2. Do not mix together too much mirror and hardener at one time, as the product is expensive, however once mixed it will go a long way. You will only need 120grams (1/8<sup>th</sup> of a kilo) to cover 1 square metre. That is over 8 square metres per kilo. Once mixed, the pot life is over 8 hours.
3. Only light coats need to be applied (see video for application method). If applied too heavily you will not get the mirror finish and waste product. Make sure you use a wide fan and plenty of air.
4. For the drying of the mirror you need heat and air flow over the backing surface, if you don't have the air flow you will not get a true mirror effect. The mirror is hazy when first applied and you will need heat and air flow for 15 minutes to clear this.
5. It is essential that you remove all contamination and white marks from the surface prior to application of AVKO Mirror. If you don't then these marks will be very prominent after the Mirror coating has been applied. If you have a glass washer you can clean the glass first with this, then clean with AVKOTE Glass Cleaner. The glass needs to be thoroughly cleaned using our AVKOTE Glass cleaner and 100% cotton lint free rags, ensuring that you change the rags regularly. The surface must be crystal clean and smear free .

**Please see our Video Demonstration and PDF document which includes all the information of how to apply this product.**

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.