

Surface Preparation

Proper surface preparation is critical to the long term performance of ARC S7. The exact requirements vary with the severity of the application, expected service life, and initial substrate conditions. Optimum preparation will provide a surface thoroughly cleaned of all contaminants and roughened to an angular profile between 75 – 125 μm (3 – 5 mil). This is normally achieved by initial cleaning and degreasing and then abrasive blasting to a cleanliness of *White Metal (Sa 3/SP5)* or *Near-White Metal (Sa 2.5/SP10)* followed by removal of all abrasive residues.

Mixing

Each kit contains one Part A resin (14 liters) and one Part B catalyst (250 ml ARC CHP). The addition of Part B catalyst is based on Part A material temperature and is referenced below:

- Part A between 10 – 15°C (50 – 60°F) add 250 ml of Part B to one 14 liter (3.6 gals) pail of Part A
- Part A between 15 – 21°C (60 – 70°F) add 200 ml of Part B to one 14 liter (3.6 gals) pail of Part A
- Part A between 21 – 26°C (70 – 80°F) add 150 ml of Part B to one 14 liter (3.6 gals) pail of Part A

Mix Ratio 15 - 21°C (60-70°F)	By Weight	By Volume
A : B	100 : 1	66 : 1

Premix Part A to re-disperse any settled or separated material, then add Part B as per the above schedule. Use a low speed, variable drive power mixer with a non-air entraining blade such as a “Jiffy” style mixer. Thoroughly scrape the sides and bottom of the container to completely mix product. Continue mixing until a uniform consistency is achieved (3 – 5 minutes).

Working Time – Minutes

	10 – 15°C	15 – 21°C	21 – 26°C	This chart defines the practical working time of ARC S7, starting from when mixing begins.
14 Liters	50 – 60°F	60 – 70°F	70 – 80°F	
ARC S7 without MEK	40 min.	30 min	20 min	
ARC S7 with MEK	50 min.	40 min	30 min	

Application

Apply immediately by conventional airless spray unit. While ARC S7 is formulated for spray by conventional airless systems, the use of additional solvent for viscosity reduction may be used, incorporating methyl ethyl ketone (MEK) not to exceed 3% by volume, is allowed. Application by brush or roller should be limited to touch up only or small areas. MEK dilution is not recommended for brush and roller applications. As with all styrenated products, proper ventilation must be maintained during mixing, application and curing.

Application process must allow for solvent evaporation prior to second coat application. Keep hoses and spray unit out of direct sunlight when applying ARC S7. Purge immediately with MEK or acetone for work interruptions. If applied in direct sunlight, it is recommended to recoat within 4 hours to obtain proper inter-coat adhesion. Prior to curing to “Overcoat End” no surface preparation is required so long as the surface has not been contaminated. The recommended application thickness per coat is 250 – 500 μm (10 – 20 mil) wet film thickness (WFT). This will cure to give a dry film thickness (DFT) of approximately 200 – 400 microns (8 – 16 mil). It is recommended to apply ARC S7 in two coats to eliminate holidays and pinholes.

Coverage

Thickness	Unit size	Coverage
375 μm (15 mil) WFT yields 300 μm (12 mil) DFT	14 Liter	37.33 m ² (401.86 ft ²)

Curing Schedule

	10°C	16°C	21°C	29°C
	50°F	60°F	70°F	85°F
Tack Free without MEK	140 min.	120 min.	100 min.	70 min.
Tack Free with MEK	180 min.	150 min.	120 min.	76 min.
Overcoat Begin	12 hrs.	6 hrs.	2 hrs.	1 hrs.
Overcoat End	5 days	4.5 days	4 days	3 days
Full Chemical	72 hrs.	48 hrs.	24 hrs.	16 hrs.

Clean Up

Use commercial solvents (Acetone, Methyl Ethyl Ketone) to clean tools immediately after use. Once cured, the material would have to be abraded off.

Storage

Store Part A and Part B in closed containers out of direct sunlight and in a dry location. Keep away from heat and flames. Shelf life is six months when stored at 10 – 24°C (50 – 75°F). Refrigerated storage will extend the storage life of ARC S7. 24 hours before use narrow storage temperature top between 16 – 25°C (60 – 77°F) to aid in spraying.

Safety

Before using any products, review the appropriate Safety Data Sheet (SDS) or Safety Sheet for your area. Follow standard confined space entry and work procedures, if appropriate.

Maintain transport temperature below 24°C (75°F). Shelf life (in unopened containers): 6 months [when transported and stored between 10°C (50°F) and 24°C (75°F)]