

RESOLCOAT 7060

Hardeners 7064 & 7067

Epoxy clear or pigmented Gelcoat

- Improved UV resistance
- Room temperature cure & high gloss
- Choice of Slow and Fast hardeners



New mixing ratio :

- 7060 CLEAR or COLOR / 7064 : Resin 100 + Hardener 40

- 7060 CLEAR or COLOR / 7067 : Resin 100 + Hardener 50

Check on the pails/can the mixing ratio !

Improvements : Identical mixing ratio for clear or color. Improved vertical sag resistance. Better film surface for high gloss results and improved UV resistance for the clear version. Smoother brush application characteristics.

RESOLCOAT 7060 epoxy gelcoat is specially formulated for the production of structural composites parts or tools requiring high mechanical & abrasion properties and room temperature curing.

Two versions are available depending on the pot life needed : 1h45min for large parts or 16min for high production outputs, with a very fast curing time in film for the fast version - closer to a polyester curing time than to a typical epoxy.

In both cases, the gelcoat may be ordered in its clear version (mainly for parts) or coloured version for tools or parts production.

500 microns (0,57 kg/m²) is sufficient coating thickness in most cases. For parts or moulds requiring polishing or finishing a 800 microns (0,92 kg/m²) is recommended.

This gelcoat offers low toxicity working conditions to the users. Laminates can be released from the moulds after a room temperature curing.

Epoxy Gelcoat 7060

Hardeners 7064 & 7067

MIXING RATIO

Systems	7060 CLEAR or COLOR / 7064	7060 BASE + PIGMENT / 7064	7060 CLEAR or COLOR / 7067	7060 BASE + PIGMENT / 7067
Mixing ratio by weight	100 / 40	91 + 9 / 40	100 / 50	91 + 9 / 50

Warning: the mixing ratio must be accurately followed. It is not possible to change the ratio, it would result in lower mechanical properties. The mixture should be thoroughly stirred to ensure full homogeneity. It is important to note that epoxy systems tend to heat up much faster in a pot than as a thin film. It is preferable to only mix the necessary amount usable within the given pot life. Keeping the mixture in flat open containers reduces the risks of exothermic reaction.

APPLICATION

The standard procedure of working with epoxy gelcoats applies to this system.

The 7060 system is best applied by brush, but application by conventional spray gun is possible with large nozzles. If using a roller, it is best practise to pour the gelcoat on the roller and then apply on plug or mould.

As an indication, it is possible to overcoat the gelcoat with a laminating resin as long as the surface still has tack (timing to be defined by workshop temperature, tack meaning the product is soft and stain your finger when touched). It is recommended to sand and degrease before laminating onto the gelcoat if the surface has cured and formed its film (tack-free surface).

Other application methods (when using the coloured version) such as using RESOLTECH ALUMINIUM 250TV to ensure mechanical adhesion or delaying the gel by applying a coat of ultra slow laminating epoxy resin onto the freshly applied gelcoat are possible. If delaying the gel method is used, choose 1050/1053 or 1040/1043 system as ultra slow resin and apply right after gelcoat application. It will grant a 12h overcoating window onto the freshly applied gelcoat.

Like the 1070S CLEAR laminating resin, this epoxy gelcoat may be over coated with a polyester topcoat without inhibition problems of the polyester, this is also true for silicone.

Best practise is to mix in one pot, dispense in another pot, remix before use.

The 7060 is not prone to the formation of by-product due to humidity and CO₂ in the air.

In all cases testing in production conditions should be conducted in order to validate the method before industrial size applications.

PHYSICAL CHARACTERISTICS

Visual aspect

7060 CLEAR : Clear liquid with slight purple aspect

7060 BASE : Thixotropic liquid with slight purple aspect

7064 : Transparent gel

7067 : Transparent/Opalescent gel

Epoxy Gelcoat 7060

Hardeners 7064 & 7067

VISCOSITY

Systems	7060 CLEAR / 7064	7060 BASE + PIGMENT or COLOR / 7064	7060 CLEAR / 7067	7060 BASE + PIGMENT or COLOR / 7067
Resin viscosity	12000mPa.s	6000mPa.s*	12000mPa.s	6000mPa.s*
Hardener viscosity	4000mPa.s		N/A - Thixotropic gel	
Mixed viscosity	10000 - 2000mPa.s		15000 - 25000mPa.s	

REACTIVITY

Systems	7060 CLEAR / 7064	7060 BASE + PIGMENT or COLOR / 7064	7060 CLEAR / 7067	7060 BASE + PIGMENT or COLOR / 7067
Gel time on 70mL (4cm thickness) at 23°C	2h	1h45min	16min	
Temperature at exothermic peak on 70mL at 23°C	52°C	62°C	163°C	
Time at exothermic peak on 70mL at 23°C	1h56min	1h41min	18min	
Vertical sag limit at 23°C	<600µm		<400µm	
Gel time on 2mm film at 23°C	4h34min	4h09min	1h08min	50min
Tack off time on 2mm film at 23°C	6h30min		1h30min	

MECHANICAL PROPERTIES

Systems	7060 CLEAR / 7064	7060 BASE + PIGMENT or COLOR / 7064	7060 CLEAR / 7067	7060 BASE + PIGMENT or COLOR / 7067
Shore D Hardness 14 days at 23°C / 16h60°C	86 / 88	88 / 89	84 / 85	85 / 86
T _g 14 days 23°C / 16h60°C	48°C / 56°C	49°C / 58°C	36°C / 40°C	44°C / 45°C

Epoxy Gelcoat 7060

Hardeners 7064 & 7067

PACKAGING

Kits 7060 CLEAR or COLOR / 7064

- 1kg+0.4kg
- 5kg+2kg
- 10kg+4kg
- 25kg+10kg
- 200kg+4x20kg

Kits 7060 CLEAR or COLOR / 7067

- 1kg+0.5kg
- 5kg+2.5kg
- 10kg+5kg
- 25kg+12.5kg
- 200kg+4x25kg

Kits 7060 BASE / 7064

- 0.91kg+0.4kg
- 4.55kg+2kg
- 22.75kg+10kg

Kits 7060 BASE / 7067

- 0.91kg+0.5kg
- 4.55kg+2.5kg
- 22.75kg+12.5kg

PIGMENT

- Epoxy RAL pigment paste available in 0.95kg cans or 20kg pails (black & white in 5 kg)

TRANSPORT & STORAGE

Shelf life is one year in sealed containers as provided. Keep containers away from heat and cold preferably between 10°C and 30°C in a well ventilated area.

HEALTH & SAFETY

Skin contact must be avoided by wearing protective nitrile gloves & overalls or other protective clothing.

Eye protection should be worn to avoid risk of resin, hardener, solvent or dust entering the eyes. If this occurs flush the eye with water for 15 minutes, holding the eyelid open, and seek medical attention.

Ensure adequate ventilation in work areas. Respiratory protection should be worn with ABEKP coded filters.

RESOLTECH issues full Material Safety Data Sheet for all hazardous products. Please ensure that you have the correct MSDS to hand for the materials you are using before commencing work.

The data provided in this document is the result of tests and is believed to be accurate. We do not accept any responsibility over the mishandling of these products and our liability is limited strictly to the value of the products we manufacture and supply.