

RESOLTECH 8050

Hardener 8058

Epoxy profiling & fairing filler

- **Lightweight: 0,8 Density**
- **Simple mixing ratio 1:1 by weight or volume**
- **Easy sanding**
- **Fast curing**



RESOLTECH 8050 / 8058 is a fast curing, lightweight, and easy sanding epoxy filler. It is a premium choice for profiling & fairing above and below the waterline for professional applicators on steel, aluminum and composite materials.

The specially formulated lightweight epoxy filler will apply from very thin layers up to 30 mm in one coat without the risk of sagging/slumping. This filler will result in a high strength and impact resistant watertight surface

The formulation of the 8050 will help improve health and safety for the workers and follows the latest EU regulation (CE) n° 453/2010 and does not contain any CMR materials.

When sanded, the surface of this system is smooth enough to be directly overrated with 2 coats of RESOLCOAT 3010T high build epoxy primer and is compatible with all paints & primers. RESOLTECH 8050 fast curing characteristics enable applications of 2 to 3 layers of a day with sanding between them, improving the productivity of the workers, It may be applied in covered facilities or outside as it offers little sensitivity to climate conditions. Its excellent waterproof quality enables to guarantee long lasting barriers when used as Osmosis treatment. Easy to sand or mill with CNC, RESOLTECH 8050 may be used as profiling filler on low density foams blocks for plugs manufacturing and tooling boards adhesive. RESOLTECH 8050 is the product that offers long-term performance of superior quality.

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MIXING RATIO

System	8050 / 8058
Mixing ratio by weight	1 / 1
Mixing ratio by volume	1 / 1

The mixing ratio must be respected neither excess nor default. The mixture should be homogeneous and intimate with the use. It is recommended to use flat spatulas & trowels to hand mix the resin & hardener on a flat surface to avoid air incorporation during the mix.

PHYSICAL CHARACTERISTICS

Visual aspect

8050 :	Pale blue paste
8058 :	White paste
Mix :	Light blue paste

Density (ISO 1675, ± 0.05)

References	8050	8058
Density at 23°C	0.80	0.80
Mixed density at 23°C	-	0.80

Water absorption (ISO 62)

8050 / 8058 :

REACTIVITY & HARDENING

References	8050 / 8058
Reactivity on 70mL (~4cm thickness) at 23°C	18 min
Temperature at exothermic peak on 70mL at 23°C	48°
Time at exothermic peak on 70mL at 23°C	4 min 50
Reactivity on 2mm film at 23°C	45 min

Reactivity measurements made with Trombotech®

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System	Sandable in 5mm			Sandable in 10mm			Sandable in 30mm		
	10°	20°	30°	10°	20°	30°	10°	20°	30°
8050 / 8058		5h	4h		4h	3h 30		3h 30	2h 30

APPLICATION

It is mandatory to respect the mixing ratio, all excess or default will result in a loss of thermo-mechanical properties.

- **Substrate temperature** should be minimum 10°C and maximum 35°C. Product temperature should also be minimum 10°C and maximum 35°C. Ambient temperature should be minimum 10°C and maximum 35°C.
- **Surface preparation:** on previously painted surfaces, clean thoroughly to degrease the surface and sand with 80-180 grade paper or remove all previous coatings if in poor condition and prime the substrate.
Steel Aluminum: Prime with RESOLCOAT 3010T.
Wood: Prime stable constructions only, with RESOLCOAT 1010 / 1014.
GRP: For osmosis treatment, prime the sanded fibre with 1020T/1029S in order to waterproof the substrate and lightly sand/deglaze before application of filler.
BARE GRP/COMPOSITE: Remove surface wax/mould release agent with degreaser, sand with 80-180 grade paper. If left for longer than 24 hours, two component epoxy primers and fillers will need sanding with 80-180 grade paper to ensure a good mechanical adhesion.
As general rule: all substrates must be sanded, clean and dry.
- **Mix** the two components thoroughly to an even colour. Remove any dust from the surface. Apply firmly in a spreading action. When hardened, sand smooth with 80-180 grade wet or dry paper.
- **Overcoating:** RESOLTECH 8050 may be over coated with itself or with RESOLCOAT 3010T as soon as it is cured enough not to be lifted during the screeding process.

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Coverage of application vs thickness

Coverage will depend on the thickness needed to profile. The following table indicates the coverage vs thickness.

Thickness	Coverage
1mm	0.8 kg/m ²
5mm	4 kg/m ²
10mm	8 kg/m ²

Warning : On thick applications, with high temperatures it is recommended to test the desired thickness at application conditions & substrate temperature to ensure that no exothermic reaction may occur.

THERMO-MECHANICAL PROPERTIES

Glass transition temperature & Hardness

	T _G	Shore D Hardness	T _G	Shore D Hardness
Curing cycles	14 days at 23°C		16h at 60°C	
8020 / 8023		70		72

T_G realized with Kineteck® (DMA type)

Flexural properties

System	Flexion					
	Moduleus (GPa)		Max strength (MPa)		Elongation at max strength (%)	
	Curing cycles					
	14d at 23°C	16h at 60°C	14d at 23°C	16h at 60°C	14d at 23°C	16h at 60°C
8050 / 8058	1.04	1.28	12.3	18.7	1.6	1.75

Tests realized according to ISO 178

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PACKAGING

Kits of 8050 / 8058 available :

- 1kg : (0,5+0,5)kg
- 5kg : (2.5+2.5)kg
- 30kg : (15+15)kg
- 350kg : (175+175)kg

TRANSPORT & STORAGE

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

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 or hardener 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.

Nota : The data provided in this document are provided good-faith and are based on the test in laboratory and our practical experience and is believed to be accurate. Considering the application of our products gets away from our control, 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.