

RESOLTECH 1060 NOIR

Hardeners 1065 & 1068

Casting & injection dielectric epoxy system

- Adjustable working time from 25min to 1h45min
- Low viscosity system optimized for gravity casting
- Curing at room temperature



RESOLTECH 1060 NOIR / 1065 or 1068 epoxy system exhibits excellent mechanical properties and a good resistance to chemical agents.

It is particularly recommended for the protection and **insulation of electrotechnical equipment** subjected to a severe climatic environment or operating in a very humid environment.

Its excellent fluidity allows the filling of electrical connection boxes or the coating of electronic components by simple **casting or injection** to obtain a solid and permanent electrical insulation.

Its two hardeners make it possible to better adapt the reactivity according to the volumes to be poured.

Rather suitable for casting small volumes (thickness <10 cm), its short crosslinking time allows it to guarantee good productivity.

The resin 1060 NOIR is also available in **thixotropic version** under the reference **1060T NOIR**.

Resin 1060 NOIR

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MIXING RATIO

References	1060 NOIR / 1065	1060 NOIR / 1068
Mixing ratio by weight	2 / 1	

Mixing ratio must be accurately followed neither excess nor default.

The mixture must be homogeneous before use.

APPLICATION

It is recommended to use the products at a **temperature between 18°C and 25°C** to facilitate mixing, working time and casting.

A lower temperature increases the viscosity of the mixture as well as its gel time. On the contrary, a higher temperature decreases the viscosity of the mixture as well as its gel time.

The system can be processed using a two-component dispensing machine or by manual mixing. The **resin part must be re-homogenized before each use**.

The material used for mixing and the parts to be treated must be clean and dry. Preheat the pieces and moulds if necessary.

PHYSICAL CHARACTERISTICS

Visual aspect

1060 NOIR : Black liquid
1065 & 1068 : Colourless to yellow limpid liquid
Mix : Black liquid

Densities at 23°C according to ISO 1675 (± 0.03)

References	1060 NOIR	1065	1068
Density	1.17	1.02	1.04
Mix density	-	1.12	1.13

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Viscosities at 23°C according to ISO 12058.2 ($\pm 15\%$ tolerance)

References	1060 NOIR	1065	1068
Viscosity (mPa.s)	810	370	745
Mix viscosity (mPa.s)	-	570	750

REACTIVITIES

Systems	1060 NOIR / 1065	1060 NOIR / 1068
Gel time on 70mL (4cm thickness) at 23°C	1h45min	25min
Temperature at exothermic peak on 70mL at 23°C	67°C	156°C
Time at exothermic peak on 70mL at 23°C	1h35min	28min
Gel time on 2mm film at 23°C	4h14min	2h

Reactivity measurements made with Rheotech®

ELECTRICAL & THERMAL PROPERTIES

Systems	1060 NOIR / 1065	1060 NOIR / 1068
Glass transition temperature*	48°C	
Thermal range of use	-30°C à +135°C	
Dielectric strength (kV/mm)	-	-
Dissipation factor at 25°C under 100 kHz	-	-
Dielectric constant at 25°C under 100 kHz	-	-

*Tests realized on samples cured 24h at 23°C + 16h at 60°C

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MECHANICAL PROPERTIES

Properties	Standards	1060 NOIR / 1065		1060 NOIR / 1068	
Curing cycles	-	14 days at 23°C		16 hours at 60°C	
Shore D Hardness	ISO 868	83	85	85	86
Flexural modulus (GPa)	ISO 178	2.33	2.23	1.85	1.78
Elongation (%)		4.1	4.4	4.2	4.4
Flexural max strength (MPa)		68.5	69.2	49.4	55.8
Water absorption	ISO 62	0.28%		0.30%	
Resistance against water, acids & bases	-	Excellent			

PACKAGING

Available kits :

- 1.5 kg : (1+0.5) kg
- 6 kg : (4+2) kg
- 15 kg : (10+5) kg
- 30 kg : (20+10) kg
- 300 kg : (200+4x25) kg

TRANSPORT & STORAGE

Keep containers sealed and away from heat and cold preferably between 10°C and 30°C in a well ventilated area. Our products are guaranteed in their original packaging (check expiry date stated on the label).

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.