

Decorative resins



The METACONCEPT Group offers a wide range of products designed for the jewellery and silverware markets. Besides alloys for casting, centrifugal casting equipment and silicones for manufacturing, we also offer enamels used for decorative purposes in arts and crafts work as well as the materials necessary for applying decorative resins to your chosen base.

Characteristics

Decorative resin (epoxy) is a bi-composite enamel + catalyst (hardener).

For all enamels, we recommend using a furnace for curing (hardening of the enamel) to prevent warping.

After hardening in the furnace, the enamels must remain at room temperature for 24 hours.

All enamels, except for the 9005 TR FLEX, can be mixed together.

We recommend mixing only the minimum required quantities to prevent waste.

Storage period: 12 months in dry conditions away from direct sunlight.

Have you defined the type of application? [Contact us](#). Our technical staff will be happy to assist you in choosing which equipment and materials to use.

Types of enamels	Composition	Comments	Instructions for use
Standard series	Epoxy resin base	CO (matt) – TR (translucent). The most commonly used enamels (90% of applications). For use with the 9085 TR catalyst.	Mix the enamel and catalyst in the following proportions: 100 g of enamel + 40 g of the 9085 TR catalyst
EXTRA transparent series	Epoxy resin base	Resistant to abrasion It is shiny and is very pure. For use with the 9085 TR EXTRA hardener.	Mix the enamel and catalyst in the following proportions: 100 g of 9005 TR EXTRA enamel + 40 g of 9085 TR extra catalyst
FLEX transparent series	Epoxy resin base	It is used to varnish and protect flexible elements. After applying the hardener, the resin becomes shiny and flexible.	Mix the enamel and catalyst in the following proportions: 100 g of 9005 TR FLEX enamel + 40 g of 9085 TR FLEX catalyst
FLEX ANTI UV transparent series	Epoxy resin base	Only the 9005 TR FLEX ANTI UV (ultra-violet rays) transparent coating is produced as part of this series. It has the same characteristics as the FLEX enamel and also has a high resistance to UV rays whilst retaining the same transparency, It doesn't yellow.	Mix the enamel and catalyst in the following proportions: 100 g of 9005 TR FLEX N enamel + 40 g of 9085 TR FLEX N catalyst
ANTI UV transparent resin series	Epoxy resin base	Only the 9005 TR ANTI UV transparent coating is produced as part of this series. It is a totally colourless enamel that retains its transparency over time. It has excellent temperature resistant properties and can therefore be used with machinery (sanding, polishing, laser etching, etc.).	Mix the enamel and catalyst in the following proportions: 100 g of 9005 TR FLEX ANTI UV enamel + 40 g of 9085 TR LENT and/or 9085 TR TIXO catalyst
Z series	Epoxy resin base	All NICEM enamels can be supplied as Z versions. These are hard enamels that are resistant to high temperatures and UV rays and which can be sanded, polished, engraved and lasered. Z series enamels are also used as bases in hot image stamping procedures (thermal transfer or thermal sublimation).	Mix the enamel and catalyst in the following proportions: 100 g of enamel + 40 g of 9085 TR LENT and/or 9085 TR TIXO catalyst
CO and TR fluorescent series	Epoxy resin base	These are enamels with the typical behaviours of fluorescent substances. When hit by electromagnetic radiation (light), they emit a particular luminescence, giving a highlighter effect. This effect disappears as soon as the stimulating radiation stops. They are available in normal or Z version.	Mix the enamel and catalyst in the following proportions: 100 g of enamel + 40 g of the 9085 TR catalyst
Phosphorescent series	Epoxy resin base	Only the 7032 FO enamel is produced as part of this series (yellow/green colour). This enamel has the typical behaviour of phosphorescent substances; when hit by electromagnetic radiation (light), it emits a particular luminescence, giving a highlighter effect.	Mix according to the instructions for the "normal series"
Metallised and metallised Z series.	Epoxy resin base	These are enamels that have a metallised effect and are available in standard and Z versions.	Mix the enamel and catalyst in the following proportions: 100 g of enamel + 40 g of 9085 TR LENT and/or 9085 TR TIXO catalyst
Special series GLITTER	Epoxy resin base	These are colourless enamels (transparent) mixed with different sized and coloured (silver and gold) GLITTER (small iridescent fragments).	Mix according to the instructions for the "normal series"

Available equipment and accessories

Designation	Characteristics	Comments
Heated table for resin application	With or without accessories	The heated table has been designed to ensure a very precise application of resins and good productivity.
Heated plate	With or without distributor	For special conditions (limited space, sampling), we offer a heated plate with a small manual distributor (500 x 500 mm). This economical solution offers all technical production features.
Resin distributor	Manual or automatic	The components of this machine have been designed to simplify the application of resins, glues and solder pastes on complex-shaped objects. A wide range of interchangeable syringes are available for all types of applications.
Resin distributor	Automatic, drip-free version	The components of this machine have been designed to simplify the application of resins, glues and solder pastes on complex-shaped objects. A wide range of interchangeable syringes are available for all types of applications.
Furnace FOS 200	4 tablets supplied with the furnace	For drying the enamels after application to their bases
Active carbon filtration system	220 V – 50 or 60 Hz with 3 suction nozzles	Used to filter vapours produced by the FOS 200 furnace and the resin application table.
MP200 cabinet	14 shelf capacity	For work preparation
Cylinder, syringe and adaptor	10 cc – 30 cc – 60 cc	Depending on the application.
Tapered needle	0.5 – 0.6 – 0.7 – 0.8 – 0.9 – 1.1 – 1.2 – 1.6 mm	Depending on the application.

Applications

These decorative resins are mainly used in **ornamental and artistic applications** on metallic (gold, silver, etc.) and non-metallic objects (crystals, glasses, plastic, wood and diamante). Their aesthetic and mechanical properties impart a very high quality to the treated enamels in terms of the brightness of the colours, resistance to abrasion and elasticity.

Implementation

The product safety information sheet below is available upon request from the METACONCEPT Group.

The implementation process is specific to the characteristics of the part being produced, [Contact](#) the METACONCEPT Group's technical department who will advise which enamels to choose.

Precautions for use

To prevent burns caused by the molten metal, it is advisable to wear a protective apron, shoes, gloves, helmet and glasses.

Do not smoke at the workstation.

The workstation must be well ventilated.

Wash your hands when leaving the workstation.

Comments:

Always use a flux suited to the intended use. [Contact our technical department](#) to ascertain which product is most suited to your application.

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