

## ENCLOSURE TO RESIN COLOUR CARD

**INTRODUCTION**

The wide range of epoxy resins shown in the colour card needs for decorative applications on **metallic items**: such as gold and silver jewellery, costume jewellery, buckles and on **non-metallic items** made in crystal, glass, plastic and wood.

These enamels are of high quality, both in terms of aesthetic appearance and colour and also in respect of their elasticity and abrasion resistance. In many cases they may be finished and polished without damaging adhesion.

The colour card depicts three types of two-component epoxy enamels with differing applications and characteristics, also various additives and ancillary products.

**CHARACTERISTICS AND APPLICATIONS****ENAMELS TYPES****1 - Type "NORMAL" enamels**

This is the most commonly used type. Designations end with **CO** (matt) **TR** (transparent) - for ex.: 9005 CO, 9085 TR.

**2 - Type special "EXTRA" enamels**

Their designations end with additional "EXTRA". It is used only transparent **9005 TR EXTRA** with hardener **9085 TR EXTRA**, due to its high resistance to abrasion, to its brilliance and purity.

**3 - Type special "FLEX"**

This is used to glaze and protect flexible ornaments as advertising adhesives. After hardening, the enamel remain bright and flexible, although it maintains a fine brilliance.

It is available only transparent colour **9005 TR FLEX** and hardener **9085 TR FLEX**.

**4 - Additives and ancillary products**

They give special effects to enamels and are used for solving applications and mixing problems.

**INSTRUCTIONS FOR USE****1 - Type "NORMAL" enamels**

Mix the enamel with the hardener **9085 TR** in the ratio: **100 grammes of enamel to 40 grammes of hardener 9085 TR**.

The hardening varies with temperature:

15 - 20 °C = about 8 hours

60 - 70 °C = about 2 or 4 hours,

changes according to enamel masses/piece. It is advisable to mix the quantity necessary to avoid waste. Mix only a quantity which can be applied from 15 to 30 minutes, as after this time the resin starts to set. Do not use thinner to extend this time, as this changes the chemical and physical characteristics of the resin. It is possible to blend colours to obtain new tints.

**2 - Type "EXTRA" enamels**

The same instructions as for the "NORMAL" enamels (1); it is possible to mix **NORMAL** and **EXTRA** resins to obtain intermediate characteristics.

**3 - Type "FLEX" enamel**

Mix enamel **9005 TR FLEX** in the ratio: **100 grammes of enamel + 60 grammes of hardener 9085 TR FLEX**

Hardening time is the same as for the **NORMAL** type.

Drying time is 45 minutes at 80 °C

These enamels are available only in transparent.

**ANCILLARY PRODUCTS AND ADDITIVES****9050 TR Mother of pearl enamel**

This may be used neat or mixed with transparent resins to give alternative effects.

**9051 CO Mother of pearl paste concentrate**

If mixed with enamel, gives a veined effect.

**9052 CO Mother of pearl powder concentrate**

This may be mixed with enamels (for ex. 20 g per kg of enamel), to give a "pearlised" effect.

**9080 TR Homogenizing additive**

This is used in the ratio 1-2 % to eliminate air bubbles and colour striping (above all by mixing different colours); it used for flatness.

**9081 TR Softener additive (ex 736 TR)**

This is used to give more elasticity. Ratio: 80 g enamel, 20 g 9081 TR + 40 g hardener.

**9085 TR TIXO Thixotropic hardener**

This is used to enamel curved pieces. This product, used in the same ratio as 9085 TR, is thixotropic, that is to say that it becomes liquid if shaken and it turns again doughy if be at rest. For its use **shake the tin, and the percentage of hardener to be used must be 40% of the quantity of epoxy resin**, then mix the hardener with the enamel and apply on the pieces to be enamelled. Before placing the pieces in the oven, leave the pieces there to be able to get a doughy consistency (10 minutes).

**9085 TR LENTO Slow hardener (ex 260 L)**

It can be used with normal enamels: **100 g of enamel, 40 g of hardener 9085 TR LENTO**. It is completely colourless, time does not yellow this hardener and this gives extra mechanical strength to the finished result. The hardened items with 9085 TR LENTO present an optimum compromise among toughness, hardness and elasticity. **Enamels mixed with this hardener cure only in a drying oven.** Con il Hardening at a room temperature do not develop its properties: working time is greater of 50% than the mixing with hardener 9085 TR.

**9091 TR Cleaner**

This is for removing the enamel from workpieces. It is best used by immersing the items to be cleaned in a bowl or other container. The tin containing the product **must be kept closed** with an hermetic cover (or a water layer) to avoid evaporation losses.

**9095 TR Thinner ETG**

This is used to reduce the viscosity of the **mixed enamel/hardener**, and should be added up to a **maximum proportion of 5%** after the resin and hardener have been mixed. It does not affect during hardening so that its molecules do not bind to the molecules of enamels by decreasing its mechanical characteristics. It is added after the mixing Enamel/Hardener. Setting and curing times tend to be extended.

**9096 TR Thinner BOH**

Use of this product enhances the fluidity of enamel by adjusting the **chemical reaction between the hardener and the enamel**; but does not affect the mechanical properties. Use up to a maximum proportion of 5%.

**9901 Dermoprotective**

Protective spray for application to hands before enamelling. Shake before use.

**STORAGE**

Life of enamels and hardeners life, if kept in closed tins, is two years. Hardeners, with a extended air contact, react with CO<sub>2</sub> and become unsuitable for use.

**ATTENTION**

Observe instructions and hazard warnings on the labels and ask for safety cards.