

# RIO FLOW TECHNICAL DATA SHEETS



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The RIO FLOW epoxy system is developed for thicker pours and encapsulation of objects.



## **Typical Properties**

Property	<b>Rio Flow A</b>	<b>Rio Flow B</b>
Appearance	Liquid free from suspended	Liquid free from suspended particles
Viscosity cPs	700 – 1,000	20 – 50
Specific weight @ 25 °C	1.13 – 1.15	0.99 – 1.03

#### Uses and applications

Its use is recommended for thick pours and decorative encapsulation where brightness and dimensional stability is desired or required.

#### Surface preparation

Wood or any other materials that are in contact with the resin must be perfectly dry, free of contaminants.

The use of the a sealant and surfacer is recommended to fill irregular cavities of wood, cracks or knots of wood.

It is recommended to remove knots entirely (to avoid bleeding of resin and possible faults in the finished appearance).

Sand the contact surfaces so they are uniform and to avoid poor adherence areas or splinters caused by the cut.

It is recommended to apply an epoxy sealant, to fill pores that could catch air bubbles while pouring.

Eliminate all presence of oil and grease from the surfaces.

Fix the wooden pieces to the mold, either by mechanical means or silicone sealant.

Check levelling to ensure an even distribution of the pour.

## Application

Calculate the amount of material to be used per cast at a recommended approximate thickness of 1.5".

Prepare the RIO FLOW RESIN "A" / RIO FLOW HARDENER "B" mixture in a 3:1 ratio and stir until a uniform mix is achieved.

# Recommendations and Application Precautions

Due to its characteristics of low exotherm and almost no contraction, this system can be applied in castings with a recommended thickness of 1.5 inch., in order to ensure adequate levelling and avoid over heating that may result in pours thicker than 2.5" and causing possible wood deformation and entrapment of bubbles. You can add a few drops inks or pigment powder, to attain the desired colours and shades.

Before pouring it is recommended to place the mix in a clean container and to lightly stir it to ensure that the mix is uniform, particularly from the mix that was in contact with the surface of the mixing container.

Pour the mix at a single point and avoid spreading it over the entire surface in order to allow the product to displace air as it flows.

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Properties	<b>Rio Flow</b>
Viscosity of the mixture @ 25 °C, cPs	180 – 220
Specific weight mix g/cm3	1.06 – 1.09
Shore D hardness after 48 hours	77 – 79
Handling time hours	5 – 6
Curing time, hours	48 minimum

To ensure good adhesion between castings and avoid contraction, it's recommended to perform the next pour in 24 hrs. Repeat until the required thickness is achieved.

If the piece is to be polished, it's recommended to do so 48 hrs. after the last pour.

#### Mix Ratio

Product	Parts by weight
Rio Flow A	3
Rio Flow B	1

#### Curing

The curing cycle of the RIO FLOW system should take place at room temperature after 48 hours of application, obtaining its maximum properties 7 days later.

## Availability

RIO FLOW kits are available in different volume sizes.

#### Storage

Containers should be stored in a dry place, away from sources of moisture, heat or fire and protected from the weather. They must be tightly capped and should not present bumps or dents to avoid spillage and product contamination.

## Expiration

RIO FLOW "A" and RIO FLOW "B" have an expiry time of 12 months if storage recommendations are followed.

#### Important note

Information and data included in this technical data sheet has been obtained in tests performed in our laboratory and is considered accurate and reliable. We cannot guarantee the same quality and performance results of our products if they're used following different parameters.

Multiple factors can and will affect the performance of our products and epoxy resins in general such as the skill or technique of who uses them, weather, proper mix to name a few.

We recommend that if you want to use our products in a different way than recommended or in case you have any questions related to the characteristics, safety and / or recommended use of our products please contact us at:

#### Personal protection equipment



#### Precautions

Keep containers tightly closed in a cool dry place, away from direct sunlight and heat sources. Use in a well ventilated area. Avoid contact with skin and eyes, in case of contact with skin wash with soap and water.

#### artistexperience@resinartflow.com or

1-800-956-5754.

Please provide the name, lot number that comes in the packaging of the product and corresponding invoice number.

The use and effects the use of Resin Art Flow products is the sole responsibility of the buyer and/or user.