

EP- ART RESIN (Multi Use)

Clear Crystal Epoxy Resin for Different Art Works

DESCRIPTION:

- EP- ART RESIN (Multi Use) is a 100% reactive, crystal clear, optical quality, self-leveling epoxy resin with excellent UV resistance. Its low viscosity and medium curing time make it suitable for smaller or thin layer casting such as jewellery, 3D resin-art, gaps, knots/wood inlays and more with thickness up to 20 mm.
- EP- ART RESIN(Multi Use) has been formulated for maximum compatibility with a wide range of substrates and mould materials and is particularly suited for casting into and alongside wood, where it can be used to create stunning pieces of wood and resin jewellery. It can be used to create small objects such as coasters, to fill in cracks or wood engravings, as a topcoat on canvas, countertops, and bars, or as a seal coat/flood coat on tables. It is also ideal to encapsulate small objects.
- **EP- ART RESIN(Multi Use)** can be mixed with pigment and mica powders, glitter, glow-in-the-dark pigments, resin dyes and tints.
- EP- ART RESIN(Multi Use)has mixing ratio 2.5A: 1B with low viscosity, and medium pot life reach to 150 min at 22-24 °C.

USES:

EP- ART RESIN (**Multi Use**) can be used in the following:

- Clear or tinted wood and resin jewellery.
- Casting clear, and pigmented blanks with embedments.

- Poured in multiple layers to produce a beautiful 3D effect.
- Thick counter-tops with embedded objects
- To create rivers, oceans, lakes, trenches, waterfalls, puddles.
- Crafts and Hobbies
- Collectible and model making
- Encapsulated Objects
- Decorative Art Pieces
- Custom Furniture

FEATURES AND BENEFITS:

- ➤ Self-Leveling
- Crystal Clear
- > Excellent Air Release
- ➤ Easy-To-Use
- ➤ 100% Solids
- ➤ No VOC's
- ➤ Safe For Incidental Food Contact
- ➤ No Odor
- ➤ Scratch and Impact Resistant
- > UV Resistant
- > Extremely Durable
- ➤ High Gloss
- ➤ Blush Resistant
- ➤ Water Resistant.

SURFACE PREPARATION:

- Surface should be clean and dry. Casting epoxy, molds, and items to be cast should all be at the same temperature. If using wood, it should be clean and dry and free of excessive internal moisture.
- Properly cover or mask surrounding areas to protect from spilled or dripped epoxy.



MIXING:

- Mixing: For best results product should be used at 20-24°C. Combine the Part A Resin and Part B Hardener in a clean container, at the proper 2.5A to 1B mix ratio by weight.
- It is very important the proper mix ratio is followed. Mixing a different ratio could cause product to not cure properly and lead to tacky areas or product failure.
- Mix product using a clean mixer or stick for 3 − 5 minutes. Be sure to mix gently so that excessive air isn't incorporated during mixing.
- Transfer mixed material into another clean container and mix for an additional minute.
- The table below can be used to look up some common mix sizes.

Mixing Ratio Examples		
Total	Resin -A	Hardener- B
50gm	35.7gm	14.3gm
100gm	71.4gm	25.6gm
250gm	178.6gm	71.4gm
500gm	357.15gm	142.85gm
1kg	714gm	256gm
1.5kg	1071.4 gm	428.6 gm
3kg	2143 gm	857 gm
5kg	3571 gm	1429 gm
7.5kg	5357gm	2143gm
10kg	7143 gm	2857 gm

eP- ART RESIN (Multi Use) in common with all epoxies, generate heat as part of the curing process. In order to ensure that the resin does not overheat during mixing and curing, it is essential to make sure you stay within strict limits of ambient temperature, time-in-pot and pour depth, as well as avoiding localised overheating from direct sunlight, nearby radiators or heat guns/hair dryers. Failure to do so could result in damaged resin, or in extreme cases, resin smoking or igniting.

• The recommended working temperature for **EP-ART RESIN(Multi Use)** is 20-24°C. When working in higher ambient temperatures, pay attention to the reduced pot-life and maximum pour depth.

INSTALLATION:

- SEAL COAT: It is best to determine if your surface needs a seal coat before starting your project. Seal coats are important because porous or rough surfaces may lead to excessive air bubbles. Seal coating the surface will help prevent air bubbles from attaching to the surface. EP-ART RESIN (Multi Use) can be used as the seal coat. Porous or unsealed wood such as tabletops, bars, hardwood, knotty wood or other types of wood should be sealed before applying flood coat. When pouring over aluminum, copper, stainless steel, plastic laminate (like Formica®), or other non-porous surfaces a seal coat is not needed.
- EMBEDMENTS: Just as with the surface preparation, it is important to ensure that any materials that are going to be embedded within the resin, such as pennies, crushed glass, bottle tops, corks, leaves etc. are thoroughly dry. Any embedments may also require being glued or fastened down to stop them floating in the resin once it is poured.
- Prepare the Sealing Coat for the Next Pour.

It may be possible to pour the next layer as soon as the sealing coat has reached the B-stage, this can be tested by pressing a gloved finger on to the resin, you should be able to indent the resin but no residue should stick to the glove. If the Sealing Coat has fully cured it is necessary to key the surface to ensure a strong bond between layers. To do this you will need to 'Key' the surface of the sealing coat using some coarse abrasive paper. Use a sheet of coarse abrasive



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paper (such as P200) to 'key' or scratch the entire surface. Don't worry that the surface then looks scratched and light in color - this will disappear as soon as the next layer of resin is poured. Ensure that the surface is cleaned thoroughly after keying and any dust and dirt removed before moving on to the next step.

• The Resin Pour

Ensure your work area is as free of airborne dust as possible. Ensure the ambient temperature is between 20°C- 24°C.

IMPORTANT: Maximum casting thickness for **EP- ART RESIN(Multi Use) is 2**0mm per layer. If you are creating a layered piece, for example a 3D Resin Art piece, it is advisable to pour clear and pigmented layers in sequence to add depth and create 3D effects. Around 10 minutes after pouring the resin, take a careful look over your casting. If any trapped air bubbles still persist, you can use a heat-gun or gas blow torch lightly over the surface of the resin to lift any remaining air bubbles out of the resin. Once you are happy with the casting, cover it as soon as possible to prevent any airborne dust or contamination from landing on the surface. Once the resin has reached the B-stage, mix and pours the next layer, re-cover the piece and leave to cure to the Bstage if more layers are needed or leave to fully cure if complete. When the surface is fully cured (this is likely to be up to 36hrs), depending on the ambient temperature it can be handled and demoulded. Please note that the resin will continue to harden to full strength over a period of 7 days.

Polishing, Finishing & Shaping

Once fully cured, **EP- ART RESIN(Multi Use)** can be shaped, flatted and polished up to a full gloss finish. This can be particularly effective in

creating soft, radiused edges on cast surfaces such as wood and resin jewellery or when flatting the cast surface to be perfectly flush with the surrounding material, such as a flat table surface when filling surfaces of reclaimed wood. To flat and finish EP-ART RESIN (Multi Use), follow standard flatting and polishing techniques of working up through the grits of abrasive paper until you reach around P1000 grit before changing to a polishing compound and power polisher for the final gloss finish. This process can also be followed to restore surface scratches and dulling from continual use or alternatively you could coat the surface with EP-ART RESIN (FAST) . You will now have a stunning casting that with care will last for many years, amazing family and guests alike. If over time the surface picks up minor scuffs and scratches these can be polished out to restore the original high gloss finish.

TECHNICAL PROPERTIES

Appearance: A	Visual	Clear viscous
	observation	liquid
Appearance: B	Visual	Clear liquid
	observation	
Peak Exotherm		
Temperature (1.5		90 °C
kg casting)		
Working Time		10-30 min
Limit		
Tacky to Touch		2-4 hours
Period		
Demolding Time		3 days
Full Cure		7day
Shore D Hardness	ASTM	80-85
	D2240	



PACKAGING:

- Kit A+B = 1kg
- Kit A+B = 5 kg
- Kit A+B = 16 kg

CLEAN UP INSTRUCTIONS:

EP- ART RESIN (**Multi Use**) should be removed from tools and equipment with solvent such as acetone, nail polish remover or denatured alcohol immediately after use. Hardened material can only be removed mechanically.

SHELF LIFE / STORAGE:

Shelf life is 24 months when stored in factory-sealed containers indoors at (15°C to 27°C) for Base and Activator. Keep containers tightly sealed.

- DO NOT FREEZE. Keep away from sparks or flames.
- Do not place containers against an exterior wall or on the floor.



ENVIRONMENTAL & SAFETY PRECAUTIONS:

- Keep out of reach of children.
- Ensure good ventilation during application and drying.
- In case of skin contact, wash with soap and water or a recognized skin cleaner.
- Avoid contact with eyes In case of contact, rinse eyes immediately with plenty of water and seek medical advice if symptoms persist.
- Harmful if swallowed. Do not induce vomiting.
 Seek medical attention.
- Flammable. Store in a cool dry place away from heat and sparks
- For further information check the Material Safety Data Sheet.