HANDOUT FOR THE VIDEO "The Resin Medium"

I hope you were able to take away some valuable insights for yourself and your art from my video, *"The Resin Medium."* Since it can be hard to remember everything, I've put together this handout with all the key information for you.

WHAT IS RESIN?

Resin refers to what is known as **synthetic resin**. It has a distinctive, **high-gloss finish** and offers a **wide range of applications**. Synthetic resins are widely used in industry, including automotive manufacturing and boat building. In art, we use the highest-quality type of synthetic resin: **epoxy resin**. Epoxy resins are two-component systems consisting **of resin and hardener.**

The term "resin" is used in two different ways:

• **Resin** – the individual component, the resin itself

• **Resin** – a colloquial and trend-based term for the finished mixture of resin and hardener

I use the term the same way throughout this handout, and it's easy to tell the difference:

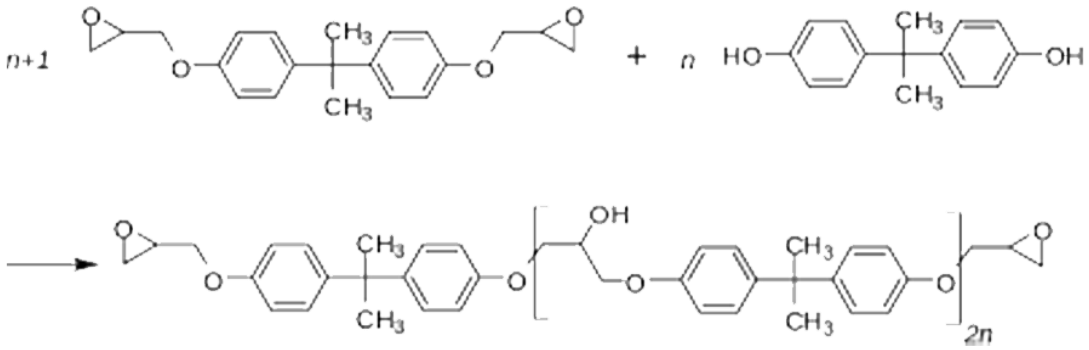
• When referring to technical data for selection, purchasing, and mixing, **resin** means the individual component - the resin itself.

• When referring to application and working with the material, **resin** always means the finished mixture of resin and hardener.

THE CHEMISTRY

Epoxy resin is a **high-quality plastic**. It is made of so-called **polymers**, meaning it is a chemical substance composed of many **molecules**.
Epoxy resin is created through **a chemical reaction** that occurs when **resin and hardener are combined**. Once cured, this plastic can no longer be reshaped.

For this reason, it is also called a **thermosetting plastic**. This also makes epoxy resin an **excellent adhesive**, as it becomes extremely difficult to remove once it has set.



CRITERIA FOR BUYING RESIN

Criteria:

- Crystal Clear
- Free of **volatile organic** compounds (no VOCs)
- Solvent-free
- Certified according to **ASTM D4236** (tested for safety)
- Low odor
- **Non-flammable**
- Contains **UV stabilizers** (absorbers and HALS) to prevent yellowing

When buying resin, make sure to ask for both the **safety data sheet** and the **technical data sheet**. They contain all the relevant information you need..

WHAT ARE THE DIFFERENCES?

Here's a brief overview of how resins can differ:

- **Viscosity** – Viscosity refers to the **thickness of a liquid**. The higher the viscosity, the thicker the resin.

- **Working time** – The amount of time you have to work with the resin before it starts to set. This is also called the **pot life**.

- **Curing time** – The time it takes for the resin to fully **harden.**

- **Heat resistance** – The resin surface can **withstand certain temperatures.**

- **Scratch resistance** – Once fully cured, the resin surface offers a certain level of scratch resistance.

Resins also differ in their mixing ratios. The resin and hardener are usually mixed in a **1:1** or **2:1** ratio.

If you're a beginner, I recommend using a resin with a higher viscosity, such as **MASTERCAST 1-2-1**. Higher viscosity makes working with the **pouring technique** easier, especially at the start, because the thicker resin won't flow away as quickly.

For multi-layer projects, you can also combine different resins. Make sure each layer is **fully cured** before applying the next.

I hope you have fun experimenting!

Yours,