



Resoltech WWA is a unique epoxy system formulated for decorative applications and castings. It is totally clear, UV stabilized, not solvated and compatible with glass. Excellent optical properties. No shrinkage.

PREPARATION

WWA can be used for casting decorative parts or inside glass containers. It features a long working time, ease of use and low exothermy.

MIXING

Unlike most epoxy systems, WWA has a variable mixing ratio. Mixing is critical and must be accurate.

BY VOLUME:

2 parts of WWA or WWAS resin for 1 part of WWB hardener will provide a hard casting once cured. This is suitable for castings on their own.

1 part of WWA or WWAS resin for 1 part of WWB hardener will provide a soft casting once cured. This is suitable for castings inside a glass container.

It is possible to choose any ratio between 2 and 1 depending on the application.

Pour the hardener first and then the resin. WWA is a slow system, WWAS is a faster system.

Both liquids must be thoroughly stirred manually or mechanically. It is important to mix the correct quantity at a time as epoxy systems tend to exotherm when kept in a container. The mixture must be homogenous in order to provide optimal optical results.

APPLICATION

WWA can then be poured into a mould. The mould can be a hard mould or made of silicon. Moulding can be carried out by gravity or under vacuum. WWA does not trap air easily and does not heat up when used properly.

Temperature should be between 18 to 25°C. Humidity level below 70%.

Pot life is as follow for a 500g mix at 22°C:

2+1 MIX:	10 Hours with WWA	1 H with WWAS
1+1 MIX:	24 Hours with WWA	3 H with WWAS

The hard mix (2 to 1) will provide a hard casting, suitable for the manufacture of fancy shapes, decorative items, etc. The soft mix (1 to 1) is suitable for castings in glass containers. The resin will then absorb the dilatation of the glass.

Should a new mix be applied onto cured resin, the contact surface should always be sanded in order to enhance adhesion.

CURING

Parts can be released after the following time at 22°C:

2+1 MIX:	19 Hours with WWA	8 H with WWAS
1+1 MIX:	72 Hours with WWA	15 H with WWAS

PHYSICAL & MECHANICAL PROPERTIES

Properties given for a temperature of 22°C.

WWA and WWAS resins:	Clear liquid, viscosity of 1,000mPas.	
WWB hardener:	Clear liquid, viscosity of 150 mPas.	
Mixture:	Clear liquid, viscosity of 300 to 450 mPas.	
Mixture density:	1.1.	
Hardness:	95 Shore D (2+1 mix).	70 Shore A (1+1 mix).
Elongation at break:	8% for the 2+1 mix.	98% for the 1+1 mix.
Tensile strength:	66 MPas (2+1 mix).	18 MPas (1+1 mix).
Flexural strength:	105 MPas (2+1 mix).	15 MPas (1+1 mix).

The optimal mechanical properties will be reached after 21 days at 20°C or 15H at 60°C.

TROUBLESHOOTING

PROBLEM

Cloudy or solid state
In container

CAUSE

Storage below 10°C.

Uncured after 24 to 48 hours	Wrong mixing ratio and/or low temperature.
The mixture gets hot	High temperature and/or too much mixture was prepared.
Air bubbles are entrapped	Mixing was too fast and did not have time to release air.
Sticky, greasy surface	Humidity level is too high.
The glass container breaks	Dilatation problem, use the 1+1 mix or close.
The casting does not stick To the glass container	Container was not degreased or curing temperature is too high.

PACKING & STORAGE

WWA is available in packs of 2Kg, 4Kg, 60Kg and 400Kg.

Shelf life is one year in sealed containers as provided. Keep containers sealed and away from heat and cold.

HEALTH AND SAFETY

WWA is a modern formulation of the safest epoxy chemicals available. It is however advised to follow basic rules such as avoiding skin contact, wear masks when producing dust. Please read our standard health and safety sheet for more information.

In case of eye contamination, wash with water and seek medical advice.

More information is available on www.resoltech.com.

The data provided in this document is the result of tests and is believed to be accurate. We do not accept any responsibility over the mishandling of these products and our liability is limited strictly to the value of the products we manufacture and supply.

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