

TDS: TECHNIPLAST 3D-UVLS, TECHNIPLAST 3D-LC
 Issue: 01 June 2021
 Update: 27.05.2022
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TECHNIPLAST 3D-UVLS TECHNIPLAST 3D-LC

COLOURLESS EPOXY RESIN FOR MAKING SMALL AND LARGE CASTINGS, WOOD FLOODING, JEWELLERY WORK, ARTISTIC WORKS, MAKING GLASS AND CARBON LAMINATES, FOR THE PRODUCTION OF CONGLOMERATES.

TECHNIPLAST 3D epoxy resins are among the most technologically advanced products currently available on the market. By using a unique **resinplast**[®] technology, products with crystalline transparency and high resistance to light were created. The UV blocking and light stabilising LS (HALS) technology used in our resins makes them ideal for applications such as jewellery, small and large foundries, art, furniture industry, glass and carbon laminates, all types of conglomerates and many other areas where the highest quality products are required.

GENERAL CHARACTERISTICS:

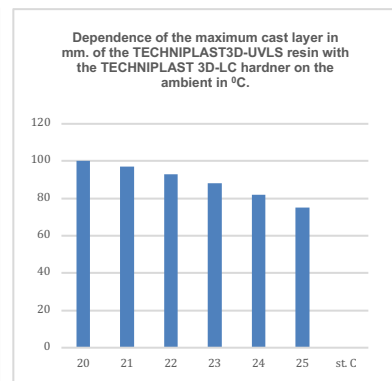
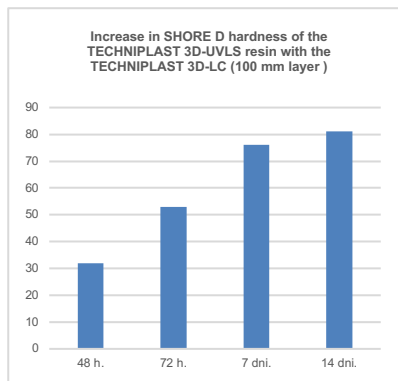
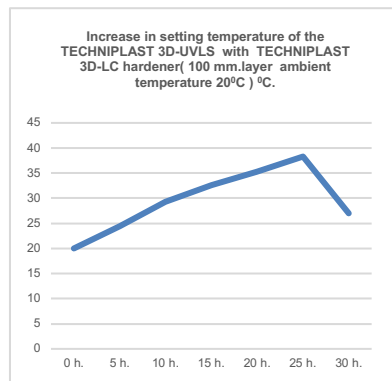
Excellent clarity.
 Long-lasting protection against UV radiation.
 HALS light stabilizer.
 Low viscosity without the use of solvents.
 Excellent spreadability.
 Can be poured up to 100 mm in one layer.
 Very low linear shrinkage.
 Easy to vent.
 High wetting power for substrates and fillings.
 Very low temperature rise during setting.
 Compatibility with many substrates and fillings such as wood, concrete, fiberglass, carbon fiber, natural and colored quartz, marble, granite, specialized dyes (series 3D-COLOR TR, 3D-COLOR PR, 3D-EFFECT).

PHYSICAL PROPERTIES:

TECHNIPLAST 3D-UVLS with TECHNIPLAST 3D-LC hardener

Mixing ratio (by weight)	100 : 40
Viscosity (mPa*s) 25°C	300 – 330
Density (kg/dm ³)	1,05
Curing time (dry touch) h.	24
SHORE D hardness:	
48 h.	~ 34
72 h.	~ 54
7 days.	~ 76
14 days.	~ 81
Max. setting temperature °C	40.4*
Max. single coat (at 20°C) mm.	~ 50*

* (measured in a polyethylene cylinder of diameter 80 mm with a 100 mm layer and an ambient temperature of 20°C)



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MIXING THE INGREDIENTS:

The most accurate method of measuring ingredients is the weighing method.

Once the correct amount of ingredients has been weighed and dosed, start mixing immediately.

Mixing quantities up to 1 kg can be carried out with a wooden spatula, whereas in case of larger quantities a slow rotating electric mixer is recommended (max. 300 rpm).

Mix the ingredients for at least 3 minutes and then pour the whole into a new clean container and mix again. Continue mixing until the mixture is completely homogeneous.

During the entire mixing process pay special attention to allow as little air as possible to get into the mixed components; this will greatly facilitate the process of venting the object to be flooded.

After mixing the ingredients, the mixture should be used immediately.

CURING:

In the case of casting resins, it must be remembered that a sufficiently thick layer can only be cast in one working cycle if the setting temperature is controlled. If the temperature rises too high inside the casting during setting, resin gasification may occur, the whole casting may turn yellow and the linear shrinkage will be too high.

TECHNIPLAST 3D resins have been designed to maintain the lowest possible temperature during setting, yet particular care must be taken during application and the entire setting process.

For example, when flooding wood (river table) you need to control the temperature inside the workshop room by ventilating and sometimes even using air conditioning.

When using TECHNIPLAST 3D for producing conglomerates highly filled with mineral fillers or for laminates with the use of glass or carbon fiber, long open time is a very convenient parameter. It allows you to quietly make a casting or laminate (infusion molding technique, vacuum, compression molding, spray lamination, hand lamination) and then subject it to elevated temperatures to accelerate the bonding process.

PACKAGING:

TECHNIPLAST 3D-UVLS

Bottles - 0,5kg, 1,0kg.

Canisters – 2,0kg, 4,0, 10kg, 20kg.

Container – 1000kg.

TECHNIPLAST 3D-LC

Bottles– 0,2kg, 0,4kg, 0,8kg.

Canisters – 1,6kg,

Containers – 1000kg.

STORAGE:

Store products in original packaging in a dry ventilated room at room temperature. In the event of crystallization, the material should be heated to 40 ° C and wait until the phenomenon has completely subsided. The situation does not affect the technical parameters of the material.

SAFETY/SECURITY:

Please refer to the material safety data sheet available at www.techniart.pl

FINAL NOTES:

The above information on the TECHNIPLAST 3D family of materials, and in particular on their proposed application areas and methods of application, has been given in good faith based on our current state of knowledge. The technical data cited above are based on laboratory studies and tests.

Due to the lack of control over actual conditions, method and quality of material application, TECHNIART stipulates that data contained in this technical data sheet, as well as oral advice not confirmed in writing, cannot constitute a basis for unconditional responsibility of the manufacturer.

With the issue of this sheet, previous versions are no longer valid.