



SCANDIPLAST

USER INFORMATION

INTENDED USE

Embedding specimen for materialographic polishing.

This leaflet describes the product regarding its properties and processing requirements.

SAFETY INSTRUCTIONS

Carefully follow the requirements stated in the Material Safety Data Sheet.

MATERIAL

SCANDIPLAST is a cold setting polyester resin. It consists of two liquid components:

- Resin SCANDIPLAST
- Hardener

The polymerised block has a green, transparent colour.

PROPERTIES

SCANDIPLAST can be poured for 5 - 6 minutes after mixing the components. SCANDIPLAST is well suited for vacuum embedding, using the SCAN-DIA VACUUMSET-UNIVERSAL. At room temperature (21° C) the material will cure within 30 – 60 min.

Using SCANDIPLAST implies simple handling. Curing does not require pressure or heat. Cured SCANDIPLAST is considerably hard and abrasion resistant. SCANDIPLAST can be ground and polished easily. Respecting the material properties SCANDIPLAST will give excellent bonding to the specimen. SCANDIPLAST is resistant to acids and solvents. Being a duromer it can not be dissolved chemically.

In order to achieve especially hard surfaces and improved edge definition, the hardness adjustor AEQUIDUR can be added. AEQUIDUR is available in three levels of hardness: S – soft, M – middle and H – hard. Using AEQUIDUR, the hardness can be adjusted in the range between aluminium and carbide metal.

PROCESSING

Good cleaning and degreasing, preferably with acetone, is necessary to ensure effective bonding.

Silicone rubber moulds are recommended for embedding. SCAN-DIA's SCANDIFORM moulds are particularly well suited for this purpose. Ensure that there is a 2 mm gap between the sample and the inside of the mould.

MIXING

MIXING RATIO

1 gram SCANDIPLAST (resin) and 1 drop of HARDENER.

SCAN-DIA recommends using the SCAN-DIA MIXING CUP (part-no. 91192) for dosing and mixing.

PROCEDURE

Pour first the resin then the hardener into the mixing cup. Stir with glass stirrer, until both components are thoroughly and evenly mixed (30 – 60 sec).

Note: No streaks of the hardener may be visible in the mixture. Let the mixture rest for appr. 1 min, so that any entrapped air bubbles can rise to the surface.

Pour enough SCANDIPLAST into the mould to form a 2 – 3 mm thick layer at the bottom. Using a pair of pliers, insert the specimen into the mould, slightly pressing it down into the bottom layer. Ensure that no air bubbles are trapped beneath the specimen.

Now fill the mould completely with SCANDIPLAST, leaving a 1 mm gap at the top. Caused by the chemical reaction, the temperature of the sample can reach 120 - 150° C while curing, depending on the size of the sample.

NOTE

Using SCANDIPLAST and proper processing, the silicone rubber SCANDIFORM moulds will not experience any wear.

To ensure maximum life-time, do not use SCANDIFORM moulds with changing embedding materials. Avoid using SCANDIFORM moulds that have been used with other embedding materials.

GENERAL INFORMATION

SCANDIPLAST (resin and hardener) should be stored in a cool, dry environment. Shelf life is min. 6 months if stored properly (20° C and well closed containers). Respect the 'use before date' which is printed on each container.

NOTE ON CLEANING THE TOOL (CUPS, STIRRERS, ETC.)

Clean all tools immediately after use by wiping them down with paper towels.

The product can not be chemically removed once cured.

The statements made here are based on our present up-to-date knowledge.

If, despite having followed the above instructions, the results are not to your complete satisfaction, please do not hesitate to contact us, as SCAN-DIA is at your disposal for any further assistance or information you may require.

THESE PRODUCTS MIGHT BE INTERESTING FOR YOU

EMBEDDING SET

useful accessoires for the cold mounting procedure



VACUUMSET-UNIVERSAL

small device for mounting or impregnating porous samples in a vacuum



SCANDIFORM

Silicon rubber embedding mould - rectangular



SCANDIFORM

Silicon rubber embedding mould - circular



AEQUIDUR

Hardness Equalizer



SCANDICLIP

plastic CLIP for fixing wires, pins, etc.



Our entire product range can be found at
www.scan-dia.com

