



UNI EN ISO 9001:2015
Quality System Certified Company



TECHNICAL DATA SHEET
PRODUCT

**COMPACT
QUARTZ**

**SPECIAL ADHESIVE
for QUARTZITE and NATURAL STONES**

NATURE OF THE PRODUCT

High mechanical characteristics combined with exceptional adhesive properties make **COMPACT QUARTZ** (adhesive derived from special compounds combined with unsaturated monomers forming hybrid resins, mixed with styrene monomer, thixotropic agents, stabilizers, mineral fillers) one of the best mastic that current technology can provide. The mechanical and adhesive characteristics are comparable to those obtainable with epoxy resins and for some aspects (thermal distortion, reaction kinetics) decidedly better. The alkali resistance (the mastic is resistant to saponification) and the oxidizing agents make the bonding made with **COMPACT QUARTZ** also suitable for washing with aggressive detergents (hypochlorites, degreasing detergents or solvents)

APPLICATION

COMPACT QUARTZ is suitable for permanent bonding, even in very difficult situations, of QUARTZITES, NATURAL STONES, GRES PORCELAIN TILES, CEMENT, IRON. Bonding between heterogeneous materials is also good.

PACKAGING

Set of 500 ml. (adhesive + catalyst)

PREPARATION

The best results are obtained by mixing the adhesive with 2-3% of catalyst (dibenzoyl peroxide). A homogeneous mixing promotes uniform catalysis. The catalysis rate is influenced by the temperature and the amount of catalyst / hardener. An excess of hardener increases the speed but weakens the "seal" of the putty. The surfaces to be treated must be clean and dry; porosity and roughness of the surfaces favour a better adhesion of the mastic. The hardened putty can be perfectly worked, polished, etc. after 2 to 5 hours from the hardening

PROPERTIES OF THE ADHESIVE (as supplied)

Viscosity and reactivity may slightly change during prolonged storage.

| Properties | value | unit | method |
|-------------------------|--------------------|-----------------|-----------|
| APPEARANCE | Paste | - | - |
| COLOUR | Whitish | - | DIN 6271 |
| NON-VOLATILE SUBSTANCES | 80 | % | DIN 3251 |
| STABILITY *** | 6 | months | - |
| DENSITY | 1,400 | gr/ml | DIN 53217 |
| FLASH POINT | 31 / 87.80 | °C / °F | DIN 53213 |
| EXPANSION CORFFICIENT | 8×10^{-4} | K ⁻¹ | - |

PROPERTIES OF THE HARDENER ADHESIVES (typical value) ***

| Propertie | value | unit | method |
|-----------------------------------|-----------|---------|-----------|
| TENSILE STRENGTH | 80-90 | Mpa | DIN 53455 |
| TRACTION ELASTIC MODULUS | 2900 | Mpa | DIN 53457 |
| ELONGATION AT TRACTION | 1,6 | % | DIN 53455 |
| ELONGATION AT BREAK | 3,1 | % | DIN 53455 |
| BENDING STRENGTH | 109 | Mpa | DIN 53452 |
| FLEXION ELASTIC MODULUS | 3010 | Mpa | DIN 53457 |
| HDT (HIGH DISTORTION TEMPERATURE) | 102 / 216 | °C / °F | ASTM D648 |
| VETREOUS TRANSITION TEMPERATURE | 115 / 239 | °C / °F | DIN 53455 |

*** data referred to pure resin



TEST

Always carry out a preliminary test, before using, to check the suitability of the product with the supports used and the degree of adhesion actually achieved in the specific conditions of use.

HARDENING TIME

| | | |
|--------------------------------------|---------------------------------------|----------------------------------------|
| 30°C / 86°F 5 to 7 minutes | 20°C / 86°F 8 to 11 minutes | 10°C / 50°F 17 to 22 minutes |
|--------------------------------------|---------------------------------------|----------------------------------------|

CHEMICAL RESISTANCE

% weight loss % disquettes after 21 days sinking at 25°C / 77°F

| Chemical aggressor | % |
|---------------------|-----|
| DISTILLED WATER | 1,4 |
| SODIUM HYDROXIDE | 1,1 |
| ACETIC ACID | 8,1 |
| HYDROCHLORIC ACID | 1,7 |
| METHYLISOBUTYLKETON | 3,2 |
| SODIUM HYPOCHLORITE | 2,4 |
| ETHANOL | 6,7 |

TEST OF ADHESION

Tensile strength (after 48 hours of hardening at 25°C / 77°F)

| Test | | SUPPORTS | | kg/cm ² |
|------|------------------|-----------------|------------------|--------------------|
| A | GRINDED MARBLE | <i>glued to</i> | GRINDED MARBLE | 55 |
| B | POLISHED GRANITE | <i>glued to</i> | POLISHED GRANITE | 45 |
| C | SYNTHETIC QUARTZ | <i>glued to</i> | SYNTHETIC QUARTZ | 62 |

During the A-B-C tests, the rupture of the support occurred (marble or granite or quartz) and not the resin / mastic

SAFETY

For all GENERAL products, the relevant safety data sheet is provided.

IMPORTANT

Always ventilate the rooms during use and in case of grouting, smoothing and consolidation of floors it is recommended to ventilate the rooms very well for at least 24 - 48 hours.

NOTE

There are many factors that influence the hardening process and many and varied are the applications of putty / adhesive; therefore the present information - which are based on bibliography, our studies and laboratory tests - must be understood as valid indications in principle and do not constitute a specific or a guarantee. The user is always required to verify, in each specific application, the suitability of the putty / adhesive with the required purpose.

LIMITATION OF LIABILITY The data provided derive from published information or from our own laboratory tests. The information provided here must be considered as a guideline and not as any form of performance guarantee. Liability for defective products, when verified, is limited to refund of the purchase price since application of the product is beyond the control of the manufacturer or supplier.

TESTING A SMALL, HIDDEN, AREA IS RECOMMENDED BEFORE THE APPLICATION