



HYDA CON
Innovative chemical solutions

Technical Data Sheet

HYDAFILLO MCF 12

Transparent stone treatment

ABOUT HYDAFILLO MCF 12

HYDAFILLO MCF 12 is a low-viscosity, extra-clear liquid resin formulated for gluing and filling white or translucent marbles such as Carrara, and similar stones. It is especially recommended for travertine and other porous stones where a transparent-filled finish is desired. The resin is highly stable under sunlight exposure, offers excellent clarity, and features very low shrinkage. Its formulation ensures good reactivity even at lower temperatures, making it suitable for a variety of environments and applications.

SURFACE APPLICATION MATERIALS

- | | |
|---|---|
|  Clear-White Marbles (e.g., Carrara) |  Travertine and Similar Stones |
|  Natural & Porous Stones |  Translucent Marble Surfaces |

RECOMMENDED SURFACES / SUBSTRATES

- | | |
|--|--|
|  Dry and Dust-Free Marble |  Polished and Porous Stones |
|  Indoor and Outdoor Stone works |  Travertine Slabs & Tiles |

APPLICATION AREAS

- | | |
|---|--|
|  Transparent Stone Filling |  Glue for Carrara Marble |
|  Surface Restoration |  Interior Stone Installations |

PRODUCT HIGHLIGHTS

- ❖ **EXTRA-CLEAR** – Provides a crystal-clear finish for aesthetic stone filling
- ❖ **LOW VISCOSITY** – Ideal for deep penetration and void filling
- ❖ **LOW SHRINKAGE** – Maintains bond and clarity after curing
- ❖ **SUN-STABLE** – Resistant to yellowing under UV exposure
- ❖ **GOOD LOW-TEMP REACTIVITY** – Effective even in cooler environments
- ❖ **COMPATIBLE WITH COLORING** – Can be tinted using pastes or metal oxides
- ❖ **EASY TO USE** – Simple mixing and application
- ❖ **MULTI-SURFACE** – Suitable for marbles, travertine, and other porous stones

TECHNICAL DETAILS

PROPERTY	TEST METHOD / CONDITIONS	HYDAFILLO MCF 12 VALUE
Viscosity at 25°C (20 r.p.m.)	ASTM D2196	310–410 cps
Density at 25°C	-	1.3 g/cm ³
Aspect	-	Light red transparent liquid
Mixing Ratio (Glue : Hardener)	-	100 : 2
Gel Time (Bulk) at 25°C	-	6–10 minutes
Tacky-Free Time (Thin Layer) at 25°C	-	Approx. 30 minutes
Recommended Working Time at 25°C	-	Approx. 85–95 minutes
Minimum Reaction Temperature	-	6°C
Minimum Service Temperature After Hardening	-	0°C
Maximum Service Temperature After Hardening	-	+115°C
Shelf Life at 25°C	-	7 months
Ultimate Tensile Strength	ASTM D638	60 MPa
Tensile Elongation	ASTM D638	>3%
Tensile Modulus	ASTM D638	4200 MPa
Flexural Strength (Breaking Load)	ASTM D790	120 MPa
Adhesion Strength after 2 hrs (25°C, Botticino polished)	ASTM D4541	3.8 MPa
Adhesion Strength after 24 hrs (25°C, Botticino polished)	ASTM D4541	6.0 MPa

APPLICATION INSTRUCTIONS

SUBSTRATE PREPARATION GUIDELINES

1. Ensure the marble or stone surface is clean, dry, and free of dust.
2. Remove required amount of resin from its container.

3. Add 2–3% liquid catalyst by weight to the resin.
4. Mix thoroughly until uniform and apply immediately.
5. For colored applications, add pigment before catalyst, then mix catalyst last.
6. Do not pour unused mixed resin back into the original container.
7. Store away from direct sunlight, moisture, and heat.

TOOL & EQUIPMENT CARE

- Use clean tools for mixing and application
- Clean tools with appropriate solvents like acetone after use
- Seal containers immediately after use to avoid contamination
- Do not expose product to prolonged air contact

.PRO TIPS & PRECAUTIONS

- ✓ Use gloves, safety goggles, and appropriate protective gear
- ✓ Refer to Safety Data Sheets for both resin and hardener before use
- ✓ Store **HYDAFILLO MCF 12** away from direct sunlight, moisture, and sources of heat
- ✓ Avoid ingestion, inhalation, and prolonged contact with skin or eyes
- ✓ Do not reuse or return mixed or unused resin back into the original container

PRODUCT SPECIFICATIONS & STORAGE GUIDELINES

AVAILABLE PACKAGING

- 1 Litre
- 5 Litres

SHELF LIFE

- Minimum 7 months when stored between 18–25°C
- Must be kept away from sunlight, moisture, and heat sources

STORAGE LIFE:

- Store in cool, dry, well-ventilated places
- Avoid exposure to extreme temperature variations
- Keep containers tightly sealed when not in use

SAFETY & APPLICATION GUIDELINES FOR HYDAFILLO MCF 12

1. PERSONAL PROTECTION

- Always wear gloves, goggles, and suitable protective equipment

2. EMERGENCY PROCEDURES

- Skin Contact: Wash thoroughly with soap and clean water

- Eye Contact: Rinse immediately with plenty of water and seek medical advice
- Inhalation: Move to fresh air and consult a doctor if needed

3. DISPOSAL

- Do not dispose of resin or catalyst in the environment
- Follow local environmental laws for chemical waste disposal

MAINTENANCE GUIDELINES

- Store correctly to retain product integrity
- Use calibrated pumps or weight-based mixing for accurate proportioning
- Avoid contamination between the resin and the catalyst
- Follow mixing instructions carefully to ensure optimal performance

PERFORMANCE LIMITATIONS

- Not suitable for wet or dirty substrates
- Do not use with copper, brass, or PVC-based application tools
- Always conduct a small patch test before large-scale use
- Product performance may vary based on ambient conditions (humidity and temperature)

End of TDS