MARIPUR® 7700

Aliphatic Polyurethane Coating
Transparent, Glossy, UV stable

Product description

The MARIPUR® 7700 is a premium, transparent, glossy, semi-rigid, one component aliphatic polyurethane coating with high impact and abrasion strength and very good UV stability, used for as a transparent top-coat for floor coating constructions or as a transparent concrete sealer.

Cures by reaction with ambient humidity (moisture cure).

Advantages

- Simple application (roller or airless spray).
- One component.
- Resistant to constant, heavy abrasion and wear conditions.
- Non-yellowing, UV stable.
- Gives a glossy and easy-to-clean surface.
- Does not show the chalking effect of aromatic polyurethane waterproofing coatings.
- Resistant to water and frost.
- Maintains its mechanical properties over a temperature span of -20°C to +90°C.
- The waterproofed surface can be walked on (public pedestrian traffic).
- Resistant to bacteria and fungus.
- Stops the creation of dust.
- Decorate the surface and improves the working environment.

Uses

The MARIPUR® 7700 is mainly used in floor coating applications, either as a transparent, UV stable, solvent based coating over polyurethane or epoxy coatings or as a transparent concrete sealer.

Due to its properties is widely used for decorative flooring applications in:
- Offices and Houses
- Retail Stores and Show Rooms
- Night Clubs and Restaurants
- Warehouses and Production Areas
- Hospitals and Healthcare Facilities, etc.

Consumption

Thin-layer top-coat: 100-200 gr/m² in one layer.
Concrete dust sealer: 300-400 gr/m² in two layers.

This coverage is based on practical application onto a smooth surface in optimum conditions. Factors like surface porosity, temperature, humidity, application method and finish required can alter consumption.

Colors

The MARIPUR® 7700 is supplied transparent.

Technical data*

<table>
<thead>
<tr>
<th>PROPERTY</th>
<th>RESULTS</th>
<th>TEST METHOD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Composition</td>
<td>Aliphatic moisture triggered Polyurethane polymer. Solvent based</td>
<td>DIN EN 1928</td>
</tr>
<tr>
<td>Resistance to Water Pressure</td>
<td>No Leak</td>
<td>DIN EN ISO 527</td>
</tr>
<tr>
<td>Elongation at break</td>
<td>&gt;50%</td>
<td>DIN EN ISO 527</td>
</tr>
<tr>
<td>Tensile strength</td>
<td>&gt;5 N/mm²</td>
<td>Inhouse Lab</td>
</tr>
<tr>
<td>Surface chalking after 2000h of accelerated aging (DIN EN ISO 4892-3, 400 MJ/m²)</td>
<td>No chalking observed.</td>
<td>DIN EN ISO 4628-6</td>
</tr>
<tr>
<td>Adhesion to concrete</td>
<td>&gt;2 N/mm² (concrete failure)</td>
<td>ASTM D 903</td>
</tr>
<tr>
<td>Adhesion to MARICOAT® 2000</td>
<td>&gt;1.5 N/mm²</td>
<td>ASTM D 903</td>
</tr>
<tr>
<td>Hardness (Shore D Scale)</td>
<td>30</td>
<td>ASTM D 2240 (15°)</td>
</tr>
<tr>
<td>UV accelerated ageing, in the presence of moisture</td>
<td>Passed - No significant changes</td>
<td>EOTA TR-010</td>
</tr>
<tr>
<td>Hydrolysis (5% KOH, 7 days cycle)</td>
<td>No significant elastomeric change</td>
<td>Inhouse Lab</td>
</tr>
<tr>
<td>Service Temperature</td>
<td>-20°C to +90°C</td>
<td>Inhouse Lab</td>
</tr>
<tr>
<td>Application Temperature</td>
<td>5°C to 35°C</td>
<td>Conditions: 20°C, 50% RH</td>
</tr>
<tr>
<td>Tack Free Time</td>
<td>1-4 hours</td>
<td></td>
</tr>
<tr>
<td>Light Trafficking</td>
<td>12 hours</td>
<td></td>
</tr>
<tr>
<td>Final Curing time</td>
<td>7 days</td>
<td></td>
</tr>
</tbody>
</table>
Application as Transparent Top-Coat

Surface Preparation
Careful surface preparation is essential for optimum finish and durability. The surface needs to be clean, dry and sound, free of any contamination, which may harmfully affect the adhesion of the coating. Maximum moisture content should not exceed 5%. Possible surface irregularities need to be smoothened. Any loose surface pieces and dust need to be thoroughly removed. The maximum time between the application of the Polyurethane or Epoxy Floor Coating to be transparently top-coated is 18-36 hours.

WARNING: Do not wash surface with water!

Top-Coating
Apply the MARIPUR® 7700 onto the previously applied Polyurethane or Epoxy Floor Coating surface by roller in one layer.

ATTENTION: Be sure to apply thin layers. Do not let coating pond.
ATTENTION: Change rollers every hour, especially in high temperature conditions (>25°C) as the MARIPUR 7700 tends to cure and then creates uneven steaks during application.

Application as Concrete Sealer

Surface Preparation
Careful surface preparation is essential for optimum finish and durability. The surface needs to be grinded with a stone- or a diamond-grinding machine. The surface needs to be clean, dry and sound, free of any contamination, which may harmfully affect the adhesion of the coating. Maximum moisture content should not exceed 5%. Substrate compressive strength should be at least 25MPa, cohesive bond strength at least 1.5MPa. New concrete structures need to dry for at least 28 days. Old coatings, dirt, fats, oils, organic substances and dust need to be removed by a grinding machine. Possible surface irregularities need to be smoothened. Any loose surface pieces and grinding dust need to be thoroughly removed.

WARNING: Do not wash surface with water! Do not use a metal-ball blasting machine to grind the surface, because the heavy metal-ball impacts destroy the cohesion of the concrete surface and lower its stability.

Repair of cracks:
Clean cracks and hairline cracks, of dust, residue or other contamination. Fill all cracks with suitable putty. The next day smoothen the putty surface with a sandpaper or a mechanical grinder.

Concrete Sealing
Make sure that the concrete surface to be coated was previously prepared (grinded and cleaned) and is according specifications. Apply the MARIPUR® 7700 by roller. After 2-4 hours (not later than 6 hours) apply the second layer.

For best results, the temperature during application and cure should be between 5°C and 35°C. Low temperatures retard cure while high temperature speed up curing. High humidity may affect the final finish.

WARNING: The MARIPUR® 7700 is slippery when wet. In order to avoid slipperiness during wet days, sprinkle suitable aggregates onto the still wet coating to create an anti-slip surface. Please contact our R+D Dept. for more details.

Packaging
MARIPUR® 7700 is supplied in 17kg and 5 kg pails. Pails should be stored in dry and cool rooms for up to 9 months. Protect the material against moisture and direct sunlight. Storage temperature: 5°C-30°C. Products should remain in their original, unopened containers, bearing the manufacturers name, product designation, batch number and application precaution labels.

Safety measures
MARIPUR® 7700 contains isocyanates. See information supplied by the manufacturer. Make sure personal protection (gloves, mask, goggles) are used and ventilation is adequate. Please study the Safety Data sheet. PROFESSIONAL USE ONLY.

Our technical advice for use, whether verbal, written or in tests, is given in good faith and reflect the current level of knowledge and experience with our products. When using our products, a detailed object-related and qualified inspection is required in each individual case in order to determine whether the product and/or application technology in question meets the specific requirements and purposes. We are liable only for our products being free from faults; correct application of our products therefore falls entirely within your scope of liability and responsibility. We will, of course, provide products of consistent quality within the scope of our General Conditions of Sale and Delivery. Users are responsible for complying with local legislation and for obtaining any required approvals or authorizations. Values in this technical data sheet are given as examples and may not be regarded as specifications. For product specifications contact our R+D department. The new edition of the technical data sheet supersedes the previous technical information and renders it invalid. It is therefore necessary that you always have to hand the current code of practice.

* All values represent typical values and are not part of the product specification.