

**OASLASTIC TC-172****Technical Data Sheet**

One component polyurethane waterproofing coating, moisture curing, UV-and weather resistant

**DESCRIPTION**

**OASLASTIC TC-172** is aliphatic, high-performance polyurethane top coating. This product has waterproofing, wear and weather resistance characteristics. **OASLASTIC TC-172** is a long-lasting waterproof, aesthetic high quality coating material. This product is suitable for all types of external wall where waterproofing and non-sagging are required. It can be applied by rollers, brushes or airless spray equipment.

**PRODUCT HIGHLIGHTS**

- Excellent elasticity, flexibility, high elongation and anti-cracking
- Excellent adhesion, waterproofing and acid rain resistance
- Excellent UV resistance
- Easy application
- Excellent weather and aging resistance
- Preventing and repair cracking of wall

**RECOMMENDED USES**

- Water proof construction: factories, mansions, barracks etc.
- Impervious project: external or internal walls, basements.
- Indoor or outdoor floors, waterproof parking lots.
- Indoor or outdoor aisles, square, stadiums waterproof floors etc.

**TYPICAL PROPERTIES**

| Item                      | Property                  |
|---------------------------|---------------------------|
| <b>Composition</b>        | 0.2-0.3 kg/m <sup>2</sup> |
| <b>Pot life</b>           | Under 3 hrs / 25°C        |
| <b>Recoating interval</b> | 4 hrs / 25°C              |
| <b>Full cure</b>          | 7 days / 25°C             |

**PHYSICAL PROPERTIES**

| Property                               | Result                    | Test method   |
|--|---------------------------|---------------|
| <b>Hardness(Hs)</b>                    | 85-90 A                   | ASTM D 2240   |
| <b>Tensile Strength</b>                | 200 kgf/cm <sup>2</sup> ↑ | ASTM D 412    |
| <b>Elongation at break</b>             | 180% ↑                    | ASTM D 412    |
| <b>Tear strength</b>                   | 80 kgf/cm ↑               | ASTM D624     |
| <b>Pull-off Strength</b>               | <1.5 N/mm <sup>2</sup>    | ASTM D4541    |
| <b>Total solar reflectance</b> (White) | 89.98%                    | ASTM E-903-12 |
| <b>Thermal Emittance</b> (White)       | 0.896                     | ASTM C-1371   |

**Manufacturer:****CHINGTAI RESINS CHEMICAL CO., LTD.**

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| Property                               | Result    | Test method |
|--|-----------|-------------|
| <b>Solar reflectance index</b> (White) | 114       | ASTM E-1980 |
| <b>Solid content (by weight)</b>       | 75% ↑     | Test in lab |
| <b>Maximum VOC limit value(g/L)</b>    | 300 g/L ↓ | ASTM D2369  |
| <b>Shelf life</b>                      | 12 months | Test in lab |

\*\*\* Note: Results are based on the temperature of 25°C; relative humidity is below 50% and allowed to cure for 7 and 14 days.

### SYSTEM BUILD UPS

#### **OASROOF 700 (Flat concrete roof)**

- Primer **OASPRIMER 138**
- Waterproofing layer **OASLASTIC 112 Green**
- Finishing layer **OASLASTIC TC-172**

#### **OASGUARD 700(Metal sheet)**

- Primer **OASLASTIC 185**
- Finishing layer **OASLASTIC TC-172**

### PACKAGING & STORAGE

OASLASTIC TC-172 is available in 20 kg.

- The product must be stored properly in original, unopened and undamaged sealed packaging in dry conditions at temperatures between 0°C and +25°C. Higher storage temperatures may reduce shelf life of product.
- Store under cover out of direct sunlight and protect from extremes of temperature.
- Shelf life: See label on the package according to the above conditions.

### APPLICATION METHOD

#### • **Surface Preparation**

All substrates (new and old) must be structurally sound, dry and free of laitance and loose particles. Clean of oil, grease, paint stains and other adhesion impairing contaminants. Profile mechanically the surface by shot blasting, high-pressure water jetting or other suitable mechanical preparation method. After surface preparation, the pull off value of the substrate should exceed 1 N/mm<sup>2</sup> (check with an approved pull-off tester). Temperature of the substrate should be minimum +5 °C and maximum +35 °C.

#### • **Primer**

Suitable primer for using OASPRIMER 138 on concrete. Refer to TDS for application guidelines. Before the surface application, all detail areas and any singular points like wall-floor connections, chimneys, joints, substrate cracks, penetrations, corners, etc., must be treated.

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In some circumstances, other primers may be more appropriate. For further details, please consult your local sales office.

● **Application**

Application OASLASTIC TC-172 should be spread evenly with a roller. The curing time of the material is influenced by the humidity and the ambient and substrate temperatures. At low humidity and low temperatures, the chemical reaction is slowed down; this lengthens the curing time and the re-coating intervals. At high humidity and high temperatures, the chemical reaction is accelerated thus the time frames mentioned above are shortened accordingly.

**LIMITATION**

- Do not apply to wet, contaminated or friable substrates. Applying to primer for interface, if necessary.
- The temperature below 15°C will retard the curing.
- The coverage will depend on the condition of the surface.

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