



Primer Pro 1030 AR

| Description: | DEVCON Primer Pro 1030 AR has been specially formulated to produce a protective epoxy primer coating for application to concrete/metal surface where a chemically resistant surface is required. DEVCON Primer Pro 1030 AR resists a wide range of acids, including concentrated sulphuric acid, as well as alkalis and solvents. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| Intended Use: | <p>As a protective coating on metals against corrosion in the following industries / plant areas:</p> <table><tr><td>▪ Power and steel plants</td><td>▪ Battery manufacturers</td></tr><tr><td>▪ Mining industries</td><td>▪ Bleaching areas</td></tr><tr><td>▪ Food industries</td><td>▪ Paper manufacturers</td></tr><tr><td>▪ Plating shops</td><td>▪ Pharmaceutical industries</td></tr><tr><td>▪ Chemical industries</td><td>▪ Chemical containment</td></tr><tr><td>▪ Wastewater treatment</td><td>▪ Heavy duty applications in chemical plants</td></tr></table> | ▪ Power and steel plants | ▪ Battery manufacturers | ▪ Mining industries | ▪ Bleaching areas | ▪ Food industries | ▪ Paper manufacturers | ▪ Plating shops | ▪ Pharmaceutical industries | ▪ Chemical industries | ▪ Chemical containment | ▪ Wastewater treatment | ▪ Heavy duty applications in chemical plants | | | | | | | | | | | | | | | | | | | | | | | | |
| ▪ Power and steel plants | ▪ Battery manufacturers | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ▪ Mining industries | ▪ Bleaching areas | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ▪ Food industries | ▪ Paper manufacturers | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ▪ Plating shops | ▪ Pharmaceutical industries | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ▪ Chemical industries | ▪ Chemical containment | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ▪ Wastewater treatment | ▪ Heavy duty applications in chemical plants | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Features: | <p>Monolithic Protection Metal Protection Excellent adhesion Broad chemical resistance Abrasion, Erosion and Impact resistant Excellent mechanical properties Solvent free Resists 98% sulphuric acid *</p> <p><small>*When fully cured resistant to the splashes and spills of many chemicals. Surface staining may result from exposure to some aggressive chemicals. Good housekeeping practice requires that spills are quickly removed and washed away.</small></p> | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Limitations: | Suitability of product is determined by the end user for their application and process. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Estimating Data | 1L DEVCON Primer Pro 1030 AR = 1 m ² @ 1 mm DFT | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Typical Physical Properties: | <p>Technical data should be considered representative or typical only and should not be used for specification purposes.</p> <table><tr><th>Property</th><th>Typical Values</th></tr><tr><td>Shelf Life</td><td>2 Years</td></tr><tr><td>Mixing Proportions (by volume only)</td><td>1 Hardener to 3 Resin</td></tr><tr><td>Solids Content</td><td>100%</td></tr><tr><td>Application Temperatures</td><td>10°C - 30°C</td></tr><tr><td>Work Time</td><td>30 minutes at 25°C</td></tr><tr><td>Cure Time</td><td>24 hours at 25°C</td></tr><tr><td>Mixed Viscosity</td><td>0.7 Pas</td></tr><tr><td>Full Chemical Resistance</td><td>7 days at 25°C</td></tr><tr><td>Weather Resistance</td><td>Excellent</td></tr><tr><td>Abrasion Resistance</td><td>Excellent (withstands steel wheels)</td></tr><tr><td>Maximum Operating Temperature</td><td>65°C</td></tr><tr><td>Flexural Strength</td><td>> 10 Mpa</td></tr><tr><td>Compressive Strength, Ultimate</td><td>75 Mpa</td></tr><tr><td>Tensile Strength</td><td>> 10 Mpa</td></tr><tr><td>Tensile Bond Strength</td><td>>3.8 MPa</td></tr><tr><td>Water Permeability</td><td>1.2 x 10⁻¹⁶ m/s</td></tr><tr><td>Temperature Resistance</td><td>Wet 65°C, Dry 150°C</td></tr></table> | Property | Typical Values | Shelf Life | 2 Years | Mixing Proportions (by volume only) | 1 Hardener to 3 Resin | Solids Content | 100% | Application Temperatures | 10°C - 30°C | Work Time | 30 minutes at 25°C | Cure Time | 24 hours at 25°C | Mixed Viscosity | 0.7 Pas | Full Chemical Resistance | 7 days at 25°C | Weather Resistance | Excellent | Abrasion Resistance | Excellent (withstands steel wheels) | Maximum Operating Temperature | 65°C | Flexural Strength | > 10 Mpa | Compressive Strength, Ultimate | 75 Mpa | Tensile Strength | > 10 Mpa | Tensile Bond Strength | >3.8 MPa | Water Permeability | 1.2 x 10 ⁻¹⁶ m/s | Temperature Resistance | Wet 65°C, Dry 150°C |
| Property | Typical Values | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Shelf Life | 2 Years | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| Weather Resistance | Excellent | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Abrasion Resistance | Excellent (withstands steel wheels) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Maximum Operating Temperature | 65°C | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Flexural Strength | > 10 Mpa | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Compressive Strength, Ultimate | 75 Mpa | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Tensile Strength | > 10 Mpa | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Tensile Bond Strength | >3.8 MPa | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Water Permeability | 1.2 x 10 ⁻¹⁶ m/s | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Temperature Resistance | Wet 65°C, Dry 150°C | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Surface Preparation: | <p>Metal</p> <ol style="list-style-type: none">In case of steel surfaces, abrasive blast to ISO 8501-1 SA 3 (Thorough blast-cleaning) standard surface cleanliness and achieve surface free from grease, grease, oil, loosely adhering particles, cement laitance and other contaminants. Surface profile height of minimum 75-100 microns is recommended.Rusted Surfaces – Accessible areas: It is suggested to blast - clean the metal surface to achieve ISO 8501-1 SA 3 (Thorough blast-cleaning) standard surface cleanliness to achieve surface free from grease, grease, oil, loosely adhering particles, cement laitance and other contaminants.Rusted Surfaces – Inaccessible areas: It is suggested to clean the metal surface to achieve ISO 8501-1 SA 1 (Light brush blast-cleaning) standard surface cleanliness to achieve surface free from grease, grease, oil, loosely adhering particles, cement laitance and other contaminants. Convert the rust into a black layer using DEVCON Corrosion Primer CP-10.The surface shall have less than 7 mg/cm² chloride contaminants, less than 10 mg/cm² of soluble ferrous ion levels, and less than 17 mg/cm² of sulfate contaminates as verified by field or laboratory analysis using reliable, reproducible test equipment. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

Concrete

1. Remove prior coatings and all loose material. The new concrete must be at least 28 days old. Remove any oil or grease contamination by washing with a suitable surface degreaser. Hose off with high pressure water. Captive blast clean to expose firmly adhered aggregate. Rinse with water and allow to dry before application.
2. Alternatively, acid etch using 1-part commercial Muriatic Acid and 2 parts clean water. Neutralize surface by washing with fresh water and allow to dry.

Surface preparation guidelines cannot cover all site or field contingencies, and it is always recommended that an on-the-spot adhesion test be performed as part of the Standard Quality Assurance audit for the project.

Mixing Instructions:

- It is strongly recommended that full units be mixed, as ratios are pre-measured.
- Proper homogenous mixing of resin and hardener at the correct ratio is essential for the curing and development of stated properties.
- Prior to mixing, the area should be reviewed so that a fixed volume of mixed material can be applied over a fixed area to ensure correct application rate.
- Measure sufficient Hardener and Resin to be used in 30 minutes. Mix thoroughly using a stirrer fitted into a low speed (400 rpm) power mixer. Ensure that all the material on the sides, under the lip of the container and on the stirrer is incorporated.

Note: Take care to avoid air entrapment into the mix. Keep propeller below liquid line, as additional air can be added to mixture, resulting in air bubbles on the surface of the finished product.

Application Instructions:

Application should only take place when surface and ambient temperature is 10°C or above and the substrate temperature is no lower than 10°C. Application not recommended with surface temperatures over 45°C. Surface to be painted must be at least 3°C above the dew point. Relative humidity must be below 85% during application (or below 50% in confined spaces).

For ±21°C Applications

Applying epoxy at temperatures below 21°C lengthens functional cure and pot lifetimes. Conversely, applying above 21°C shortens functional cure and pot life.

May be applied by spray, roller or brush.\

Spraying should be done using suitable airless equipment – DO NOT ADD THINNERS. Spraying should be perpendicular to the surface to insure complete coverage. Each pass of the spray gun should overlap the previous pass by 50%. Weld seams and edges should be stripe coated prior to complete prime coat.

Curing

For optimum chemical resistance DEVCON Primer Pro 1030 AR should be cured for seven days at 25°C. Longer curing times should be allowed at lower temperatures.

The figures quoted for work time, cure time and coverage are not definitive. They are dependent on job site conditions and will vary accordingly. In all cases we endeavour to provide typical figures for use as a guide.

Storage:

Store in dry conditions between 10°C and 30°C, away from sources of heat and naked flames. Protect from frost. When stored in original sealed containers, the minimum shelf life is two years.

Chemical Resistance:**Chemical resistance tested after 112 days, room temp. cure @ 25° C**

| | | | |
|---------------------|-----------|----------------------|-----------|
| Sulphuric Acid 98% | Very good | Sodium Hydroxide 20% | Excellent |
| Sulphuric Acid 30% | Excellent | Sodium Hydroxide 50% | Very Good |
| Hydrochloric 32% | Very Good | Sodium Hypochlorite | Excellent |
| Nitric Acid 20% | Very Good | Ammonia Solution 10% | Excellent |
| Mineral Spirits | Excellent | MEK | Excellent |
| Acetic Acid 10% | Excellent | Hexane | Excellent |
| Lactic Acid 5% | Excellent | Toluene | Excellent |
| Phosphoric Acid 20% | Excellent | Ethyl Acetate | Excellent |

Precautions:

DEVCON Primer Pro 1030 AR should not be applied at temperatures below 10°C.

Warranty:

ITW India Private Limited will replace any material found to be defective. Because the storage, handling and application of this material is beyond our control, we can accept no liability for the results obtained.

Order Information:

Please check with ITW India Private Limited on the available pack sizes

Contacts:

ITW India Limited
Plot No: 34 to 37, Phase-2, IDA,
TSIIC, IDA, Pashamylaram,
Hyderabad, Telangana 502307

TEL: +91-9000031515

Email: chemininfo@itwchemin.com

Disclaimer:

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