TECHNICAL DATA SHEET (MCI-TDS-057, Rev1, 01.09.2023)

# **BENZITHANE 300**

Two Pack Polyurethane Recoatable Gloss Finish



**BENZITHANE 300** is a two pack polyurethane recoatable gloss finish for exterior and interior surfaces where exceptional gloss and color retention are required. This high performance finish has excellent resistance to abrasion, scratches, impact, condensing humidity, staining and splashes of chemicals. It is used as a topcoat on properly primed steel, galvanized iron, masonry, glazed tile and etc. Due to its toughness and excellent weathering resistance, it is highly recommended for bridges, transmission towers, heavy structural steelworks in industrial and marine environment.

**General Properties**: Does not chalk easily despite exposure to UV light; Resistant to splash and spillage of large variety of dilute acids, alkalis, detergents, hydrocarbon, solvents, petroleum products, mineral and vegetable oils; Superlative gloss and colour retention on outdoor exposure; High stain resistance and impact resistance.

Standard Packing

Typical Painting System

: 5 litres

Technical Information		
Mixing Ratio (By Volume)	:	6.4 : 1 (Base : Hardener)
Binder	:	Polyurethane
Finish	:	High Gloss
Color	:	Assorted colors, refer Color Infinity & BENZi High Performance Coating color card
Thinner	:	Thinner
Solid Content	:	70% (by weight); 60% (by volume)
Dry Film Thickness	:	45 - 50 microns / coat
Theoretical Coverage	:	12 - 13 m <sup>2</sup> / litre / coat (actual coverage may vary from 20 – 50% due to loss factors such as surface profile, application method, dry film thickness, surrounding condition & etc)
No. of coats	:	Minimum 2 coats
Touch Dry @ 30°C	:	1 - 2 hours (depends on temperature and humidity)
Recoating Interval	:	Minimum 5 hours
Curing Time @ 30°C	:	6 - 7 days
Pot Life @ 30°C	:	1 - 2 hours after mixing of Base and Hardener
Shelf Life	:	Minimum 12 months if properly stored

Substrate	Primer (1 coat)	Intermediate (1 coat)	Topcoat (1 - 2 coats)
Ferrous Metal (For Optimum Performance)	BENZIPOX Inorganic Zinc Rich Primer or BENZIPOX Organic Zinc Rich Primer	BENZIPOX Mastic 88	BENZITHANE 300
Ferrous Metal	BENZIPOX EA9 Red Oxide Primer	BENZIPOX Mastic 88	BENZITHANE 300
Non-Ferrous Metal	BENZi 100 Etching Primer or BENZIPOX EA9 Red Oxide Primer	BENZIPOX Mastic 88	BENZITHANE 300
Concrete Floor	BENZi Excelbond or BENZIPOX Excel-Damp Primer	BENZIPOX Mastic 88 or BENZITHANE 300	BENZITHANE 300
Masonry Wall	* BENZIPOX Mastic 88	BENZIPOX Mastic 88	BENZITHANE 300

\* Recommended to dilute the primer (BENZIPOX Mastic 88) with 30% Thinner as to provide better adhesion to concrete surface.

Application Methods		
Brush / Roller	:	Recommended for small area and touch up such as stripe coating, weld-seams, edges, corner, rivets etc. Dilute up to 5% of Thinner if necessary.
Conventional Air Spray	:	Dilute up to 10% of Thinner if necessary
Airless Spray	:	If thicker coat in one application is required, airless spray application is recommended. Dilute up to 5% of Thinner if necessary
Handling	:	Mix the Base and Hardener in correct ratio and stir the paint thoroughly until completely mixed before painting
Clean Up	:	Clean all paint equipment with Thinner immediately after use

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# Surface Preparation

## Ferrous Metal Surface

For optimum performance, mild steel surface shall be abrasively blasted in accordance to Swedish Standard Sa 2.5. If abrasive blasting is impossible, mechanical cleaning to St 3 is essential. If oxidation occurred on the blasted steel before application of paint, it is necessary to reblast the steel. The surface must be dry and free from any abrasive residues, dirt, grease and other contaminants prior to painting.

### Non-Ferrous Metal Surface

For new surface, thorough solvent degreasing to SSPC-SP1 is necessary. For old surface, it must be abraded to remove corrosion deposits. All surfaces must be dry and clean prior to painting.

## **Concrete Floor Surface**

Newly laid concrete surface must be allowed to cure for at least 28 days, ensure the surface is below 16% moisture content as measured by protimeter and alkalinity below PH9 (It is highly recommended to have a layer of water-proof membrane underneath the concrete). If alkalinity is high, neutralize the surface by etching with 5% Sulphuric Acid solution and rinsed thoroughly with clean water and allow to dry completely prior to painting.

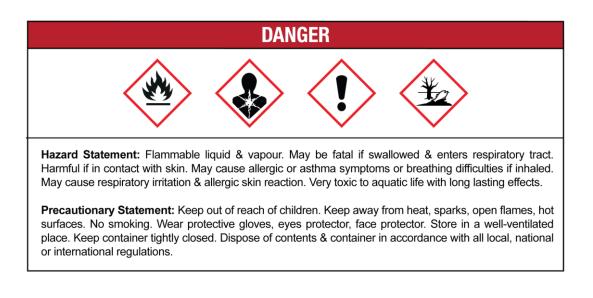
#### Storage

Keep container tightly closed and in a secure upright position, store in a cool and shady place, do not expose directly to sunlight and extremes of temperature. Keep out of reach of children.

### Safety, Health and Environment

Ensure good ventilation during painting, do not breathe vapour or spray mist. Keep doors and windows open during application and drying. It is advisable to wear mask and eyes protector while applying. In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. In case of accidental ingestion, DO NOT INDUCE VOMITING, seek immediate medical advice. To remove splashes of paint from skin by using water and soap or skin care product. Do not empty paint into drains or water courses, dispose of any paint waste in accordance with the appropriate Environmental Quality Regulations.

Materials Safety Data Sheet (MSDS) is available upon request.



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## Limitation of Liability

Liability of MCI Paint Sdn Bhd on any claim of any kind, including claims based upon negligence of MCI Paint Sdn Bhd, for any loss or damage arising out of, connected with, or resulting from the use of the products, shall in no case exceed the purchase price allocable to the products or part thereof which give rise to the claim. In no event shall MCI Paint Sdn Bhd be liable for consequential or incidental damages.

### Disclaimer

The above information is given to the best of our knowledge based on laboratory tests and practical experiences. However, since we cannot anticipate or control the many conditions under which our products may be used, we can only guarantee the quality of the product itself. We reserve the right to change the given information without prior notice due to production refinements arising from continuing research and development, which may result in changes in the paint properties.



MCI PAINT SDN BHD (849155-P) Lot 5189, Kawasan Perindustrian Balakong Jaya, 43300 Balakong, Selangor. Tel: +603 8962 2788 Fax: +603 8962 2798 Website: www.mcipaint.com.my