Optima COATINGS

DATA SHEET

FLOORING

DURATOPPUD MONO

DURATOP PUD MONO is a single component water borne polyurethane clear semi-sheen topcoat.DURATOP PUD MONO has been specifically formulated to provide a highly durable clear coating with a semi-sheen finish.DURATOP PUD MONO is UV resistant and has good mechanical properties as well as having good chemical resistance against water, alcohols and salt solutions amongst others.

Colours: Clear. Can be pigmented to other colours volume dependant.

PRODUCT USES

- DURATOP PUD MONO is used as a topcoat for sealing/maintenance coat of Polyurethane and Epoxy coatings.
- DURATOP PUD MONOoffers a very good cleaning effectand resistance to car-tyre contamination/hot tyre pickup.
- DURATOP PUD MONO is also used in showrooms, light-industrial floors and kitchens/restaurants.
- Used to seal and protect monolithic, cementitious and decorative screeds.
- Coating garages, stoeps and patios and for new or previously painted cement floors.

ADVANTAGES

- Environmentally and user friendly (solvent free) being water-based.
- Excellent mar resistance and polyurethane performance for toughness.
- Easy cleaning - good stain resistance to coffee, shoe polish and mustard.
- Long pot life
- Single component – easy, no-mix formula.
- Excellent scratch, scuff and wear resistance.
- Chemical and stain resistant.
- Quick drying – rapid hardness development.
- Resists hot tyre pick-up.
- UV and weather resistant – colourfast& non-yellowing.
- Odourless and lead free.

COVERAGE

- 7 - 8m² per litre per coat. Applied in a 2 coat application, for smooth concrete.
- Coverage will vary depending on the porosity and profile of the concrete.
- Apply further coats in high wear areas.

STEPS TO ENSURE A SUCCESSFUL APPLICATION

1. INSPECTION

- Allow new cement at least 28 days to cure. All surfaces must be dry. Check the cement floor for conditions that might interfere with proper adhesion; such as moisture, loose crumbling cement, cement dust, floated or shiny cement floors, sealed cement, release agents, curing compounds, salts, efflorescence andlaitance, dust, oil and grease.

2. SURFACE PREPARATION

- Cleaning: All surfaces must be sound, clean and free of oil and grease. Use Optima's OPTIDEGREASER if necessary.
- The substrate must be firm, dry, and free from dust and grease. If necessary, employ mechanical cleaning methods and equipment.
- It is advisable to check bonding on unfamiliar surfaces. Older coatings must be abraded using a 40-80 grit sand paper.

3. PRIMING

- All surfaces must be primed with DURATOP ACRYLIC PRIMER to aid adhesion and resist thealkalinity inherent in cement.

4. TEST THE TOPCOAT

- Always apply a test patch of DURATOP PUD MONO polyurethane floor paint to ensure the substrate has been properly prepared and primed. Check adhesion of the coating by cutting a small X in the coating using a sharp utility knife. Firmly apply a piece of packaging tape over the centre of the X cut, then pull off with a fast snap. The adhesion is suitable if no significant coating is removed beyond the X cut. If the coating failsthis test, then additional surface preparation is required - repeat the above steps.

APPLICATION

UNPAINTED CEMENT

- Perform a moisture test: All cement contains moisture but excessive moisture will affect adhesion and cause blistering. Test for excessive moisture by taping a clear plastic sheet (approximately 30cm x 30cm) to an area on the cement – the taping must create an airtight seal between the concrete and the plastic sheet. Leave it for 24 hours and check the underside of the plastic. If water droplets or a darkening of the cement is detected under the plastic, then moisture is present and the surface cannot be painted. Leave the cement to cure for another 7 days, then re-test. Painting should continue only after the moisture is removed, along with the source of moisture being determined and eliminated. If there is no damp-course beneath the cement, rising damp caused by a very shallow water-table can cause delamination of the DURATOP PUD MONO coating.
- Check for loose, crumbling cement and cement dust: All loose cement and dust must be removed. Repair damaged and crumbly areas with suitable screeding products, however crumbling and dusting may be symptomatic of poorly cured cement which cannot be painted. Apply a 0,5m² test patch of DURATOP ACRYLIC PRIMER and DURATOP PUD MONO.
- Floor Paint as per instructions and test adhesion after 7 days.
- Floated or shiny cement floors: Must be etched using a suitable chemical etcher as per instructions.
- Sealed cement: Some floors have been finished with a clear sealer. Test for a sealer by lightly sprinkling water onto the surface. If the water beads and does not penetrate then a sealant is present and paint may not adhere properly. Use a suitable chemical etcher as per instructions to remove the sealer. If the etching process does not foam, then it is necessary to remove the sealer with abrasive blasting.
- Release agents, curing compounds, salts, efflorescence* and laitance*: must be removed with a suitable chemical etcher as per instructions.
- Dust, oil and grease: The floor should be clean, structurally sound and free of dust, oil and grease. Clean the floor with Optima's OPTIDEGREASER as per instructions, rinse with water and allow to dry completely.

PREVIOUSLY PAINTED CEMENT

- Loose paint: If the paint is peeling and flaking, or can be easily removed with a paint scraper then the previous paint needs to be removed.
- Smooth, hard or glossy painted surfaces: Such as an oil based enamel or stoep paint, these should be dulled by abrading the surface with medium grit sandpaper. In the case of an Epoxy coating, even more careful abrading and dulling is needed. Apply a test area of the DURATOP ACRYLIC PRIMER and DURATOP PUD MONO as per instructions andtest adhesion after 7 days. If adhesion is poor, additional abrading is necessary.
- Sound condition: If the paint is in a sound condition with good adhesion, then clean the surface with Optima's OPTIDEGREASER as per the instructions.
- Dust, oil and grease: The floor should be clean, structurally sound and free of dust, oil and grease. Clean the floor with Optima's OPTIDEGREASER as per instructions, rinse with water and allow to dry completely.

PRIMING

- All unpainted or previously painted cement floors require a base coat of DURATOP ACRYLIC PRIMER which will provide afoundation coat that forms a chemical bond with the cement.
- Apply DURATOP ACRYLIC PRIMER as per instructions.

APPLICATION

- To retain sheen and colour consistency of your paint, always make sure that the batch numbers arethe same on all paint containers you purchase.
- Stir DURATOP PUD MONO well using a flat paddle. Do not dilute with water.
- Paint the edges first using a brush, then paint the rest of the floor using a mohair roller, movingtowards the door/exit.
- Apply two coats to achieve complete obliteration. Apply further coats in high wear areas.
- Allow thorough drying between coats – approximately one hour depending on the room temperature.
- The floor can be used for light traffic 24 hours after applying the final coat. The floor can be put intofull service after 7 days.
- For future repainting: overcoat as per manufacturer's instructions.

CLEANING

- Clean tools and equipment using water immediately after use.
- For dried material, use Optima MEK or Xylene thinners before full cure is affected.

SAFETY PRECAUTIONS

- Skin contact: Wash thoroughly with soap and water.
- Eye Contact: Flush immediately with water for 10 - 15 minutes and contact a physician.
- Respiratory problems: Remove affected person to fresh air immediately and contact a physician.
- Not for internal consumption.The safety data sheet is available from your local Optima Coatings Technical Sales Consultant.

TECHNICAL DATA

Pack Size	5 and 20 litres
Number of components	Single pack
Density (typical)	1,12g/cm³
Volume solids	31%
Flash point	Water based
Dilution	Do not dilute
Pot life	Approx. 5 ½ hrs

Drying time @25ºC and 50% RH
Touch: 1-2hrs
Hard Dry and Light Foot Traffic:24 hrs
Full cure: 7 days
Over coating time @25ºC Minimum: 1-2 hrs
Maximum: 24 hrs
Application temperature range 10ºC to 35ºC
Do not apply coating if humidity is in excess 85%@ 21ºC
75% @ 10ºC
Do not apply coating if the substrate
Temperature is at least 5ºC above dew point
Induction time 15 minutes
Fire resistance of wet film Not flammable

Finish	Semi - Sheen
UV Resistance	Excellent

Abrasion resistanceExcellent

Durability	Good
Solvent resistance	Good resistance to aliphatic solvents and alcohols
Chemical resistance	Good resistance to spillages of most dilute solutions of acid and alkalis.

Resistant to cleaning chemicals at recommended dilutions.

Technical details above are provided in good faith. We are an ISO 9001: 2008 registered company and our products are manufactured to the highest standards using raw materials of superior quality. Consequently we believe in the quality of our products and will willingly replace any product in the unlikely event of a quality related performance failure. Whilst we are confident in guaranteeing the quality of our products, we cannot however accept any liability for performance failure due to the incorrect application of our products. Correct application is critical to the successful performance of our products and as this process falls outside of our control we are unable to cover the application under our product performance warranty. Where there are doubts, it is recommended that the user conduct their own suitability tests before use. To retain sheen and colour consistency of your paint, always make sure that the batch numbers are the same on all paint containers that you purchase.

Updated: March 2013 (this supercedes all previous publications)