



ROCC Base

Clear Polysiloxane Hybrid Coating

Utilizing high crosslinking chemistry resulting in very low surface energy providing excellent release qualities

- Polysiloxane/Epoxy system providing high resistance against physical and chemical attack
- High temperature and UV resistance while providing a strong cavitation and erosion barrier
- Remains flexible at very low temperatures
- Excellent bonding to bare steel and aluminum
- High crosslinking with low surface energy providing excellent release properties
- Long term protection **utilizing environmentally neutral chemistry**
- High solids, low viscosity system eliminates the need to use solvents for dilution

Product Description

ROCC Base was designed as a high solid and low VOC system with superior environmentally friendly properties. This bisphenol and isocyanate-free system is formulated with VOC contents lower than 120 g/L. It can be used as an anticorrosion coating for various steel structures in both industrial and marine environments. In several maintenance demanding applications ROCC Base has proven to provide lower maintenance / easy cleaning on applied surfaces. The high crosslinking associated with ROCC Base exhibits strong anti-corrosive and chemical resistant properties. In addition, the hydrophobic properties provide foul releasing and anti-icing functions. ROCC Base has been designed to have great resistance to cavitation and erosion in pumps, propellers and running gear.

The destructive effect of cavitation can be compared to an implosion in which water, streaming at high speed on the surface, causes sudden high-pressure loads. If a coating cannot withstand this high pressure, material loss (erosion) occurs (appearing as chalking or loss of gloss). The flexural properties of this system have been designed to handle these forces even in very low temperatures.

ROCC Base has outperformed traditional two-coat polyurethane/epoxy systems in chemical, weather, erosion and salt spray resistance testing. The epoxy-siloxane hybrid structures of the ROCC Base system are less susceptible to degradation from chemical exposure or UV oxidation because of the strength of the Si-O bond in ROCC Base versus the C-C bond found in traditional coatings. Depending on the substrate and application, several layers may be applied.

Lastly, using a low viscosity activator / crosslinking agent in the ROCC Base system eliminates the need for solvent dilutions to reduce viscosity.



ROCC Base

Clear Polysiloxane Hybrid Coating

Product Information

Color	Clear, colorless
Finish/Sheen	High gloss
Components	2 (mixing ratio 100:22-25)
Volume Solids	90% ± 2%
VOC	100 g/L* (EPA Method 24) *Applied coating reaction/curing will produce VOC of mixed alcohols
Flash Point	242.6 °F Method: DIN EN 22719 (DIN 51758)
Unit Size	1kg, 20kg, 200kg

Application / Drying / Overcoat Information

Method of Application	Brush, roll, spray
Number of coats	Single or multiple
Dry Film Thickness	2-8 mils (50-200 microns)
Application Temp	Ambient: 32°F to 130°F
Theoretical coverage	1 mil dft: 1350ft ² /gal (Dry Film Thickness) 3 mil dft: 450ft ² /gal
Dry Time 4mil dft at 70°F (50%RH)	To touch: 5 h. Through: 8 h. Fully cured 5 days.
Overcoat	Minimum 4 hours. After a 24 hour waiting period, a light sanding between coats is recommended.
Thinner (if needed)	Max 10% Butyl acetate, xylene
Cleaning	Butyl Acetate, Xylene, Glycol Ethers



ROCC Base

Clear Polysiloxane Hybrid Coating

Surface Preparation

ROCC Base bonds very well to clean, bare metal. Excellent bonding occurs to clean, corroded substrates, although a blasted or abraded surface is preferred. To help release surface tension on difficult (for example, polished surfaces), ROCC Prep High is recommended as a priming solution. Very porous substrates in extremely corrosive environments may be saturated/penetrated with ROCC Prep Low for very deep protection prior to coating with ROCC Base. ROCC Base is compatible with most epoxy primers and is highly recommended as a top-coat on zinc-rich primer systems. Coating performance is always proportional to the degree of surface preparation. Avoid shortcuts. Inadequate performance will follow inadequate surface preparation.

Application / Systems and Use

Working areas should be sheltered from weather and wind as well as from airborne particles and pollutants. Ensure good ventilation during coating and curing.

Plan your application well. Do all masking and prep-work prior to mixing. After the two components are mixed, the **pot life is approx. 4 hours** depending on temperature and humidity.

Mix ROCC Base and activator as pre-measured kits or in larger proportions 100:22 or up to 100:25 depending on climate conditions or viscosity variation. After thoroughly stirring the base, add desired ROCC Base volume in a separate clean, solvent resistant container. Then add activator slowly while stirring without mixing air into it. Stir for a couple of minutes until the mixture is completely homogeneous. Make sure the activator has come in contact with the complete solution. Let mixture rest for a few minutes before application.

Brush application: use a high-quality natural bristle brush. Roll application: use a high quality, low nap, and solvent resistant roller. Apply uniform and sufficient. A slow, well-loaded roll helps to avoid the creation of air-bubbles.

Spray application: airless spray with 0.015-0.017 tip is recommended. Air spray with moisture and oil trap and a 0.070" fluid orifice.

Transportation, Storage and Safety Information

Packaging and storage

- Keep containers tightly closed in a cool, dark and well-ventilated place.
- Keep tightly sealed in original packaging.

Safety and handling

Before using, please read the Safety Data Sheet (SDS) thoroughly for safety and toxicological data as well as for information on proper transportation, storage and use.

Product warranty information – Please read carefully

The information contained herein is based on Surface Dynamic's present knowledge and experience; it is believed to be accurate and is offered in good faith. However, because conditions and methods of use of our products are beyond our control this information should not be used in substitution for customer tests to ensure that our products are safe, effective and fully satisfactory for the intended end use. Suggestions of use shall not be taken as inducements to infringe any patent. Surface Dynamic's sole warranty is that our products will meet the sales specifications in effect at the time of shipment.

Your exclusive remedy for breach of such warranty is limited to refund purchase price of replacement of any product shown to be other than as warranted. Surface Dynamic specifically disclaims any other express or implied warranty of fitness for a particular purpose (even if Surface Dynamic is aware of such purpose) or merchantability. Surface Dynamic disclaims liability for any incidental or consequential damage (including loss of profits) of any kind.

Surface Dynamic reserves the right to make any changes to technological progress or further developments. These are starting point formulations and are not proven for use in the user's particular application but are simply meant to assist in the development of the user's own formulations. It is the user's responsibility to fully test and qualify the formulation, along with the ingredients, methods, applications, or equipment identified herein ("Information"), by the user's knowledgeable formulator or scientist, and to determine the appropriate use conditions and legal restrictions, prior to use of any Information.

Furthermore, Surface Dynamic cannot assume any responsibility for patent infringements, which might result from the use of any Information.

May only be sold/distributed by an Surface Dynamic approved and certified representative.