



ORARP-1

Product Description

-ORARP-1 is a VOC compliant top coat, high in chemical and abrasion resistance for a variety of substrates. ORARP-1 has been designed to function as a high performance, one component moisture cure urethane top coat system, designed for use on steel, aluminum, and stainless steel, galvanized metal, wood and concrete leaving a bubble-free coating. Working time is adjustable by selective addition of catalyst. It also exhibits a low sensitivity to substrate moisture, when applied to damp surfaces.

Applications

-ORARP-1 is an excellent coating choice for industrial high traffic aisle ways or work cells and warehousing sealer. ORARP-1 can also be used as an interior coating for wood flooring or furniture. Also used for roofing, decking, truck bed liners, pipeline, and tank coatings.

Colors available

Standard colors are black and dark gray.

Non-skid Applications

For non-skid application various products can be added for both roll on or spray applied versions. To spray apply with the non-skid additive, please call for proper application equipment needed.

Storage Stability

One year in unopened original containers at 40-90° F. Normally, containers should be used within one week after opening unless resealed with nitrogen blanket.

Advantages

- VOC exempt
- Penetrates and seals leaving a smooth, pinhole and bubble-free coating
- Excellent adhesion to a variety of substrates
- Good physical properties
- Outstanding stability at low temperatures

General Information

Mix ratio	Single component
Solids by volume	100%
VOC	-0-
Coverage	1600sq ft per gallon @ 1 mil DFT

Packaging

Product Code	Container size	Product quantity
ORARP-1-1	1 gallon	1 gallon
ORARP-1-5	5 gallon pail	5 gallons
ORARP-1-55	55 gallon drum	55 gallons

Surface Preparation

1. Previously painted surfaces: Solvent clean to remove all oils, grease and wax. Remove all rust and damaged paint. Feather edge the repair areas. Fill and putty as required. Sand all areas to be painted with 120-180 grit wet or dry sandpaper.
2. Stainless steel: Solvent wipe, scuff sand or abrasive blast.
3. Steel: Remove all rust, mill scale, and foreign matter. Solvent wipe to remove all oils and grease. Sand blasting is best –if possible.
4. Aluminum: Solvent clean to remove all oil and grease. Sand surfaces with 120-180 grit sandpaper.
5. Concrete: Laitance, curing compounds, concrete contaminants must be removed. Shot-blast or acid etch areas to be coated.

Mixing

Stir contents of container prior to application.

Product does not require catalyization.

Application Instructions

-To apply ORARP-1

1. Apply coating as uniformly as possible with a ¼” nap roller.
2. Avoid excessive back rolling and cross rolling, this will lessen the chance of bubbling.
3. Spray apply as you would high quality paint.

Limitations

- This product is not recommended for immersion service.
- Do not apply this product at ambient or floor temperature below 15°F or over 100°F or if the relative humidity is above 95%.

*Pot Life

Temperature	70° F	100°F
Using accelerator	Dry to touch 1-2 hours	1 hour
Using accelerator	Dry to handle 3-4 hours	2 hours
Using accelerator	Full cure 4 days	

Without accelerator two times longer cure time of the above times.

Re-coat without scuff 4 hours

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Typical Physical Properties	Units	Results
Color	Amber	
Tensile strength	psi	3300
Elongation	pli	85%
Tear strength	pli	440
Polyurea topcoat adhesion	psi	>500
Typical film thickness	Mils	2-5
Minimum re-coat time	hours	4
Isocyanate equivalent weight	350.0	
NCO content, %	12.0	
Viscosity at 77° F (25°C)	425	
Specific gravity at 77°F (25°C)	1.16	
Flash Point (Cleveland open cup)	>110/>230	
Vapor pressure at 77°F (25°C) (mm)	<10 ⁻⁵	
Functionality	2.40	
Recommend storage temperature	60-100°F (16-38°C)	
Shelf life	12 months	
Viscosity "B" side	700-800 cps @ 23C	
Coverage	1600 sq ft/gallon/mil	
Solids by weight	100%	
Abrasion resistance	ASTM D-4060	20 mg max weight loss
Impact resistance	ASTM D-2794	160" lb direct; 160/5/0 in lb direct

Handling and storage

The reaction of isocyanates with water leads to the formation of insoluble ureas and carbon dioxide gas which gas which can result in pressure buildup inside closed containers. Therefore, extreme care must be taken to ensure containers used for ORARP-1 remain dry. Containers that have become contaminated with moisture should not be subsequently sealed; otherwise a hazardous increase in pressure may result. Freshly manufactured ORARP-1 is an amber liquid. Sedimentation is usually due to contamination from atmospheric moisture or to dimer formation. Reaction from atmospheric moisture can be prevented by storing ORARP-1 in carefully sealed containers or under a dry nitrogen atmosphere during handling ORARP-1 must be carefully resealed after each sampling. A small amount of finely divided insoluble solid in the product does not usually cause difficulties in handling or product performance. However, if necessary, the liquid product may be filtered through a suitable inline filter. It is suggested that the filter vessel be of stainless steel with a suitable polypropylene filter bag. The lines should be heated and blown clear with nitrogen after use.

Warranty

The technical data and other printed information furnished by Coating Holdings (CH LTD) are true and accurate to the best of hardeners surface and other our knowledge. CH LTD conforms to in house quality control procedures and is reliable and is offered solely for evaluation. The use of this product is beyond the control of the seller; therefore, the buyer assumes all risks of use and handling whether done in a matter that is in accordance with the provided posted directions or not. CH LTD makes no warranty, expressed or implied of its products and shall not be liable for indirect or consequential damage in any event.

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Suppliers of High performance Foam/Coating and application Equipment

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