



# TECHNICAL DATA SHEET

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HYDROPOX #4 QD 1:1 EPOXY  
Concrete Primer Coat**

**DESCRIPTION:** A two component water base epoxy amine concrete primer / sealer coating that provides excellent adhesion, solvent resistance and abrasion resistance with water clean up. Hydropox #4 primer provides a film that is comparable with many solvent base systems. It exhibits excellent adhesion to many substrates such as aluminum, cold rolled steel, glass, concrete, masonry, plastics, tile, aged alkyd and epoxy films. Hydropox #4 QD can be applied electrostatically. Hydropox #4 QD can also be used as an Anti-Graffiti coating. Since it is highly resistant to many solvents after cured, the ordinary paints, such as aerosol paints, can be wiped off without damaging the existing gloss, color or film, even if rubbed. Hydropox #4 QD is designed for the professional user. It is a true epoxy system and will exhibit properties of solvent based systems. **Always mix at a ratio of 1:1 by volume.**

**PROPERTIES:**

COLORS..... Clear  
FINISH..... High Gloss  
VEHICLE..... Epoxy Amine  
SOLIDS BY VOLUME(Mixed)..... 50-55%  
BY WEIGHT(Mixed)..... 55 - 60%  
POT LIFE(@70 Degrees F)..... \*4 - 6 Hrs  
DRY-TO-TOUCH..... \*1 Hour  
DRY HARD..... \*2 Hours  
FULL CURE..... \*5-7 Days  
COVERAGE..... 300 - 400 sq.ft/gal  
\*(All pot life and dry times will be affected by temperatures.)

**TYPICAL USES:**

- (1). Steel
- (2). Floors
- (3). Garages
- (4). Wood
- (5). Clean Rooms

**CHARACTERISTICS:**

- (1). Water Clean-up
- (2). Low V.O.C. Content
- (3). Mildew, Mold and Fungus Resistant
- (4). Chemical Resistant



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**APPLICATION & REDUCTION:** Hydropox #4 primer coat 1:1 can be applied by brush, roller or spray. Thin with tap water at 40-50% by volume for proper penetration into the concrete substrate.

**MIXING INSTRUCTIONS:** Premix both parts thoroughly before combining. Add 1 parts Component B to 1 part Component A by volume. Thoroughly mix then add tap water as required. Thin paint to a satisfactory rolling, spraying or brushing consistency, usually about 40-50%.

**SURFACE PREPARATION:** Surface to be coated must be clean, structurally sound and free of all foreign contaminants including dirt, wax, loose paint or curing compounds. Surface may be damp, but standing water must be removed. Concrete should be sandblasted, vacuum blasted or acid etched. If an acid etch is performed, surface must be rinsed and neutralized with a solution of ammonia and water. Mix 1 pint household ammonia to 5 gallons water and scrub surface immediately after water rinse. If recoating an epoxy surface is desired, and coating has cured more than 24 hours at 77 degrees F or cannot be indented with a fingernail, a light sanding with 60-80 grit sandpaper is required for proper adhesion of the new coat.

**PRECAUTIONS :**

KEEP OUT OF REACH OF CHILDREN.  
USE WITH ADEQUATE VENTILATION.  
AVOID CONTACT WITH SKIN AND EYES.  
READ MATERIAL SAFETY DATA SHEET BEFORE USING.  
KEEP FROM FREEZING!



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### **BASE COAT/TOP COAT SYSTEM APPLICATION FOR CONCRETE FLOORS:**

After proper profile is achieved on the concrete through bead blast, sandblast or acid etch, the base coat of Hydropox #4 QD must be thinned sufficiently to allow for penetration into the pores of the concrete. A base coat that is too thick may result in peeling due to bonding failure. Suggested thinning for the first coat for the 1 gallon kit size is to add 20-25% (or reduced as needed) to achieve proper penetration into the concrete. should be thinned to assure penetration of the coating into the concrete. The second coat may then be thinned with approximately 10-15% by volume with water. The use of Hydropox #4 QD without thinning is not recommended, especially as a base coat on concrete floors. For best results, follow all recommended thinning and application instructions.

**RECOMMENDED DRY FILM THICKNESS PER COAT:** 2-3 mils (50-75 microns)

### **THEORETICAL COVERAGE PER GALLON\***

593 mil sq. ft.(catalyzed & thinned per above)

\* Mixing and application losses will vary and must be taken into consideration along with the condition of the substrate when estimating job requirements.



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## DURABILITY:

Hydropox #4 QD is very abrasion resistant and may be used for aircraft hangars, parking garages, industrial shop areas, laboratories, shipping-receiving areas, clean rooms, kitchens, control rooms, correctional facilities, computer rooms, carports, patios and other such areas. This coating will provide a protective film that has excellent impact and abrasion resistance. It is resistant to most chemicals, solvents, mold, fungus and mildew. Hydropox #4 QD may also be topcoated with Intrepid's Hi Solids Polyurethane finish for exterior applications that require UV resistance and gloss stability.

## CHEMICAL RESISTANCE:

| <i>CHEMICAL/SOLVENT</i> | <i>SPLASH/SPILLAGE</i> | <i>FUMES</i> |
|-------------------------|------------------------|--------------|
| Acids(dilute)           | Good                   | Good         |
| Alkalies                | Very Good              | Very Good    |
| Solvents                | Excellent              | Excellent    |
| Salt                    | Good                   | Good         |
| Water                   | Very Good              | Very Good    |
| Gasoline                | Very Good              | Very Good    |
| Motor Oil               | Very Good              | Very Good    |



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## SURFACE PREPARATION AND PAINTING OF CONCRETE

Concrete as well as steel, must be cleaned before painting. Painting greasy, dirty or dusty concrete is just as bad as painting rusty and uncleaned steel. **Grease should be removed by washing with a solution of trisodium phosphate and soap chips in water.** If foreign matter is not removed the stain or paint will not obtain satisfactory penetration or bond and peeling will result.

Concrete has laitance, which is completely hydrated cement scum, which floats up, and just clings to the surface. **This laitance is the cause of most of the early bond failure of a protective coatings on concrete. The laitance be removed by slight sandblasting(whip blasting).** Laitance is especially bad on the interior of centrifugally spun concrete pipes.

No concrete hardeners should be used with concrete that will be stained or painted later, because they will kill the adhesion and prevent proper acid etching. **Certain curing compounds are also detrimental to adhesion.**

Forms for pouring concrete should be coated with materials that do not leave a residual film on the concrete. **Form oils or waxes which stick to the concrete must be removed or the stain or paint will not get proper penetration and will peel.** The removal of waxy residue is not easy because an acid wash will not be sufficient and only whip sandblasting will prepare the surface properly.

**Steel trowelled concrete and steel form concrete are often glazed and are too smooth to be stained or painted without etching or whip sandblasting** to give them a profile for best adhesion.

Regarding etching of concrete, it should be pointed out, that if the treated surface is not scrubbed and flushed with sufficient water to remove all traces of the acid and salts formed by the etching, these water soluble chlorides may induce severe early blistering because of osmotic action. A mild alkali rinse with trisodium phosphate or a mild caustic solution and further rinsing with clear water will eliminate the danger of blistering.