



## 2K URETHANE PAINTS

### Application Information

#### PRODUCT DESCRIPTION

POR-15 **2K Urethane** is a tough, glossy, two-component coating for use over primed or painted surfaces. It is moisture cured, so exposure to moisture and humidity will actually improve its performance and strength. When fully cured, POR-15 **2K Urethane** is rock-hard, chemical resistant, non-porous, and incredibly tough. Durable and easily cleaned, it will not crack, chip, peel, or fade with age. POR-15 **2K Urethane** will withstand even the most intensive UV environments. You'll be amazed and delighted at how well POR-15 **2K Urethane** holds up under conditions that would quickly destroy ordinary finishes. POR-15 **2K Urethane** is excellent for industrial applications. Use our safety yellow or orange colors on machinery guards or heavy equipment, and then stand back and marvel at how long they last under extreme conditions and wear.

#### PRODUCT COMPOSITION

Your **2K URETHANE** purchase consists of two items:

- 1) A green paint can, labeled **2K URETHANE** which contains the basic resin formulation.
- 2) A smaller light blue can, labeled Hardener/Activator.

Warning: Your can of Hardener/Activator is sealed tightly. Remove the lid carefully and cover with a paper towel while prying off inner seal to avoid accidental spillage or splash. Your Hardener/Activator is very sensitive to moisture and humidity, so open it in a dry area. Keep both hardener and resin tightly capped when not in use. This is very important for maximum shelf life.

Mix 1 part Hardener/Activator with 3 parts **2K URETHANE** in a separate, re-sealable container. A clean glass jar works well as does a clean paint can with lid. Stir the combined contents thoroughly. When the coating is thoroughly mixed, thin as required.

#### PARTIAL MIXES

You may mix partial quantities of **2K URETHANE** for small jobs, and you may use any measuring device you happen to have around (coffee scoop, measuring spoons, cups etc.). All you have to do is follow this formula:

Mix 1 part Hardener/Activator with 3 parts **2K URETHANE**.

**2K URETHANE** Paint has a pot life, up to 2 hours, if the lid is kept on the mixed batch when it is not in use.

#### SURFACE PREPARATION

Surface to be coated should be dry and free of grease, oil, and other contaminants. Use POR-15 Cleaner Degreaser, diluted 1 part Cleaner Degreaser to 8 parts water to remove light contamination. Then rinse with water and allow to dry.

#### APPLYING 2K URETHANE OVER OTHER PRIMERS

Repeat instructions above, then sand surface lightly with 240 grit sandpaper and wipe clean with dry tack cloth and paint.

#### TO PAINT OVER A CURED POR-15 SURFACE

Clean with Cleaner Degreaser as above, then sand with 300 grit sandpaper and wipe clean with dry tack cloth. Apply **2K URETHANE** as final finish.

#### AS A COMPLETE POR-15 PAINT SYSTEM

Apply two coats of POR15 Rust Preventive Paint over a sandblasted surface or a surface prepared with Cleaner Degreaser and Metal Prep, rinse each and allow to dry to a finger drag, normally two to five hours. Then apply two light to medium coats of **2K URETHANE** as final finish. If surface has any irregularities that you wish to remove, apply a medium coat of TieCoat Primer over the POR15. Allow this to cure for 2 to 3 days, then sand smooth and finish with 300 grit. Wipe down with dry tack cloth and apply **2K URETHANE**.

#### APPLICATION

Apply a minimum of 2 medium coats for general automotive use, and a minimum of 3 full coats for heavy marine and industrial use. **2K URETHANE** may be applied by brush, spray, or roller. You can use any type of brush you prefer; **2K URETHANE** will flow out immediately, eliminating brush marks.

•Lay down a medium covering coat, but be careful to avoid runs. A second coat may be applied when dry to the touch, usually 15 – 20 minutes later, though the second coat may be left up to 2 days before re-coating without sanding. Best method: recoat at 2–3 hourly intervals.

## POR-15 2K URETHANE Continued

- For temperatures below 64°F (18°C), drying times will be extended and consequently runs may be more likely.
  - Thin only with Xylene, if thinning is needed.
- POR15 Solvent or lacquer thinner may be used for cleanup.

**NOTE:** when applying a second or third coat by brush, surface tension may increase between coats. To reduce this tension, add some Xylene to the mix so the coating will drop and flow out properly. For best results, apply at 68–75°F (18–24°C) with less than 70% humidity.

### SPRAY PAINTING / SPRAY BOOTHS

**2K URETHANE** prefers low pressure application. Siphon or Pot Gun application: use approx. 25 psi (180 kpa). HV or top container gun: use approx. 15–18 psi (120 kpa). At 60–75 °F (16–22°C), thin 5–15%. At 71–82°F (22–28°C), thin 15–25%. Avoid temperatures over 82°F (28°C) where possible. Spray booth ideal temperature is 71°F (22°C), 50% humidity, low air flow.

Remember, thinning rates are a guide only. Consider also the type of gun, air temperature, and humidity. **2K URETHANE** can be cut with regular compounds if you have a run or imperfections, though it is best if you leave it for a week or two before cutting to make sure coating is hard (runs may take longer to fully cure due to added thickness).

### HUMIDITY CONTROL

Humidity should be 60% or lower when spraying **2K URETHANE** because the higher humidity may cause it to set up too quickly before it has a chance to flow out evenly, thus resulting in a wavy appearance. Whenever possible, spray in a humidity-controlled (air conditioned) environment. Best temperature is 68–75°F (18–24°C) and humidity is below 60%. Avoid high humidity and high temperatures.

### CURING

Remember, **2K URETHANE** will not perform as specified until it has cured for a minimum of 4 days at an average temperature of no less than 68°F(18°C). For example: Do not put engine parts into service before the 4 day cure time. Elevated temperatures will not speed up cure. Do not oven-bake parts.

### QUESTIONS & ANSWERS

#### Can I apply 2K URETHANE over metal?

*Yes, you can, but you won't get the same adhesion or leveling as you do with Rust Preventive Paint as a primer.*

#### Can I apply 2K URETHANE directly over POR-15 Rust Preventive Paint?

*Yes, you can, but adhesion problems might occur if the POR-15 has fully dried. If the POR-15 has dried more than six hours wait 24 hours and sand with 320 grit sandpaper before applying 2K URETHANE.*

#### What if I have different size cans or cans with different batch numbers? I want to make sure my final coat is 100% color uniform.

*Make sure that at least one can will be enough for the entire final coat. If not, you will need to blend some of the resin cans together so you will have enough for the entire final coat.*

***Please remember these instructions are general guide lines only and cannot and do not cover every application and environment. If you remain unsure as how to proceed, please call toll-free for technical advice at 800-457-6715.***

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