Primax™ WP

1-COMPONENT PRIMER FOR METALS TO IMPROVE ADHESION OF URETHANES

Primax™ WP is a one component water-based primer designed to improve the adhesion of urethane coatings and casting compounds to iron, steel, aluminum, galvanized iron, stainless, steel, and other metals. Primax WP is ready to use with no mixing or diluting necessary. It air-dries or can be dried more quickly with low heat. Primax WP is formulated without the use of heavy metals, mineral acids, and hazardous air pollutants.

Primax WP can be used as a tie coat over zinc rich primers and can be directly top coated by epoxy or urethane coatings systems. Primax WP is not intended as a top coat, but is widely compatible with most urethane, epoxy, acrylic, and some latex top coats.

TYPICAL PROPERTIES	VALUE	TEST METHOD
Visual Appearance	Yellow-Green liquid	
Density	1.13 g/cm³	ASTM E-201
Viscosity at 25C	720 cps	ASTM D-2393
Solids Content by weight	27% - 31%	Calculated
Volatile Organic Content	<100 g/ L	EPA method 24
Flash Point	>200°F	ASTM D-92
Coverage:	~320 square feet / gallon based on a 1 mil dry film thickness	

SURFACE PREPARATION

For best results Primax™ WP must thoroughly wet-out and coat the surface to be bonded. The surface should be as free of dirt, rust, grease, mold releases, and other contaminants as possible, as they will negatively affect adhesion. For most applications, general, light surface abrasion is all that is required to provide a good clean surface and to increase the surface area for bonding. Steel wool, a wire brush, sand paper, or abrasive pads are all suitable for light abrasion of most surfaces. Sandblasting and etching are also options for preparing the surface. In any case, after abrasion, the surface should be dusted to remove any loose material and then cleaned and degreased with an aqueous cleaner, naphtha, mineral spirits, methyl ethyl ketone (MEK) or other suitable means of removing oils and other contaminants. A final surface wipe with acetone or IPA may also be helpful. Allow solvents to completely evaporate before applying the primer. Different cleaning techniques may give better results than others, so the end user should evaluate their chosen method to determine if it is suitable for their specific application.

APPLICATION

Mix the container of the Primax WP thoroughly prior to use to re-suspend all of the fillers and pigments in the system. This can be generally be accomplished by vigorously shaking the container for a minute or two. When ready to use, this primer should be applied in a very light,

even coat by wiping, dipping, brushing, rolling, or spraying. In general, a wet film thickness of 3 – 7 mils is recommended and this will typically produce a dry film thickness of about 0.65 – 1.5 mils which is the recommended dry film thickness.

To apply by wiping, use a clean, lint free cloth made of cotton or a synthetic material. Wipe on in a thin layer and change the part of the cloth being used or the entire cloth if it becomes contaminated with soil from the surface being primed. For brushing use nylon bristle or foam brushes. For rolling use a short nap roller. For dip applications, submerse the area to be primed and then allow the parts to drain while the primer dries for at least 10 – 15 minutes. If parts cannot drain completely use a lint free cotton or synthetic cloth to wipe the surface dry after approximately 10 minutes.

A single coat is sufficient for most applications. However, some application methods may require more than one coat to achieve the desired dry film thickness and a uniform coating layer.

Allow the primer to air dry or use an oven to speed drying. Ensure the primer is dry before recoating, top coating or pouring casting materials over the primer surface. See the information below for suggested drying times.

DRYING & CURING TIMES:

	At 50ºF / 10ºC	**At 77ºF / 25ºC**	**At 110ºF / 43ºC**
Dry to Touch	3 hours	2 hours	1 hour
Dry enough to Handle	3 hours	2 hours	1 hour
Time to Recoat, Top Coat, or Cast against (minimum)	8 hours	2 hours	1 hour
Full Cure Time	7 days	5 days	3 days

Please note that the drying and curing data listed above is based on testing at 50% relative humidity in a 5 mil wet film thickness. Higher humidity levels may increase the required dry time and lower humidity may shorten the drying times. Oven drying may be required if the ambient humidity exceed 85%. In addition, thicker wet film thicknesses will dry slower and thinner wet film thicknesses will dry faster. In all cases, good air flow over the primed surface will also help to speed drying.

Ensure the primer film has thoroughly dried before applying a coating or casting material over the primer. For moisture sensitive systems, like many urethanes, allowing additional time for drying may be necessary if foaming or other signs of a reaction of residual moisture from incompletely dried primer is observed.

If the primed surface is kept dry and free of dust or contaminants, the primed surface will remain ready to receive a top coat or to have a casting compound applied to it for up to 6 months after application of the primer.

STORAGE AND SHELF LIFE

Shelf life is indicated on the product label. For best results, Primax WP should be stored below 35°C (95°F) and must be kept above freezing (0°C / 32°F) to prevent irreversible damage to the product. Containers should be kept tightly closed when not in use.

HANDLING PRECAUTIONS:
Mandatory and recommended industrial hygiene procedures should be followed whenever these products are being handled and processed. For additional information please consult the corresponding material safety data sheets.

PERSONAL HYGIENE:

Primax™ WP
AS WITH ALL INDUSTRIAL MATERIAL USE CAUTION WHEN WORKING WITH THESE MATERIALS. Avoid breezing vapors. Avoid contact with eyes, skin, or clothing. Wear eye protection and impervious gloves when handling. May cause eye & skin irritation. Wash thoroughly after handling. Use only with adequate ventilation. Do not take internally.

FIRST AID
In case of contact:
Skin – Immediately wash skin thoroughly with mild soap and water. Remove contaminated clothing and wash before reuse. Destroy contaminated shoes and other articles made of leather.
Eyes – Immediately flush eyes with plenty of water for 15 minutes and get prompt medical attention.
Inhalation - Remove person to fresh air. Administer oxygen or artificial respiration if necessary. Call a physician.
Ingestion - Do not induce vomiting. Dilute with plenty of water and contact physician immediately. Never give anything by mouth to an unconscious person.

DISCLAIMER:

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