

Guide to Whitford Coatings for Consumer Products 2010

Whitford

Makers of the largest, most complete line
of fluoropolymer coatings in the world

INTRODUCTION

Whitford Corporation was founded in 1969 to develop and market fluoropolymer and other high-performance coatings. Whitford's original product was Xylan 1010, which represented a new concept in coating formulation.

Whitford makes the largest, most complete line of fluoropolymer coatings in the world.

This booklet covers an impressive number of nonstick coatings formulated for application to cookware interiors, bakeware and counter-top appliances. It also covers all decorative coatings including high-temperature enamels, silk screen inks, waterborne enamels and low-VOC enamels.

Whitford formulates, manufactures, and markets high-performance coatings. We do not apply the coatings; rather, we instruct you as to the correct application methods or refer you to our extensive network of custom coaters worldwide.

This booklet provides an overview of products available at the time of publication. Additional information is available in various publications and may be obtained by contacting your Whitford representative or by calling (610) 286-3500 or faxing us at (610) 286-3510. You may also reach us through email at "sales@whitfordww.com" or visit our website: whitfordww.com.

Allow us to introduce you to our line of functional, cookware and decorative coatings and thank you for your interest in our products.

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TRADEMARKS

Name recognition and consequent quality perceptions are an integral part of any marketing program — be it local or, as Whitford’s program is, worldwide.

We currently use seventeen trademarks around the world. To protect the marks described below we have registered them or have applied to register them in over forty countries.

- **Whitford®**: registered throughout the world either as the word itself, or where allowed, in our own distinctive logotype style.

- **Xylan®**: the umbrella trademark for most of our products. Registered in most industrial countries around the world, Xylan is used to identify our low-friction, wear-resistant composites of fluoropolymers and reinforcing binder resins.

- **Xylan® XLR**: this trademark identifies our industrial longer-lasting release coating useful for molds, commercial bakeware and reprographic applications.

- **Xylac®**: this trademark is used to identify our high-temperature decorative materials most often utilized as exterior coatings for cookware.

- **Dykor®**: used to describe our fluoropolymer powders and dispersions; “thick-film linings”.

- **Xylar®**: used to identify our inorganic coating materials capable of operating at extremely high temperatures. When used as basecoats, these materials offer increases in resistance to salt spray by several orders of magnitude.

- **Excalibur®**: our premium cookware coating system consisting of arc-sprayed stainless steel as a basecoat. A two- or three-coat fluoropolymer release coating on top creates the toughest, longest-lasting, most durable nonstick in the world.

- **Ultralon®:** purchased from ICI Americas in 1990, the Ultralon Series has many applications in both industrial and consumer nonstick markets.

- **Quantum and Quantum2:** Whitford's patented internally reinforced multicoat systems used in many consumer and industrial applications.

- **QuanTanium®:** an internally reinforced, water-borne, multicoat nonstick system. It incorporates a unique mix of titanium particles blended into the coating to give it superior scratch resistance compared to conventionally reinforced coating systems.

- **Eclipse®:** a three-coat, internally reinforced nonstick system that is different from all others. The reinforcing agents are some of the hardest materials known. They form a web-like matrix that helps hold all the other materials in the system together, further strengthening the ultimate coating.

- **HALO®:** a three-coat internally reinforced nonstick system with a unique formula of special additives that absorb heat from the stovetop more quickly and distribute it across the surface of the pot or pan more evenly.

- **Resilon®:** identifies the series of water-based user-friendly coatings designed to improve the performance of automotive sealing systems, particularly where release and noise reduction are required.

- **Eterna®:** the longest-lasting nonstick system in the world.

- **Fusion®:** an improved version of ceramic nonstick coatings, made without PTFE and PFOA.

- **Skandia®:** a durable nonstick roller coating with a grip coat to eliminate the need for a primer.

- **Skandia Extreme®:** a high-release topcoat for roller coating or a more advanced spray single-coat, based on Eterna technology.

ETERNA

Longest-lasting Nonstick in the World.

General Information

Eterna is a totally new coating system that outperforms every other coating tested.

Eterna exhibits extremely high gloss to attract the consumer's eye at point-of-purchase and tested 10 times better in the standard Dry-Egg release test over the nearest competitor. It also lasted three times longer in the Accelerated Cooking Test.

Only conventional application equipment is required and it's engineered to work with a standard surface preparation as well. Eterna is perfect for stainless steel or aluminum (pressed, cast and anodized).

The Products

Eterna:

EXCALIBUR

Breakthrough Technology for Cookware

General Information

Excalibur is the toughest, longest-lasting, most durable nonstick coating in the world.

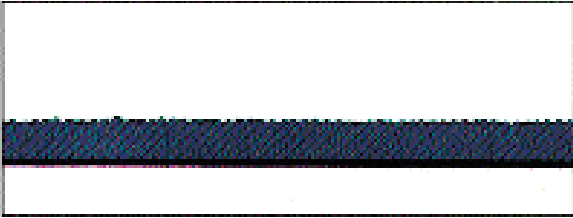
Why is Excalibur so much better than other nonsticks? Because it is reinforced externally with stainless steel.

Most coatings are just what the word suggests: a coating applied over a metal substrate — a surface finish. Excalibur is a *system*. A matrix of stainless steel is welded to the article, actually becoming a part of it. The stainless steel matrix is then impregnated with premium nonstick coatings. The result: a coating system with the toughness of stainless steel and the release properties of the best nonstick — the most durable coating system ever created for top-of-stove cookware.

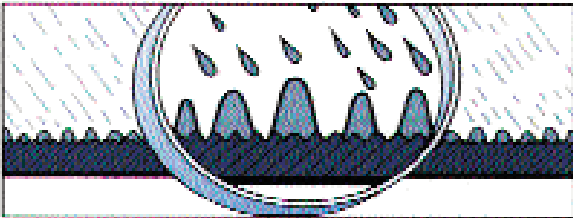
The Products

Excalibur: a patented, licensed product of Whitford Worldwide is specified for premium quality and gourmet cookware. It is available in many attractive colors. If you are interested in having the toughest, longest-lasting, most durable nonstick coating system in the world on your product, please contact our Marketing Department.

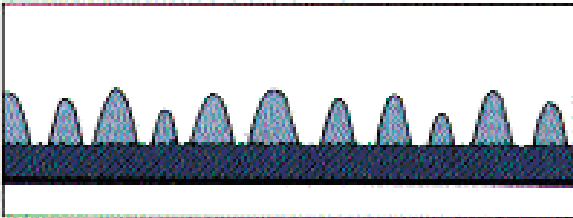
Why Excalibur is Better



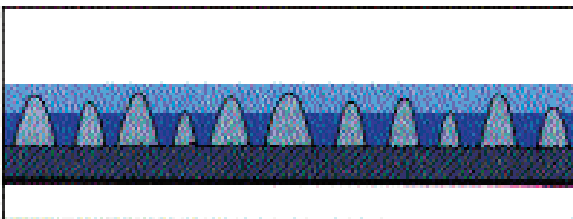
1. The surface of the substrate is grit-blasted with an abrasive to roughen it, so other elements in the Excalibur process adhere to it better.



2. Then, the most important part: white-hot particles of a special stainless steel (Whitford's patented alloy) are sprayed onto the roughened surface.



3. The particles cool and harden, bonded to the surface, forming a series of "peaks and valleys" that provide a permanent base for the nonstick coatings.



4. Several coats of tough fluoropolymers fill the "valleys" and cover the "peaks," held permanently in place by the special stainless-steel "peaks."

This unique process of reinforcing the coating makes Excalibur different from — and superior to — all other nonstick reinforced finishes. It's why Excalibur is as durable and long lasting as modern technology can provide.

QUANTUM2, QUANTANIUM

The Internally Reinforced Coating System

General Information

Quantum, Quantum2 and QuanTanium are internally reinforced nonstick systems. They are unique, high-release, wear and scratch-resistant coatings for application to cookware and other articles that are used for food preparation.

Quantum 7102-7203-7304, for which a United States Patent has been granted, is a breakthrough three-coat system, with many differences between it and conventional nonsticks. The most important one, however, lies in the primer coat itself. It contains no fluoropolymer. This permits the primer coat to be dedicated entirely to adhesion to the substrate.

Quantum2 7131-7232-7333, a second generation, is internally reinforced with a special blend of diverse ceramic materials. It provides a wider window of application tolerances and is more "user friendly." While the adhesion remains outstanding, Quantum2 has a smoother surface appearance and has high gloss. In addition, this system has superb abrasion resistance and outstanding nonstick performance. Finally, Quantum2 has improved stability and storage and is less likely to settle during transit (which may cause gun clogging).

Quantum and Quantum2 are designed for surfaces which require nonstick properties and are subjected to abrasives and/or high wear. They may be used on premium quality and gourmet cookware.

A special Quantum 7115/7320 formulation has been developed for application by coil coating methods. This formulation produces the toughest, most durable coated bakeware available.

QuanTanium is an internally reinforced, water-borne, multicoat, nonstick system. It incorporates a unique mix of titanium particles blended into the coating to give it superior scratch resistance to conventionally reinforced systems.

The excellent scratch resistance produced by the incorporation of titanium particles causes the coating to be harder and more durable than conventionally reinforced systems. QuanTanium is available for grit-blasted or smooth substrates.

XYLAN 8000 SERIES

Silicone Coatings

General Information

Xylan 8000 Series coatings are nonstick coatings for commercial and consumer applications. They are durable finishes because the silicone resin system has been modified to exhibit excellent “hot hardness.”

The Products

Xylan 8003: an inexpensive coating used principally to coat commercial baking trays and economical consumer bakeware, e.g., cookie sheets and muffin tins.

Xylan 8010: a waterborne, VOC-compliant coating formulated as a decorative finish to replace porcelain. While it does not have the temperature capabilities of porcelain, it will perform well to 650°F (340°C).

XYLAN 8100 SERIES

Nonstick Coatings for
Food Processing Equipment

General Information

Xylan 8100 Series coatings are the food-grade version of our Xylan 1000 Series resin-bonded, low-friction industrial coatings. (See our "Guide to Whitford Industrial Products" for further information on the 1000 Series coatings.) These formulae are produced from FDA-acceptable materials and are permitted for direct food-contact applications as defined in the "Code of Federal Regulations" (21 CFR 175.300 - Resinous and Polymeric Coatings). They also meet USDA requirements for use in commercial food-processing facilities.

The Products

Xylan 8110: like Xylan 1010, provides the optimum combination of properties available from a fluoropolymer coating: low coefficient of friction, very good nonstick (release), wear resistance under load, 500°F (260°C) operating temperature, and resistance to a broad spectrum of chemicals and corrosive agents. It is specified on hamburger bun chutes in fast-food restaurants, circular knife blades, and on countless components of food-processing machinery which require dry-film lubrication.

Xylan 8114: contains significantly more bonding resin relative to its content of PTFE lubricant versus Xylan 8110. Altering the formula in this manner produces finishes which are harder, more abrasion-resistant, glossier, and less porous than Xylan 8110. It has been used to coat steel pizza pans, deep fat fryers, popcorn poppers, food storage bins, and oven louvers.

XYLAN 8200 SERIES

Premium Two-coats for Cookware

General Information

Xylan two-coats are nonstick finishes for commercial and consumer kitchenware. They consist of basecoat and topcoat formulae which are available in both attractive metallic and rich nonmetallic colors.

These multicoat finishes have several performance advantages over single-coat nonsticks. First, the topcoats contain a high content of PTFE. Initial nonstick and long-term easy-clean properties are superior. Second, because two coats are thicker, they last longer. Third, because high-end consumer and commercial equipment commands higher prices, more costly high performance polymers can be used in the formulations.

The Products

Xylan 8211 Basecoats/8213 Topcoats: economical multicoat system designed for aluminum cookware.

Xylan 8231 Basecoats/8233 Topcoats: first generation Xylan multicoat system. They set the standard for wear and abrasion resistance for both commercial and noncommercial cookware. Provides good performance at economical price.

Xylan 8248 Basecoats/8241 Topcoats: may be applied to cookware which has been pretreated with ceramic (frit) undercoatings.

Xylan 8251 Basecoats/8253 Topcoats: second generation of Xylan multicoat systems formulated for application to food-processing machinery, restaurant equipment, warming trays and bakeware.

Xylan 8254 Basecoats/8257 Topcoats: multicoat system designed to be applied over blasted substrate. This is the "best" two-coat currently available.

Xylan 8255 Basecoats/8257 Topcoats: “No-blast” system, formulated to adhere to etched aluminum substrate without the need for grit blasting.

Xylan 8272 Basecoats/8279 Topcoats: multicoat systems designed to be applied “wet-on-wet,” i.e., there is no need to “flash” the basecoat prior to the application of the topcoat. May be applied to commercial or noncommercial cookware.

Xylan 8288 Basecoats/8280 Topcoats: may be applied to top-of-stove cookware, bakeware, Pyroceram, and best-quality electric kitchen appliances (griddles, waffle irons, sandwich makers).

XYLAN 8200

Premium Three-coats for Cookware

General Information

Xylan three-coats are nonstick finishes for premium quality cookware. They consist of basecoat, midcoat and topcoat formulae which are available in both attractive metallic and rich nonmetallic colors.

These multicoat finishes have two performance advantages over one- and two-coat nonsticks. First, the topcoats are composed almost entirely of pure PTFE. Initial nonstick and long-term easy clean properties are superior. Second, because three-coats are thicker, they last longer.

The Products

Xylan 8251 Basecoat/8252 Midcoat/8253 Topcoat: the second generation of three-coat materials with improved abrasion resistance and enhanced release characteristics designed for commercial food machinery, restaurant equipment, warming trays and bakeware.

Xylan 8255 Basecoat/8256 Midcoat/8257 Topcoat: "No blast" systems formulated to adhere to etched aluminum cookware without grit blasting.

Xylan 8254 Basecoat/8256 Midcoat/8257 Topcoat: Designed for application over blasted substrates.

Xylan 8288 Basecoat/8286 Midcoat/8280 Topcoat: formulated to be the best all around three-coats. May be applied to premium quality top-of-stove cookware or bakeware fabricated from aluminum or stainless-steel substrates and best quality electric kitchen appliances (griddles, waffle irons, sandwich makers).

XYLAN 8300 SERIES

World's Best One-Coats for Cookware

General Information

Xylan 8300 coatings are used worldwide to coat more housewares than any other single-film coating. Their use is appropriate for application to the interior cooking surfaces of top-of-stove cookware, e.g., skillets, frying pans, sauce pans and self-heated electric appliances such as waffle irons, sandwich cookers and griddles. Among one-coats, the economy, durability, and release characteristics of these materials are unparalleled.

The Products

Xylan 8330: contains a high percentage of PTFE in the cured film for excellent nonstick properties, yet is extremely mar- and abrasion-resistant. Available in dark, nonmetallic colors.

Xylan 8333: identical to 8330 coatings, but contains metallic pigments for improved aesthetics.

Xylan 8350: represents an improvement over the original formulae in terms of appearance, performance, and durability.

Xylan 8353: identical to Xylan 8350 coatings, but contains metallic pigments for improved aesthetics.

Xylan 8360: third generation, 8300 Series coatings. Represents a significant improvement over the original formulae in terms of wear and abrasion resistance. Available in dark, nonmetallic colors.

Xylan 8363: identical to Xylan 8360 coatings, but contains metallic pigments for improved aesthetics.

Xylan 8391: contains no PTFE. It is used principally as a primer when extra durability is desired, or to smooth out rough castings prior to the application of the coatings described above.

XYLAN 8400 SERIES

Lower Cure Temperature, Not Lower Quality

General Information

The most notable characteristics of Xylan 8400 Series coatings are their relatively low curing requirement of 600°F (315°C) or less (see Xylan 8426). Designers may now specify Xylan 8400 Series coatings for aluminum castings, such as sandwich cookers, steamers and waffle irons, knowing that the castings will have an attractive nonstick finish and will not outgas.

The Products

Xylan 8421: a low-VOC, 400°F (204°C) cure, suitable for food processing and handling equipment, i.e., water valves, etc. Good corrosion resistance.

Xylan 8426: a low-VOC, economical one-coat system suitable for electric appliances. May be cured at 525°F (273°C). Available in very attractive low-gloss, metallic colors.

Xylan 8460: resin-bonded, nonstick coatings formulated to operate continuously to temperatures of 500°F (260°C). The coating exhibits excellent resistance to cooking oils, dishwasher detergents, and a broad range of household and commercial chemicals. It is the coating of choice on cooking surfaces of aluminum castings.

Xylan 8461: contains more bonding resin relative to content of PTFE lubricant than Xylan 8460. This produces finishes which are harder, more abrasion-resistant, glossier, and less porous than Xylan 8460. Used on coffee-maker warming plates, pizza pans, popcorn poppers, and fry buckets.

Xylan 8470: incorporates a dispersion grade of PTFE which tends to stratify to the surface, yielding a slick, waxy, nonstick surface. Recommended for high-release applications, e.g., molds for foodstuffs such as cheese and chocolate, bundt pans, etc.

XYLAN 8500 SERIES

Food-Safe Function with a Flair

General Information

Striking colors, including bright white and metallic finishes, and low processing temperatures 525°F (275°C), distinguish this line from others used to coat housewares. These coatings are versatile as they bond well to steel and aluminum and require minimal surface preparation. The cured film is stain-resistant and unaffected by cooking oils, dishwasher detergents, and many household chemicals. Their visual appeal makes them natural choices to satisfy consumer and commercial coating requirements.

The Products

Xylan 8510: an inexpensive spray coating for bakeware. Is also available in high solids.

Xylan 8514: provides low-gloss, easy-clean finishes in a broad spectrum of rich colors. Contains a relatively high percentage of PTFE. Professional coating applicators indicate that these materials are among the easiest and most forgiving to apply. Used to finish bakeware, medical and laboratory equipment. The bright, white Xylan 8514/903 is favored for medical equipment because it lends a "clean room" appearance to exterior surfaces.

Xylan 8516: contains fillers to increase the abrasion resistance of the basic 8514 formula while maintaining its easy-clean characteristics. Because of its toughness, is applied to counter-top appliance housings and restaurant equipment.

Xylan 8541: formulated to provide low cure and maximum release. Exclusively for bakeware.

Xylan 8585S: formulated for good hot hardness and scratch resistance. Contains a high temperature silicone release agent. Ideal for interiors and exteriors of steel cookware.

XYLAN 8600 SERIES

Easy-Clean, Decorative Enamels

General Information

Xylan 8600 Series coatings are high-temperature, decorative enamels with easy-clean additives. One of our most successful product lines, they are used to coat a countless array of cookware, bakeware, and appliance components. Available colors include earth tones, pewter, and many bright colors found on housewares.

The Products

Xylan 8660: contains silicone as the nonstick agent. This smooth, glossy enamel has a useful operating temperature to 425°F (220°C) and is targeted for low-end bakeware.

Xylan 8666: has an attractive, medium-gloss satin finish that makes it a good choice for exterior surfaces of better quality cookware and counter-top appliances. The operating temperature of this finish should be limited to 450°F (230°C). PTFE is the easy-clean additive.

Xylan 8666S: is the identical product with a silicone release agent.

Xylan 8668: thermally stable to 480°F (250°C) and is the most popular finish in the line. If the cookware in your home has an easy-clean enamel exterior coating, it is most likely Xylan 8668.

Xylan 8668S: contains high temperature silicone as the nonstick additive. The cured film has a smooth, mirror-like finish and operates to 480°F (250°C). It is durable enough to be applied on the interior surfaces of stir-fry woks. (Most are coated inside and outside with this finish.) They may also be specified for applications where the potential for hazardous fumes associated with overheated PTFE housewares may exist (e.g., range-top drip pans, aka “burner bibs”).

XYLAN 8800 SERIES

One-Coat Release Finishes for Cookware

General Information

Xylan 8800 Series coatings are applied to metal by conventional air spray or coil-coating techniques. They are noteworthy because of two unique properties: they have arguably the best nonstick properties of any single-coat nonstick coating; they are extremely flexible, allowing them to be postformed. Other attributes of these coatings include good chemical resistance and cured films with glass-like smoothness.

The Products

Xylan 8800: formulated for application to coil stock from which top-of-stove cookware and small appliance housings are manufactured. These coatings have a medium loading of PTFE and have excellent adhesion to aluminum and tin-free steel (TFS). They are then postformed into the finished shape of the cookware or appliance.

Xylan 8802: a waterborne, VOC-compliant coating specified for spray application in several industrial molding operations which operate to 450°F (230°C). This formula was selected because it met several important criteria: a high percentage of PTFE lubricant for excellent nonstick and release; a coating which may be flexed repeatedly with no loss of adhesion; resistance to many chemicals and corrosives; and a safe, nontoxic, dry film.

Xylan 8810: bonds equally well to ferrous and non-ferrous materials. Specified for spray application to stampings, extrusions, and die-cast components used in the manufacture of microwave and toaster ovens and other kitchenware. Like 8800, Xylan 8810 coatings contain a medium loading of PTFE and are also recommended for use on top-of-stove cookware and bakeware.

Xylan 8815: a primer for Xylan 8820. It is suitable for use for application to aluminum, stainless-steel and TFS substrates.

Xylan 8820: formulated for coil application with a high percentage of PTFE. Recommended for coil stock which is converted to top-of-stove cookware and may be used in conjunction with Xylan 8815 to form a two-coat system. Spray and high release versions are also available.

Xylan 8840: unique in the Series because they contain FEP (fluorinated ethylene propylene) as the nonstick polymer rather than PTFE. It is well known in the industry that FEP processed at high temperatures produces coatings with outstanding nonstick properties. Accordingly, Xylan 8840 has the best nonstick properties of any Xylan coating currently in production.

Xylan 8840 is used to coat sealing bars and molds. Heated sealing bars, used to weld plastic packaging films around consumer products, are notoriously sticky and troublesome. Xylan 8840-coated sealing bars benefit from the material's ability to repel the melted plastic while operating continuously at elevated temperatures. Likewise, molds coated with Xylan 8840 are favored to produce a diversity of goods because of the coating's long-lasting release properties — especially useful with high-sugar recipes.

Xylan 8850: a more economical coil coating for bakeware. These coatings have a medium loading of PTFE and have excellent adhesion to aluminum and tin-free steel (TFS). It has a maximum operating temperature of 400°F (204°C).

ULTRALON ONE-COATS

One-Coat Release Finish for Cookware

General Information

Ultralon one-coat coatings are applied to metal by conventional air spray or coil-coating techniques. They are super-smooth coatings which are typically applied to top-of-stove cookware, bakeware, and counter-top appliances such as toaster-oven shells because of their excellent nonstick properties and ability to be postformed.

The Products

Ultralon OC-400: available in a broad range of colors including white and several finishes with metallic effects. (In the Ultralon lines, each Product Number denotes a specific color, e.g., OC-417 is White, OC-443 is Dark Gray Metallic, etc.)

Skandia

Durable Nonstick for Roller Coating

General Information

Whitford makes a complete line of coatings for application by roller. At the heart of the Skandia systems is a unique new “grip coat” (instead of a primer coat) that also performs as a pretreatment. It has excellent adhesion to clean aluminum and is designed to replace the primer used as part of traditional nonstick systems currently run on roller-coating lines.

However, as part of a complete system, the gripcoat raises the level of flexibility and performance.

The addition of specific subsequent coats can provide performance levels that cover Promotional, Opening Price Point, Moderate, Mid- and Upper-Mid-Range cookware.

Skandia Xtreme

Uses High-Release Topcoat

General Information

Skandia Xtreme includes a new High-Release (HR) topcoat that provides advantages not seen before in roller coating. Based on the patented technology of the recently introduced Eterna system, nonstick performance has been raised to a new level. With the HR topcoat, advances have been made with gloss, eye appeal and improved release.

FUSION

PFOA & PTFE-Free Ceramic Nonstick

General Information

Fusion is waterborne and totally free of any PTFE and PFOA as are all ceramic coatings. Because it is ceramic, Fusion can be taken to extreme temperatures (850°F/455°C); conventional coatings begin to decompose slowly at 650°F/345°C.

Most ceramic coatings involve some fairly complicated chemistry that makes them difficult to apply. But with Fusion, we have simplified the application process by reducing the number of packs that the applicator must combine. Our two-pack ceramic system needs only two packs for the base and topcoat, less than other manufacturers. Once mixed, ceramic coatings must be used promptly as they have a short "pot life." Also of note is that Fusion cures at a lower temperature using less energy and saving money.

For more information, ask for our Fusion flier.

XYLAC 4370

Decorative Silk-Screen Inks

General Information

Xylac 4370's are decorative silk-screen inks for top-of-stove cookware exteriors. This coating system may be used on the base metal or over Xylac 4500 or Xylac 4700 coating materials to provide a decorative exterior. Xylac 4370 is available in many colors, including white and light colors. It has excellent resistance to high heat, household chemicals and mild solvents.

XYLAC 4100 & 4400

High-Temperature, Decorative Enamels

General Information

Xylac 4100 and 4400 Series Enamels are our best resin- bonded, high-temperature enamels. They are similar in composition to the Xylan 1000 Series coatings, with the exception that they contain no PTFE (or other) lubricant.

The Products

Xylac 4100: employed as an industrial-strength enamel, Xylac 4100 is unaffected by most organic solvents, resists attack by acids and bases, and has an operating temperature range of -420° to 550°F (-250° to 285°C). We know of no other enamel with better physical, chemical, and mechanical properties on the market today.

Xylac 4400: properties are identical to the Xylac 4100 Series Enamels, is a waterborne rather than a solvent-borne carrier system. The use of water raises the flash point of the materials from approximately 85° to 120°F (29° to 48°C) and means lower actual (not calculated) solvent (VOC) content. Like Xylac 4100, Xylac 4400 is unaffected by most organic solvents, resists attack by acids and bases, and has an operating temperature range of -420° to 550°F (-250° to 285°C).

XYLAC 4300

Dazzling Enamels for Plastics/Metals

General Information

Xylac 4300s are a new line of solvent-borne and waterborne decorative enamels which bond well to plastics and other temperature-sensitive substrates. They are available in a rainbow of bright, eye-catching metallic and nonmetallic colors.

The Products

Xylac 4311: designed as a one-pack system for thermoset plastics. Xylac 4311 has excellent detergent resistance.

Xylac 4320: this line of finishes may be applied to thermoplastic and thermoset materials to yield finishes never before possible with so economical a material. The coatings fully cure at temperatures of (350°F/175°C) and have low VOCs: 2.5 to 3.0 pounds per gallon (300 to 360 grams per liter).

Xylac 4360: decorative enamel coatings are similar to Xylac 4320, above, but are formulated for use exclusively on metal substrates because of higher cure-temperature requirements: 400° to 450°F (205° to 230°C). These products are color stable to temperatures associated with top-of-stove cooking and, like the Xylac 4320 Series coatings above, are VOC-compliant.

XYLAC 4600

Decorative Enamels for Coil Application

General Information

Xylac 4600 Series coating materials are formulated for application to coil stock. These coatings are used on the reverse side of coil in conjunction with Xylan 8800 Series products. Available in virtually any color, these coatings cure smooth as glass, present very attractive exterior finishes and the flexibility to allow postforming.

Xylac 4600 Series coatings are also used as an economical backing to prevent the coil surface from rusting and serve as a protective cushioning film to prevent the coil from marring itself during the rewind operation and transport.

The Products

Xylac 4610: formulated for electric water boilers. These coatings are available in many colors and have the flexibility to allow postforming.

XYLAC 4510 & 4768

Decorative “Hammerstone” Exterior System

General Information

Xylac 4510/4768 is a decorative “hammerstone” exterior system. The basecoat, Xylac 4510, is applied and flashed at 300°F (150°C). The Xylac 4768 topcoat is then applied. Silicones are added to the topcoat to change its surface tension, making it incompatible with the basecoat. As a result, it cannot wet out and so it “crawls” into itself, creating small mounds or hills of color against the contrasting color of the basecoat. This coating comes in a wide variety of color combinations.

XYLAC 4700

High-Temperature Enamel for Housewares

General Information

Xylac 4700 Enamel is, in terms of operating temperature, our “better” quality high-temperature, decorative enamel (see Xylac 4360 for “good” and Xylac 4100 & 4400 for “best”). Following a simple degreasing operation, Xylac 4700 bonds tenaciously to steel, aluminum, plastics — even chrome. This coating has good gloss and can be produced in virtually any color, including earth tones, pastels, bright white, and metallics. This allows designers to match coated metal components to molded plastic parts on the same product. It has a maximum operating temperature of 500°F (260°C).

XYLAN 1022

Steam Iron/Steam Chamber Coatings

General Information

Xylan 1022 has been developed to solve several problems associated with the generation of steam in both travel and domestic irons. This coating is waterborne and is easily applied to the internal steam chamber to accelerate the generation of steam when needed during ironing.

Xylan 1022 is a combination of a high-temperature, thermoset resin for adhesion, selected pigments, additives, and fillers for corrosion resistance. While the product is called Xylan, it works exactly the opposite of our traditional Xylan nonstick, nonwetting coatings. Xylan 1022 causes water to completely “wet-out” the surface of the steam chamber. This means the water spreads quickly and uniformly into a thin film, giving it the maximum exposure (surface area) to the heat in the steam chamber. The thin film of water is converted to steam more rapidly than a pool or droplet of water, thereby enhancing the operation of the appliance.

Xylan 1022 also provides excellent corrosion resistance, eliminating oxidation of the steam chamber. This eliminates resultant stain-causing deposits from being sprayed onto clothing with the steam.

XYLAN 1500

Function with Flair

General Information

Xylan 1500 Series coatings are used for applications requiring good release and thermal stability, in striking colors. Products such as personal-care items, oven trays, industrial and restaurant filters are coated in bright and appealing colors with the highly practical quality of long-lasting release.

The colors in which Xylan 1500 is available can be matched to the colors of existing molded parts — even white. Another desirable feature is that hair preparations, barbecue sauce, even tap-water scale will neither cling to nor stain Xylan 1500's bright surface.

Excellent adhesion to steel or to aluminum substrates is obtained simply by degreasing the parts to be coated. Normally, grit blasting or primers are not required.

Xylan 1500's self-cleaning properties, resistance to ultra-violet rays, acid rain and its variety of colors, suggest its use on applications from building fasteners and snow slides to radomes and I-O drives.

The Products

Xylan: 1514: Xylan 1514 was the first coating chosen for hair-styling wands and continues to be used throughout the world today.

Xylan 1518: is the coating of choice for many travel irons and coffee-warmer plates because of its range of colors, economical cost and excellent durability.

DYKOR 700 SERIES

Powder Coatings for Kitchen Tools

General Information

Dykor 700 Series powder coatings are easy clean, high temperature resistant powder coatings for kitchen tools and bakeware.

The Products

Dykor 710: provides easy clean properties in a powder coating. This coating is ideal for kitchen tools, wire racking, and some food contact applications. This powder coating may be used in applications up to 350°F (177°C) and up to 425°F (218°C) intermittent.

Dykor 720: similar to Dykor 710 but has slightly better heat resistance. This powder coating may be used in applications up to 380°F (193°C) continuous and up to 450°F (232°C) intermittent.

XYLAN 7900 SERIES

Coatings Designed for Curtain Coaters

General Information

Curtain coating is a high-velocity production process that yields remarkably uniform deposition over horizontal surfaces. Flat and nearly flat surfaces are coated quickly and efficiently.

The Products

Xylan 7910 Primers/7930 Topcoats: this two-coat system is comparable to Xylan 8288/8280 in performance and may be postformed. Provides very good release and abrasion resistance.

Xylan 7940: provides good durability and excellent drawing properties in a one-coat VOC-compliant system. Recommended for cookware applications including pressure cookers; only available in dark colors.

Xylan 7950: similar to Xylan 7940 in performance and uses; however, it is solvent-borne. Available in dark colors including metallics.

Xylan 7960: an economical one-coat bakeware system providing good flexibility. May be applied to aluminum, TIS and AIS.

Xylan 7970: is a very good one-coat, waterborne system. Has fair heat resistance and is available in many colors.

Xylan 7980: is a one-coat system providing high heat resistance for bakeware exterior applications.

Xylan 7990: is a one-coat system providing high heat resistance and easy clean for bakeware interior applications.