



PPG TECHNOLOGIES: UNITED STATES AND CANADA

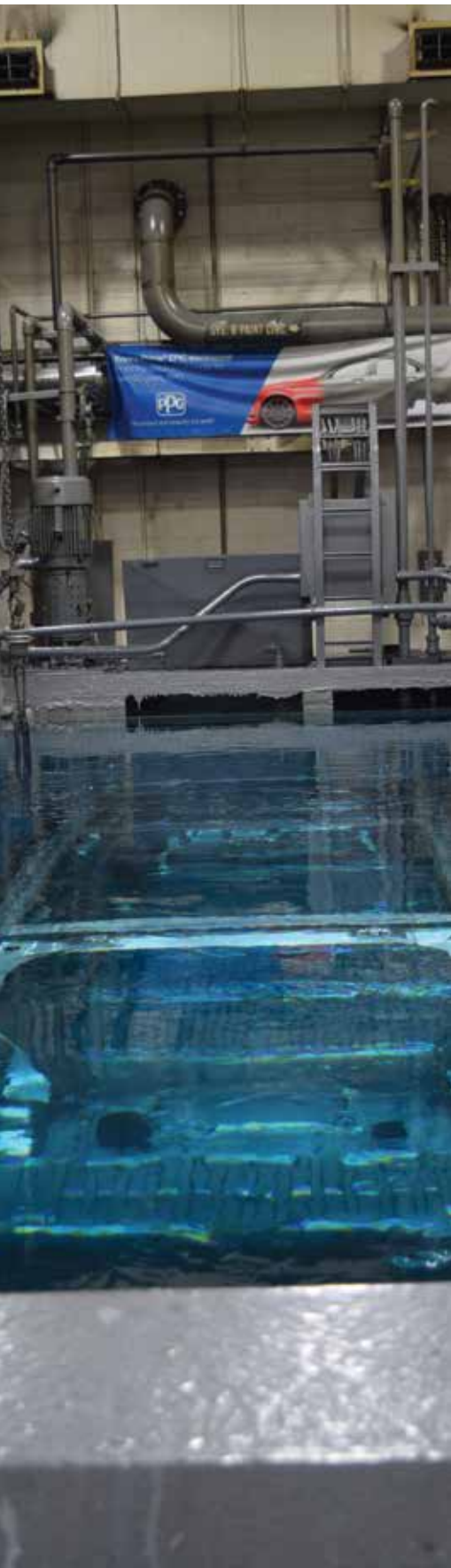
Pretreatment and Engineered Products



**Industrial Coatings & Automotive Parts and Accessories
Preferred Product Offerings**



We protect and beautify the world™



Pretreatment and engineered products from PPG

As one of the world's largest producers of industrial coatings, PPG has the capability to serve as the sole supplier for every part of your substrate protection process. We provide integrated solutions that clean, enhance, prepare, strengthen and protect metal substrates through our complete line of pretreatment and engineered products.

Unique benefits

- Available for various application methods, substrates and end uses
- Enhances paint performance
- Sustainable products
- Products that meet OEM specifications

Table of Contents

About this guide	3
Cleaners, Descalers, Iron Phosphates	4-5
Zinc Phosphates, Thin Film, Sealers	6-7

About this guide

This guide was created to promote PPG's preferred products – the products that have proven the most popular and useful to the widest number of customers. It in no way represents the full breadth of PPG's offering.

It is designed for internal use only as a training tool and as a means to help you initiate conversation with your customers and prospects. **This document contains proprietary information and should never be distributed to customers, prospects or other external sources.**

The technical data presented in this document is based upon information believed by PPG to be currently accurate. However, no guarantees of accuracy, comprehensiveness, or performance are given or implied. Continuous improvements in coatings technology may cause future technical data to vary from what is in this document.

For specific product performance specifications, consult PPG product technical data sheets or speak to a pretreatment technical expert.



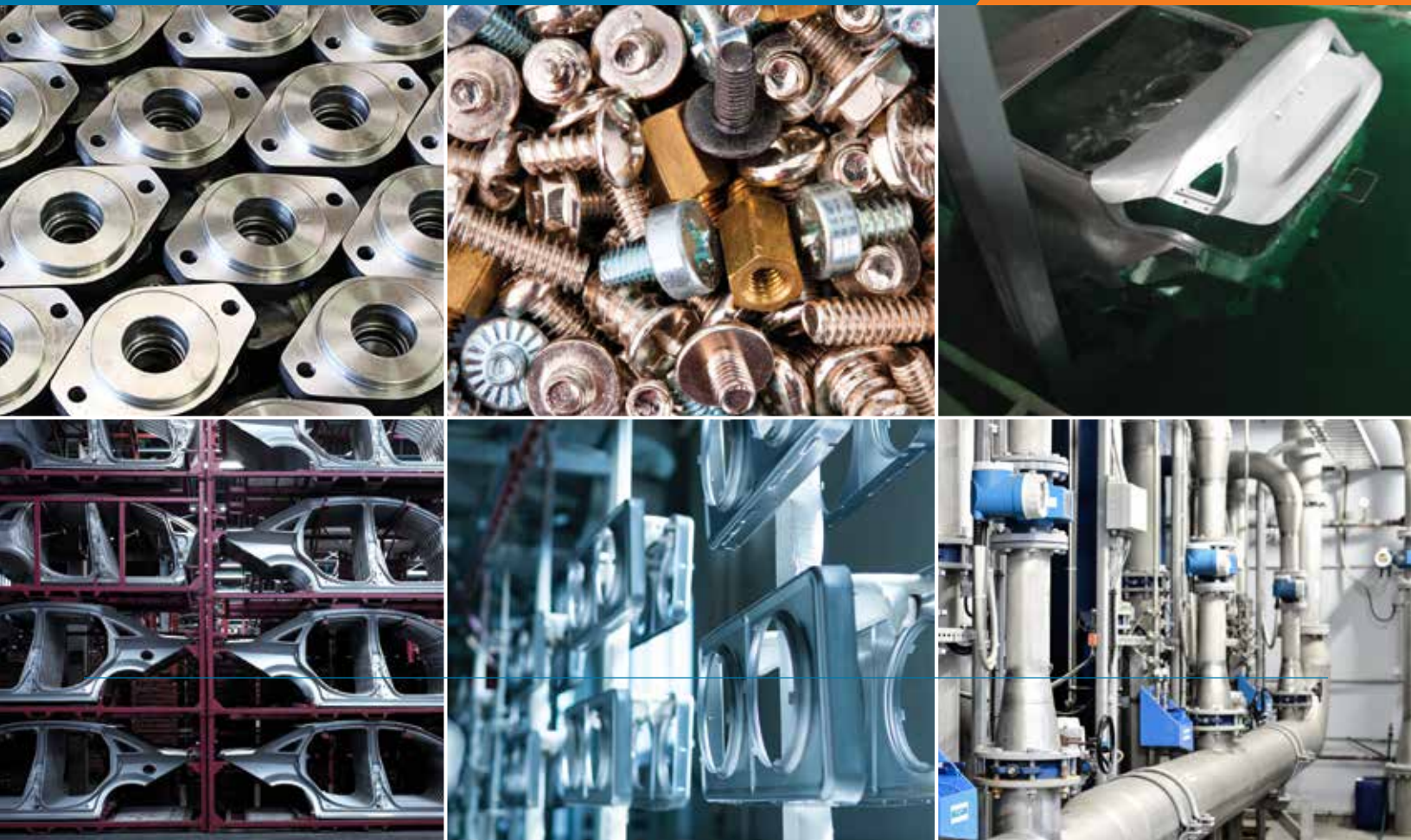
Product Type	Product Name	Product Code	Chemistry	Features >	< Potential Benefits to Customer
Cleaner	ULTRAX® 94D	UT94D	Alkaline	Excellent detergency and soil loading properties Formulated with sodium nitrite	Reduces dumping and recharging Provides in-process rust protection
	Ultrax 98D	UT98D	Alkaline	Compatible with zinc and aluminum substrates Formulated with sodium nitrite	Provides multi-metal capabilities Provides in-process rust protection
	Ultrax 29	UT29	Alkaline	Compatible with zinc and aluminum substrates Formulated for both spray and immersion	Provides multi-metal capabilities Provides process versatility and flexibility
	Ultrax 32LF	UT32LF	Alkaline	Formulated for both spray and immersion High soil loading capacity	Provides process versatility and flexibility Reduces dumping and bath recharging
	Ultrax 97	UT97	Alkaline	Lower temperature operation Capable of removing wide selection of soils	Increases energy savings with less natural gas consumption Handles wider variety of parts

Chemical Descaler	CORROSOL™ 890S	COR890S	Mineral Acid	Reduces iron sludge Enhanced weld cleaning and laser scale removal	Longer bath life Improves performance on weld areas and edges
	Corrosol 851S	COR851S	Mineral Acid	Formulated for spray or immersion processes Enhanced weld cleaning and laser scale removal	Drops into current system Improves performance on weld areas and edges
	Acid Metal Conditioner 261	AMC261	Organic Acid	Near neutral pH Multi-metal capability Enhanced weld cleaning	Less aggressive on equipment Increases flexibility while reducing capital cost Improves performance on weld areas

Iron Phosphate	ULTRAGUARD™ ATP31	UGATP31	Iron	Cleans and pretreats in one stage Low temperature	Provides compact system design and reduces material needs Increases energy savings
	Ultraguard 31F	UGALTP31F	Iron	Compatible with zinc and aluminum substrates Cleans and pretreats in one stage Low temperature	Provides multi-metal capabilities Provides compact system design and reduces material needs Increases energy savings
	CHEMFOS® 51HD	CF51HD	Iron	Cleans and pretreats in one stage Heavy soil loading	Provides compact system design and reduces material needs Reduces dumping and bath recharging
	Ultraguard ATP50M	UGATP50M	Iron	Low temperature One product for charging and replenishment	Increases energy savings Reduces complexity
	STRATAGUARD 52107	PT52107-08	Iron	Formulated to give higher coating weights Recommended for Direct-to-metal paint applications	Improved corrosion resistance Reduces paint application complexity
	Ultraguard SWHDE	UGSWHDE	Iron	Applied by spray wand Formulated to give higher coating weights	Compact process Improved corrosion performance

Substrates	Temperature	Application		Segments						
		Spray	Immersion	Agriculture and Construction Equipment	Appliance	Automotive Parts and Accessories	General Industrial	Office Furniture and Equipment	Transportation	
Metal	Operating Temperature									
Steel	120 - 150° F (49 - 65° C)		✓	✓	✓	✓	✓	✓	✓	✓
Steel, Zinc, Aluminum	120 - 160° F (49 - 71° C)		✓	✓	✓	✓	✓	✓	✓	✓
Steel, Zinc, Aluminum	120 - 160° F (49 - 71° C)	✓	✓	✓	✓	✓	✓	✓	✓	✓
Steel	125 - 150° F (52 - 65° C)	✓	✓	✓	✓	✓	✓	✓	✓	✓
Steel	115 - 135° F (46 - 57° C)	✓		✓	✓	✓	✓	✓	✓	✓
Steel	Ambient - 140° F (22 - 60° C)		✓	✓	✓	✓	✓	✓	✓	✓
Steel	Ambient - 140° F (22 - 60° C)	✓	✓	✓	✓	✓	✓	✓	✓	✓
Steel, Zinc, Aluminum	Ambient - 140° F (22 - 60° C)	✓	✓	✓	✓	✓	✓	✓	✓	✓
Steel	80 - 115° F (27 - 46° C)	✓		✓	✓	✓	✓	✓	✓	✓
Steel, Zinc, Aluminum	80 - 115° F (27 - 46° C)	✓		✓	✓	✓	✓	✓	✓	✓
Steel	135 - 150° F (57 - 65° C)	✓		✓	✓	✓	✓	✓	✓	✓
Steel	70 - 125° F (21 - 52° C)	✓		✓	✓	✓	✓	✓	✓	✓
Steel	110 - 130° F (43 - 54° C)	✓		✓	✓	✓	✓	✓	✓	✓
Steel	70 - 120° F (21 - 49° C)	✓		✓	✓	✓	✓	✓	✓	✓

Product Type	Product Name	Product Code	Chemistry	Features >	< Potential Benefits to Customer	Substrates	Temperature	Application		Segments							
								Spray	Immersion	Agriculture and Construction Equipment	Appliance	Automotive Parts and Accessories	General Industrial	Office Furniture and Equipment	Transportation		
Zinc Phosphate	VERSABOND®	VBRC	Rinse Conditioner	Long Bath Life	Reduces dumps and recharges/less maintenance	Steel, Zinc, Aluminum	60 - 120° F (15 - 49° C)	✓	✓	✓	✓	✓	✓	✓	✓	✓	
				Wide operating parameters	Easy to use & control												
	CHEMFOS® 700VM	CF700VM	Zinc	Sludge reduction	Reduces tank dumps/less maintenance	Steel, Zinc, Aluminum	122 - 128° F (50 - 53° C)		✓		✓	✓	✓	✓	✓	✓	✓
				Compatible with zinc and aluminum substrates	Provides multi-metal capabilities												
				Meets typical finish performance requirements	Meets OEM specifications												
	Chemfos 710VM	CF710VM	Zinc	Sludge reduction	Reduces tank dumps/less maintenance	Steel, Zinc, Aluminum	122 - 128° F (50 - 53° C)	✓		✓	✓	✓	✓	✓	✓	✓	✓
				Compatible with zinc and aluminum substrates	Provides multi-metal capabilities												
				Meets typical finish performance requirements	Meets OEM specifications												
	Chemfos 700VNM	CF700VNM	Zinc	Sludge reduction	Reduces tank dumps/less maintenance	Steel, Zinc, Aluminum	Spray: 122 - 128°F (50 - 53° C) Immersion: 90 - 115° F (32 - 46° C)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
				Compatible with zinc and aluminum substrates	Provides multi-metal capabilities												
				Provides higher finish corrosion performance	Meets more stringent OEM specifications												
	Thin Film	X-BOND™ 4000	XB4000	Zirconium	Low temperature	Increases energy savings	Steel, Zinc, Aluminum	60 - 115° F (15 - 46° C)	XB4000SM	XB4000DM	✓	✓	✓	✓	✓	✓	✓
Process versatility					Widens substrate and application options												
Patented iron control method					Increases performance, longevity, and consistency												
Powder/Liquid topcoat compatible					Increases performance with powder/liquid topcoat technologies												
ZIRCOBOND® 4200		ZB4200	Zirconium	Low temperature	Increases energy savings	Steel, Zinc, Aluminum	60 - 115° F (15 - 46° C)	ZB4200SM	ZB4200DM	✓	✓	✓	✓	✓	✓	✓	✓
				Process versatility	Widens substrate and application options												
				Patented iron control method	Increases performance, longevity, and consistency												
				E-coat compatibility	Increases performance with e-coat technologies												
Sealer	CHEMSEAL™ 59	CS59	Non-Chrome	Formulated without chrome	Environmentally friendly	Steel, Zinc, Aluminum	70 - 120° F (21 - 49° C)	✓	✓	✓	✓	✓	✓	✓	✓	✓	
				Provides extra layer of corrosion resistance	Higher corrosion performance												
				Meets typical finish performance requirements	Meets OEM specifications												
	ZIRCOSEAL® 400	ZS400	Non-Chrome	Formulated without chrome	Environmentally friendly	Steel, Zinc, Aluminum	60 - 100° F (15 - 38° C)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
				Dried in place capability	Compacts process												



We are PPG

- We protect and beautify the world by developing and delivering paints, coatings and materials that our customers have trusted for more than 140 years.
- Operations in 70 countries, with 100+ manufacturing facilities and 50,000+ employees.
- Over 38% of annual sales from sustainably advantaged products and processes.
- Continuous development ensures that we provide optimal solutions for asset owners, contractors, fabricators and applicators across the globe.

The preferred product offering guides will be reviewed periodically for updates.

The technical data presented in this document is based upon information believed by PPG to be currently accurate. However, no guarantees of accuracy, comprehensiveness or performance are given or implied. Continuous improvements in coatings technology may cause future technical data to vary from what is presented in this document. Contact your PPG representative for the most up-to-date information.

Chemseal, Corrosol, the PPG Logo, Ultrax and Zircobond are registered trademarks and Chemfos, Secure Launch Excellence, Ultraguard, We protect and beautify the world and X-Bond, Zircoseal are trademarks of PPG Industries Ohio, Inc. ©2024 PPG Industries, Inc. All rights reserved. 02/24

PPG • One PPG Place, Pittsburgh, PA 15272 • 1.888.774.2001 • ppg.com



We protect and beautify the world™