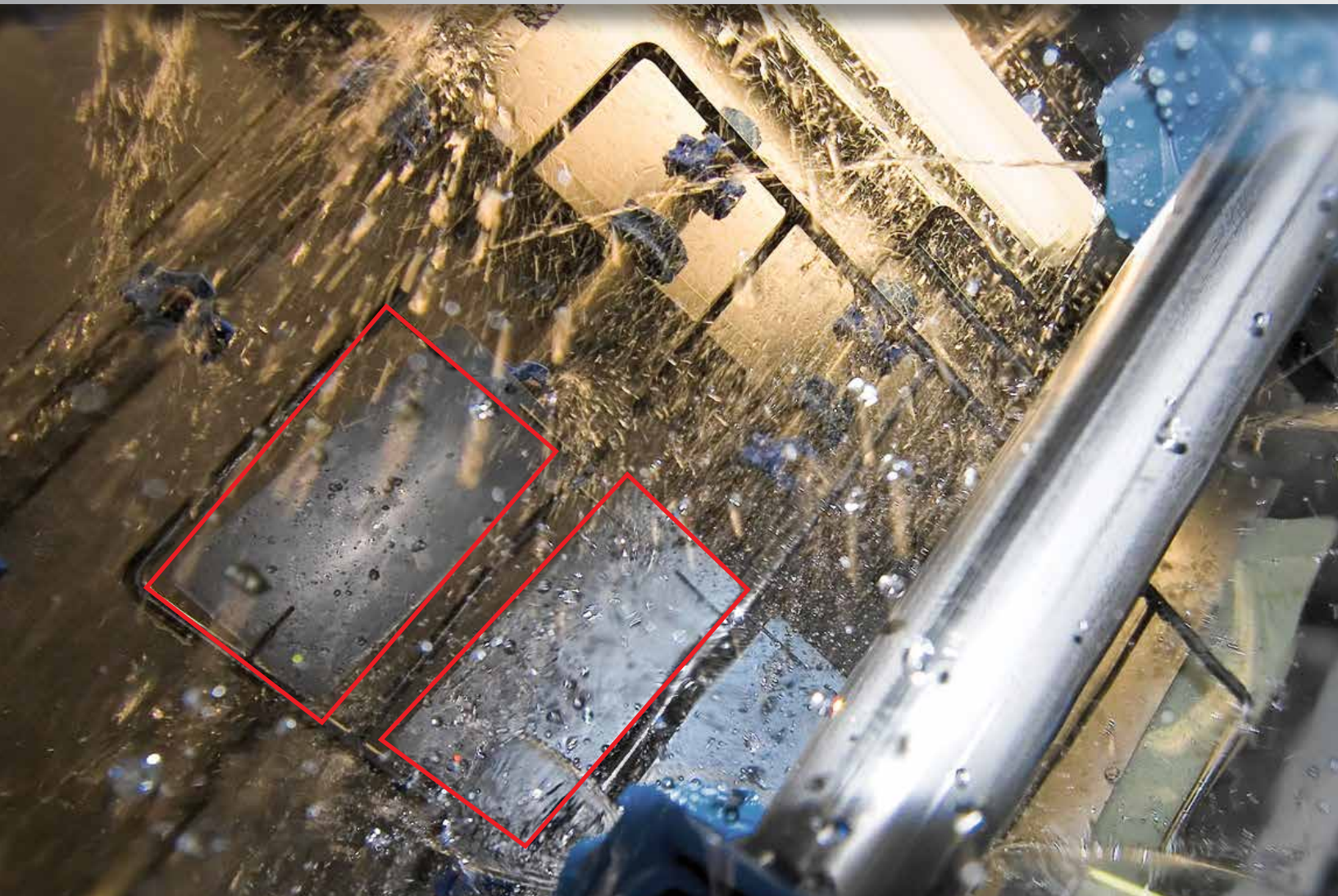


Industrial Solutions

Henkel Surface Treatment Selector Guide

Interactive Brochure

Scroll through and click on the underlined IDH number of the product to go to the product detail page.
Can't find what your looking for? then click [here](#) to do a product search.



Excellence is our Passion



At Henkel Corporation, we provide solutions to industry’s biggest challenges. We are dedicated to understanding the markets we serve and developing partnerships that stand the test of time.

For more than 100 years, Henkel has been the leading supplier of state-of-the-art metal pretreatment technologies. As the world’s leading supplier of chemical pretreatments for light metals, plastics and steel, Henkel sets high standards for corrosion protection, paint adhesion and environmental safety.

To help you compete in today’s challenging manufacturing environment, our chemists and engineers work in partnership with our customers to improve design, assembly, productivity and profitability. Whether you need consultation on our products’ performance or a turnkey process design, Henkel provides solutions.

HENKEL BRANDS

ALODINE: Registered as a trademark in 1946 as the conversion coating for aluminum substrates, Alodine® is a series of conversion coatings that improve paint adhesion and provide corrosion protection for light metal substrates. These coatings include metal pretreatments and post rinses for light metal pretreatments.

BONDERITE: Since the early 1930s, Bonderite® has been well established in the automotive and metalworking industries as a brand for conversion coating processes and chemistries to improve paint adhesion, corrosion protection and wear resistance to ferrous-based alloys, mixed metal alloys and plastic surfaces. The products that make up the Bonderite® brand include process line chemistries, cleaners, pretreatment chemistries including activators and conditioners, conversion coating chemistries, post treatment chemistries (including rinses and passivation), as well as auxiliary products including toner, additives, accelerators and neutralizer.

P3: Registered in 1894, the P3® brand didn’t begin to represent cleaners until the late 1920s. These cleaners are for metallic and nonmetallic surfaces, fouling prevention and corrosion protection, together with disinfection of water and use with wastewater treatments. These products are liquid/powdery products designed for use in low- and high-temperature applications at different pH ranges (acid, neutral and alkaline), and in high-pressure applications, depending on customer conditions.

This selector guide will aid you in choosing the right solution and product for a wide range of common industrial challenges. For additional information on Henkel products, please contact us at [1.800.562.8483](tel:1.800.562.8483).

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Preferred Alkaline Cleaners

PREFERRED ALKALINE CLEANERS

- Alkaline cleaners remove organic soils such as rust preventatives, oils and lubricants. Multi-metal cleaners reduce or eliminate etch on all non-ferrous metals such as galvanized steel and aluminum. Steel-only cleaners are heavier duty cleaners optimized for only ferrous metals such as cold rolled steel and hot rolled steel; they will severely etch non-ferrous metals.
- In addition, cleaners are designed within a specific operating temperature to reduce foaming and provide maximum cleaning effectiveness. Increasing temperature within the operating window will increase cleaning power.
- Cleaners with high levels of phosphate provide maximum cleaning power while cleaners with no phosphate or minimal levels are environmentally-friendly alternatives.

Click on IDH # to learn more information, if a link is not available then please call 1-800-562-8483 for more information. *Can't find what your looking for? then click [here](#) to do a product search.*

Products	Order Item Number	Container Size	Liquids	Spray	Immersion	Substrate		Operating Temperature	Phosphate		
						Steel	Multi-Metal		None	Low	High
Parco® Cleaner 305 N™	1470316	5 Gallon	X	X	X	X	Low Temp Only	100°F-140°F	X		
	842945	55 Gallon	X	X	X	X	Low Temp Only	100°F-140°F	X		
Parco® Cleaner 800™	772091	5 Gallon	X	X	X		X	110°F-160°F	X		
	592906	55 Gallon	X	X	X		X	110°F-160°F	X		
Parco® Cleaner ZX-2™	772270	5 Gallon	X	X	X	X	Light Etch	120°F-160°F		X	
	596418	55 Gallon	X	X	X	X	Light Etch	120°F-160°F		X	
Parco® Cleaner ZX-4™	772294	5 Gallon	X	X	X	X		80°F-180°F		X	
	596474	55 Gallon	X	X	X	X		80°F-180°F		X	
Parco® Cleaner 319MM™	772258	5 Gallon	X	X	X		X	110°F-160°F		X	
	594588	55 Gallon	X	X	X		X	110°F-160°F		X	
Ridoline® RT 153™	1194731	5 Gallon	X	X	X	X	Light Etch	80°F-153°F			X
	1194733	55 Gallon	X	X	X	X	Light Etch	80°F-153°F			X
Ridoline® RT 180™	1366503	5 Gallon	X	X	X	X	Light Etch	80°F-120°F			X
	1366502	55 Gallon	X	X	X	X	Light Etch	80°F-120°F			X
Parco® Cleaner 1533R™	596337*	5 Gallon	X	X	X		X	110°F-140°F			X
	595074*	55 Gallon	X	X	X		X	110°F-140°F			X

Most products require multiple components. For a Technical Process Bulletin please visit www.henkelna.com/industrial, consult a Henkel representative or call 1-800-562-8483. * 1533 is a 2 part cleaner – 1533-A™ and 1533-S™ are required for bath build-up. 1533-R™ is used for replenishment only.

Products	Order Item Number	Container Size
Parco® Cleaner 1533 A™	596338	5 Gallon
	595919	55 Gallon
Parco® Cleaner 1533 S™	772264	1 Gallon
	595073	55 Gallon

A is makeup and S is surfactant.



Alkaline cleaner being sprayed on parts.

PREFERRED ACID CLEANERS / PICKLES

- Acid cleaners / pickles are designed to remove inorganic soils such as rust, laser scale, weld scale and mill scale from ferrous substrates such as steel. Strong acids are required to remove these alkaline insoluble soils.
- Deoxidine® Acid Cleaners and Pickles include Rodine® inhibitors in the formulation to protect steel from over etching while still providing effective removal of inorganic soils.
- A selection of different Deoxidine® products allows for different acids based on customer preference and pickling requirements.

Click on IDH # to learn more information, if a link is not available then please call 1-800-562-8483 for more information. *Can't find what your looking for? then click [here](#) to do a product search.*

Products	Order Item Number	Container Size	Liquid	Spray	Immersion	Operating Temperature	Type		
							Phosphoric Acid	Citric Acid	Sulfuric Acid
Deoxidine® 182B™	772293	5 Gallon	X	X	X	Ambient -180°F	X		
	596557	55 Gallon	X	X	X	Ambient -180°F	X		
Deoxidine® 7150™	772286	5 Gallon	X	X	X	135°F-165°F		X	
	596730	55 Gallon	X	X	X	135°F-165°F		X	
Deoxidine® NP 7200™	1481477	5 Gallon	X	X	X	Ambient -140°F			X
	1481476	55 Gallon	X	X	X	Ambient -140°F			X

Most products require multiple components. For a Technical Process Bulletin please visit www.henkelna.com/industrial, consult a Henkel representative or call 1-800-562-8483.



Before Cleaning



After Cleaning

Nanoceramics Process and Preferred Products

NANOCERAMICS PROCESS

Bonderite® NT-1™:

- Bonderite® NT-1™ phosphate-free conversion coating is single-part zirconium-based nanotechnology which provides a green alternative to traditional iron phosphate. It runs at low temperatures and is completely phosphate- and regulated heavy metal-free, to reduce energy consumption and waste removal.
- Bonderite® NT-1™ is suitable for dip and spray applications

TecTalis®:

- TecTalis® is the next generation phosphate-free conversion coating that is a fast, easy, green and efficient alternative to zinc phosphate. It is an innovative multi-metal pre-treatment which leads to superior corrosion resistance and paint adhesion on the level of zinc phosphating. It forms a cohesive, inorganic, high-density coating which is significantly thinner than zinc phosphate coating and has been specifically developed for all metal surfaces such as steel, zinc and aluminum.
- TecTalis® is suitable for dip and spray applications.

Parcolene® 7100™:

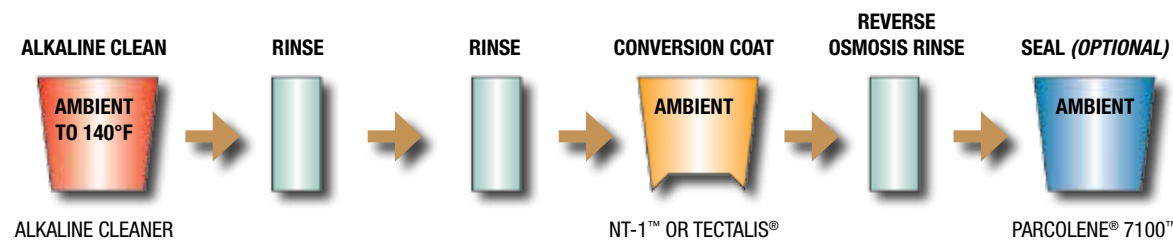
- Parcolene® 7100™ post treatment is a chromium-free post treatment formulated for use over Henkel conversion coatings. This post treatment increases corrosion resistance of metal surfaces under a variety of non-aqueous paints, especially under powder paint, and is especially effective when applied over Bonderite® NT-1™ or TecTalis®. This treatment may be applied via spray or misting applications and should be dried-in-place.

Click on IDH # to learn more information, if a link is not available then please call 1-800-562-8483 for more information. *Can't find what your looking for? then click [here](#) to do a product search.*

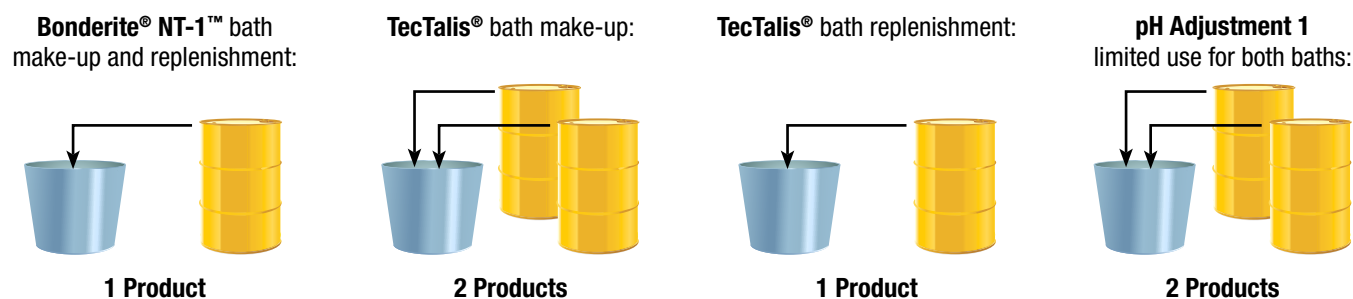
Products	Order Item Number	Container Size	Spray	Immersion
TecTalis® 1200™ Makeup A	1245934	5 Gallon	X	
	1245931	55 Gallon	X	
TecTalis® 1200™ Makeup B	1246687	5 Gallon	X	
	1246682	55 Gallon	X	
TecTalis® 1200™ Replenisher R35	1344090	5 Gallon	X	X
	1344122	55 Gallon	X	X
TecTalis® 1800™ Makeup A	1247386	5 Gallon		X
	1246859	55 Gallon		X
TecTalis® 1800™ Makeup B	1266064	5 Gallon		X
	1247015	55 Gallon		X
TecTalis® 1800™ Replenisher R27*	1432386	5 Gallon	X	X
	1432385	55 Gallon	X	X
Bonderite® NT-1™	772427	5 Gallon	X	X
	611359	55 Gallon	X	X
Parcolene® 7100™	596456	5 Gallon	X	
	594309	55 Gallon	X	

* Note – R35 is optimized for multi-metal lines, R27 is optimized for steel only lines. Most products require multiple components. For a Technical Process Bulletin please visit www.henkeln.com/industrial, consult a Henkel representative or call 1-800-562-8483.

RECOMMENDED NANOCERAMICS LINE



MAKE-UP AND REPLENISHMENT



BENEFITS OF HENKEL'S NANOCERAMIC PROCESS

1. Process

- Reduces the number of process steps since activation and passivation are no longer required while simultaneously reducing contact times. This allows for reduced cycle times and increased production rates while still decreasing overall footprint of the line.
- Simple control via:
 - Standard Process Control – A robust industrial-proven photometer has been specifically adapted to the TecTalis® and Bonderite® NT-1™ quality control parameters. By using this photometer, quality management standards and superior quality demands can be achieved and maintained easily. Tedious manual handling is omitted. (Separate unit for TecTalis® and NT-1™)
 - Easy-to-handle on-line analytics using line-guard units
 - Robust process with broad operating window which leads to higher flexibility



Photometer for monitoring quality standards.

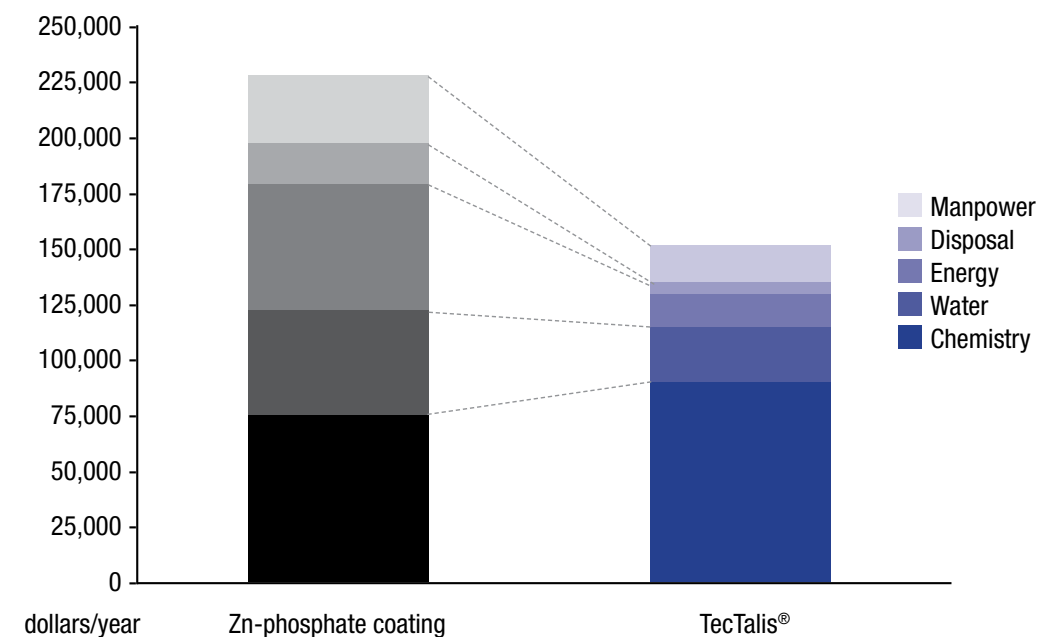
2. Environment:

- Reduced hazardous waste – Bonderite® NT-1™ and TecTalis® are composed of nanoceramics and are free of nickel, phosphates, VOC's and regulated chemicals.
- Sludge formation is marginal which leads to significant savings in hazardous waste generation
- Reduced Energy/CO₂ – Bonderite® NT-1™ and TecTalis® operate at ambient temperatures, reducing utilities and natural resource requirements (and associated CO₂)
- Ambient operation vs 120°F for Iron Phosphate vs 140°F for Zinc Phosphate.

3. Economic:

- Major cost savings due to less energy and less maintenance
 - Lower secondary costs (energy, water)
 - Less disposal costs – free of regulated chemistry and marginal sludge generation
 - Lower investment costs
 - Less maintenance costs

VALUE CREATION



For technical assistance or a comprehensive list of products and package sizes, call: **1.800.562.8483**

Iron Phosphate Process and Preferred Products

IRON PHOSPHATE PROCESS

Technology Overview:

A non-crystalline, nonmetallic, iron phosphate coating that is chemically adherent to the metal substrate to provide two major benefits to paint systems: increased paint adhesion and increased corrosion protection. This is a very versatile process which, depending on product selection, can include stand alone coater products or combination cleaner/coater products. There are recommended line layouts for manual spray wand applications and for automated spray washers or automated immersion lines.

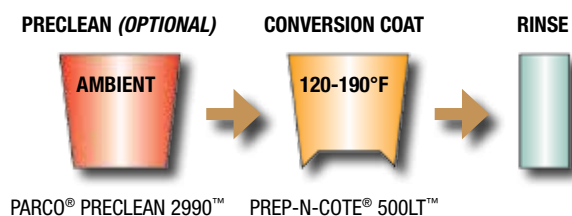
SPRAY WAND PROCESS

Parco® Preclean 2990™ – Is a concentrated, alkaline cleaner designed for general purpose cleaning and can be used prior to Prep-N-Cote® products when additional cleaning is needed. Parco® Preclean 2990™ does not cause staining on steel, zinc-coated or aluminum surfaces and can be applied by hand or spray.

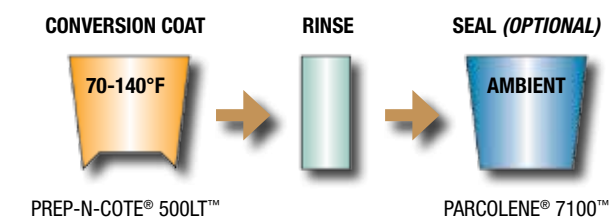
Parco® Spray Wand 101™ – Designed to simultaneously clean and impart an iron phosphate conversion coating on steel substrates via steam gun and high pressure manual applications. This product is optimized for direct proportioning and does not require significant adjustment prior to operation.

Parco® Spray Wand 200™ – Multi-metal cleaner and coater designed for high pressure manual applications. This product imparts an iron phosphate coating as it cleans and eliminates a separate cleaning step.

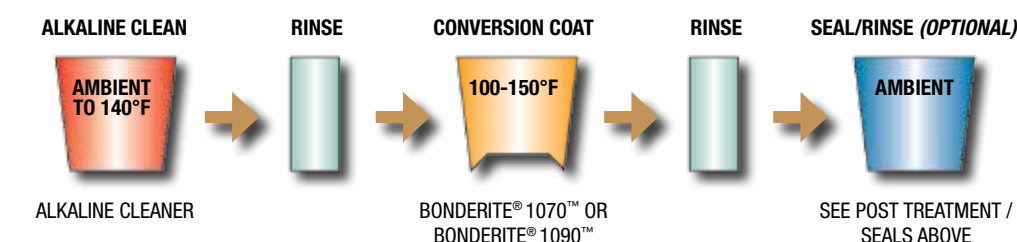
RECOMMENDED SPRAY WAND PROCESS



RECOMMENDED 3-STAGE PROCESS



RECOMMENDED 5-STAGE PROCESS



Immersion Line

Click on IDH # to learn more information, if a link is not available then please call 1-800-562-8483 for more information. Can't find what you're looking for? then click [here](#) to do a product search.

Products	Order Item Number	Container Size
Parco® Preclean 2990™	772089	5 Gallon
	594825	55 Gallon
Parco® Spray Wand 101™	772110	5 Gallon
	594296	55 Gallon
Parco® Spray Wand 200™	772101	5 Gallon
	594643	55 Gallon
Prep-N-Cote® 500LT™	771987	5 Gallon
	592944	55 Gallon
Bonderite® 1070™	772083	5 Gallon
	593818	55 Gallon
Bonderite® 1090™	772192	5 Gallon
	594281	55 Gallon
Parcolene® 7100™	596456	5 Gallon
	594309	55 Gallon
Parcolene® 99X™	717257	5 Gallon
	665553	55 Gallon

Most products require multiple components. For a Technical Process Bulletin please visit www.henkelna.com/industrial, consult a Henkel representative or call 1-800-562-8483.

PRODUCT SUMMARIES (SPRAY WASHER OR AUTOMATED IMMERSION)

Bonderite® 1070™ – Is specially formulated for spray or immersion application to steel, aluminum and zinc surfaces to simultaneously clean and develop a conversion coating. The process converts metal surfaces to a uniform, nonmetallic, iron phosphate coating which substantially increases the life of the paint.

Bonderite® 1090™ – Process converts metal surfaces to a uniform, nonmetallic, iron phosphate coating with substantial increases in the life of the paint. It is specially formulated for spray or immersion application to steel, aluminum and zinc surfaces to develop a conversion coating.

Prep-N-Cote® 500LT™ – Has been formulated for spray application of steel surfaces to simultaneously clean and coat metal surfaces. The process converts metal surfaces to a nonmetallic, iron phosphate coating with substantial increases in the life of the paint. Non-ferrous surfaces can also be cleaned simultaneously with ferrous surfaces.

POST TREATMENT / SEALS

Parcolene® 7100™ – Is a chromium-free post treatment formulated for use over Henkel conversion coatings. This post treatment increases corrosion resistance of metal surfaces under a variety of non-aqueous paints especially under powder paint. This treatment may be applied via spray or misting applications and should be dried-in-place.

Parcolene® 99X™ – Chromium and phosphate-free post treatment that increases paint adhesion and corrosion resistance of metal surfaces for use over all types of conversion coatings used in the pretreatment of steel, zinc, and aluminum surfaces.

Zinc Phosphate Process and Preferred Products

ZINC PHOSPHATE PROCESS

Technology Overview:

Bonderite® zinc phosphate coatings offer high performance corrosion protection beyond iron phosphate and are compatible with all paint systems. A surface activation step, known as a conditioner, is required for most zinc phosphate processes and aids in formation of the coating itself, yielding much better performance.

PROCESS SUMMARIES

Prepalene™ X – Is a patented polymer-based conditioning rinse that promotes the formation of a dense, uniform, refined phosphate coating which is preferred for paint-based coatings. Prepalene™ X provides a greater tolerance for hard water conditions and results in superior and more complete phosphating of otherwise difficult to coat substrates.

Bonderite® ZMX – Converts the surface of a metal substrate into a fine polycrystalline, nonmetallic, zinc phosphate coating. The coating increases the adhesion and durability of organic paints and finishes, and helps to inhibit corrosion. The Bonderite® ZMX phosphate coating is free of regulated heavy metals such as nickel. Bonderite® ZMX may be applied by either spray or immersion to cold rolled steel, galvanized, and/or aluminum surfaces in mixed production.

Bonderite® 769™ – Converts the surface of a metal substrate into a fine polycrystalline, nonmetallic coating containing manganese, cobalt and zinc phosphate. The coating increases the adhesion and durability of organic paints and finishes, and helps to inhibit corrosion. The Bonderite® 769™ phosphate coating is nickel-free. Bonderite® 769™ may be applied by either spray or immersion to cold rolled steel, galvanized and small amounts of aluminum. The metals may be treated individually or in mixed production.

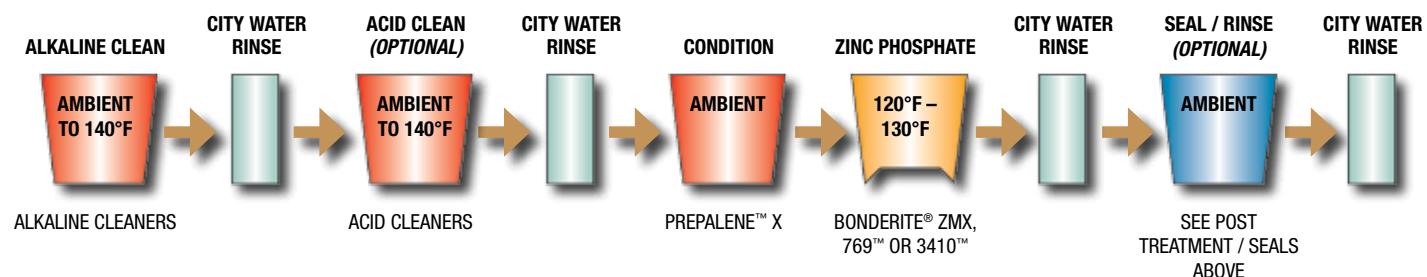
Bonderite® 3410™ – Converts the surface of a metal substrate into a fine polycrystalline, nonmetallic, zinc phosphate coating. The coating increases the adhesion and durability of organic paints and finishes, and helps to inhibit corrosion. The Bonderite® 3410™ coating is a nickel-containing coating that is extremely robust and may be applied by either spray or immersion to cold rolled steel, galvanized and/or aluminum in mixed production.

POST TREATMENT / SEALS

Parcolene® 7100™ – Is a chromium-free post treatment formulated for use over Henkel conversion coatings. This post treatment increases corrosion resistance of metal surfaces under a variety of non-aqueous paints especially under powder paint. This treatment may be applied via spray or misting applications and should be dried-in-place.

Parcolene® 99X™ – Is a reactive, organic polymer post treatment containing no heavy metals. It is especially formulated for use over Henkel conversion coatings for steel, zinc and aluminum surfaces. It may be applied by spray or immersion application under ambient conditions and is followed by a deionized water rinse. Parcolene® 99X™ increases corrosion resistance of metal surfaces and is compatible with a wide variety of paint systems including aqueous paint systems.

RECOMMENDED ZINC PHOSPHATE PROCESS



Products	Order Item Number	Container Size
Prepalene™ X	772525	5 Gallon
	687530	55 Gallon
Bonderite® ZMX*	772425	5 Gallon
	599042	55 Gallon
Bonderite® 769™*	596116	55 Gallon
Bonderite® 3410™*	771874	5 Gallon
	593943	55 Gallon
Parcolene® 7100™	596456	5 Gallon
	594309	55 Gallon
Parcolene® 99X™	717257	5 Gallon
	665553	55 Gallon

Click on IDH # to learn more information, if a link is not available then please call 1-800-562-8483 for more information. Can't find what your looking for? then click here to do a product search.

* Note: Only replenisher products listed; contact Henkel for bath build-up products. Most products require multiple components. For a Technical Process Bulletin please visit www.henkelna.com/industrial, consult a Henkel representative or call 1-800-562-8483.



Immersion Line

Aluminum Conversion Coating Processes and Preferred Products

ALUMINUM CONVERSION COATING PROCESSES

Technology Overview:

Henkel offers a full line of aluminum-specific conversion coatings including chromates, chrome phosphates and non-chrome conversion coatings. Additionally, a full line of aluminum-specific cleaners and deoxidizers are available.

ALUMINUM CLEANERS

Novaclean™ 1721™ – Is an acid cleaner concentrate formulated to clean aluminum and its alloys prior to chrome phosphate conversion coating. Novaclean™ 1721 removes organic soils and provides a slight surface etch to enhance the chrome phosphate conversion coating.

Ridoline® 212™ – Is a liquid, silicate-free, mildly alkaline cleaner designed to remove oils and light oxide films from aluminum and its alloys in either immersion or spray application. It is a low etching product that will remove polishing compounds without adversely affecting the appearance of the polished aluminum surface.

Turco® Altrex® 24 – Is an inhibited, non-etching, concentrated liquid alkaline cleaner for cleaning aluminum and aluminum alloys. Turco® Altrex® 24 is an effective remover of most soils found on aluminum plus other metals and can be used in a variety of cleaning operations. It is recommended to be applied in immersion application only.

ALUMINUM DEOXIDIZER

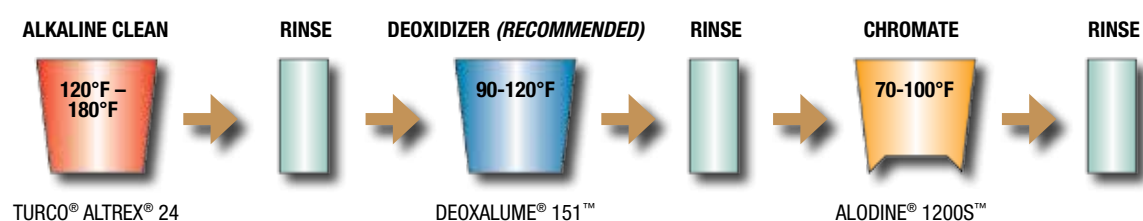
Deoxalume® 151™ – Is a liquid, non-fluoride material that is suitable for deoxidizing and/or slight etching of aluminum and its alloys. It is free of any heavy metals including chromium and iron.

ALUMINUM CONVERSION COATINGS

Chromates (Hexavalent Chrome):

Alodine® 1200S™ – Is a powdered chemical used to produce a protective coating on aluminum which minimizes corrosion and provides an improved bond for paint. Surfaces treated with the Alodine® 1200S™ produces a process range in color from a light iridescent golden to tan. Alodine® 1200S™ is a coating chemical listed on Qualified Product List QPL-81706 and is an approved material to produce Class 1A and Class 3 coatings, bare or painted, in accordance with Military Specifications MIL-DTL-5541.

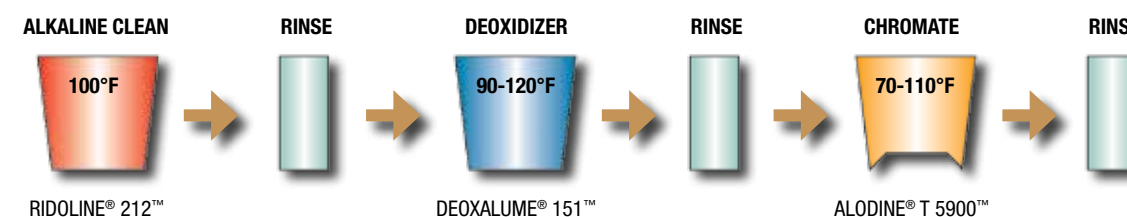
RECOMMENDED ALODINE® 1200S™ HEXAVALENT CHROME PROCESS



Chromates (Trivalent Chrome):

Alodine® T 5900™ – Is a treatment that develops a complex trivalent chromium conversion coating on aluminium, aluminum alloys, metals coated with IVD aluminium, magnesium, titanium and zinc surfaces. The process provides bare ASTM-B117 salt spray resistance and serves as an excellent base for bonding of paints and adhesives. Neither the product itself nor the conversion coating developed by the process contains hexavalent chromium. Alodine® T 5900™ can be used in immersion or pressure spray applications. Alodine® T 5900™ is a non-hexavalent chrome conversion coating chemical listed on Qualified Product List QPL-81706 and is an approved material to produce Class 1A and Class 3 coatings in accordance with Military Specifications MIL-DTL-5541 Type II coatings.

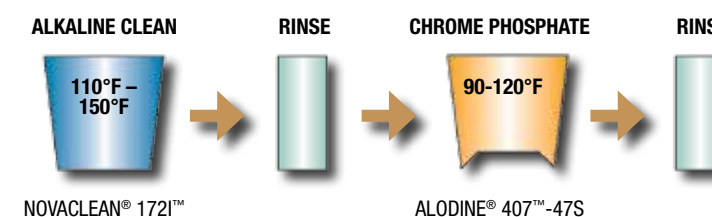
RECOMMENDED ALODINE® T 5900™ TRIVALENT CHROME PROCESS



Chrome Phosphate:

Alodine® 407™-47S – This process is used to produce a chrome phosphate chemical conversion coating on aluminum and its alloys. The coating ranges in color from light blue-green to a darker green. The conversion coating has excellent paint-adhesion properties and provides underfilm corrosion protection. Alodine® 407™-47S is readily adaptable to automatic bath control using LINEGUARD® Automatic Control Equipment.

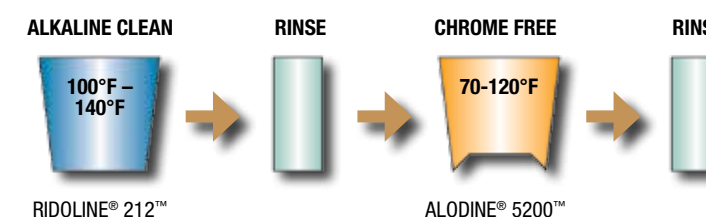
RECOMMENDED ALODINE® 407™-47S CHROME PHOSPHATE PROCESS



Chrome-Free Conversion Coating:

Alodine® 5200™ – Treatment is a chromium-free product and specifically formulated for treating non-ferrous alloys. Spray or immersion application may be used. The process provides an excellent base for bonding of adhesives and organic finishes.

RECOMMENDED ALODINE® 5200™ CHROME FREE PROCESS



Click on IDH # to learn more information, if a link is not available then please call 1-800-562-8483 for more information. Can't find what your looking for? then click here to do a product search.

Products	Order Item Number	Container Size
Novaclean™ 1721™	771966	5 Gallon
	593841	55 Gallon
Ridoline® 212™	597967	5 Gallon
	593946	55 Gallon
Turco® Altrex® 24	598901	5 Gallon
	594452	55 Gallon
Deoxalume® 151™	772103	5 Gallon
	594445	55 Gallon
Alodine® 1200S™	593964	5 Gallon
	N/A	55 Gallon
Alodine® T 5900™	756391	5 Gallon
	756387	55 Gallon
Alodine® 407™	610813	5 Gallon
	594843	55 Gallon
Alodine® 47S	596332	5 Gallon
	593839	55 Gallon
Alodine® 5200™	596088	5 Gallon
	594142	55 Gallon

Most products require multiple components. For a Technical Process Bulletin please visit www.henkeln.com/industrial, consult a Henkel representative or call 1-800-562-8483.

Alkaline Cleaners

ALKALINE CLEANERS

Applied by spray, immersion and stripline units, these strong alkaline treatments are particularly recommended for use before Bonderite® conversion coating processes. Alkaline cleaners are used to remove organic soils such as dirt, oils and grease.

Parco® Cleaner 1520A™ – Two package, low temperature, liquid cleaner formulated to prepare ferrous, zinc and aluminum surfaces to receive uniform, dense, crystalline conversion coatings.

Parco® Cleaner 1533A™ – Multi-package, low temperature, liquid cleaner formulated to prepare ferrous, zinc and aluminum surfaces to receive uniform, dense, crystalline conversion coatings. The medium- to heavy-duty cleaning solution is designed specifically for use in the automotive industry.

Parco® Cleaner 2087X™ – Single package liquid cleaner formulated for the removal of Bonderlube® lubricants and other drawing compounds or oils from baskets, racks, tumbling barrels and production parts. The cleaner may be applied by either spray or immersion.

Parco® Cleaner 2988™ – Concentrated cleaner, free of volatile hydrocarbons. Formulated for the effective removal of body sealers, drawing compounds and other soils prior to cleaning and phosphating.

Parco® Cleaner 305™ – Alkaline cleaner designed to prepare aluminum, steel, hot-dip galvanized and electrogalvanized steel surfaces.

Parco® Cleaner 319™ – Alkaline cleaner designed to prepare aluminum, steel, electrogalvanized and hot-dip galvanized surfaces to receive a conversion coating, or used prior to a plating operation.

Parco® Cleaner 319MM™ – Single package, phosphate-free, liquid alkaline cleaner specially designed as a multi-metal cleaner. Note: surfactants contain phosphorous.

Parco® Cleaner 338™ – Powdered cleaner designed to prepare aluminum, steel, hot-dip galvanized and electrogalvanized steel surfaces.

Parco® Cleaner 470™ – Heavy-duty liquid alkaline cleaner designed for the cleaning of ferrous metals.

Parco® Cleaner 907™ – Concentrated liquid, non-silicated, alkaline immersion cleaner for steel surfaces that exhibits excellent bath life, good scale inhibition and prevents soil redeposition.

Ridoline® RT 153™ – Room temperature cleaner designed to prepare aluminum, steel, hot-dip galvanized and electrogalvanized steel surfaces.

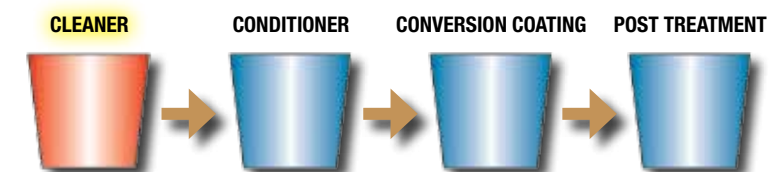
Ridoline® RT 180™ – Multi-metal, low-temperature, spray alkaline cleaner designed to clean and prepare metallic surfaces to receive a conversion coating.

ALKALINE CLEANERS

Click on IDH # to learn more information, if a link is not available then please call 1-800-562-8483 for more information. Can't find what your looking for? then click [here to do a product search.](#)

Products	Order Item Number	Container Size	Liquid	Spray	Immersion	Substrate		Etch	Temperature	Builders			
						Steel/Heavy Duty	Multi-Metal*			Sodium	Potassium	Phosphate	Glucamate
Parco® Cleaner 1520A™	772031	5 Gallon	X	X	X		X		110°F-140°F	X	X	X	
	594224	55 Gallon	X	X	X		X		110°F-140°F	X	X	X	
Parco® Cleaner 1533A™	595919	55 Gallon	X	X	X		X		110°F-140°F	X	X	X	
Parco® Cleaner 2087X™	691736	5 Gallon	X	X	X	X		X	175°F-210°F	X	X		X
	593929	55 Gallon	X	X	X	X		X	175°F-210°F	X	X		X
Parco® Cleaner 2988™	597753	5 Gallon	X	X	X		X		80°F-180°F				X
	594582	55 Gallon	X	X	X		X		80°F-180°F				X
Parco® Cleaner 305™	670363	5 Gallon	X	X	X		X	X	100°F-140°F		X	X	X
	593947	55 Gallon	X	X	X		X	X	100°F-140°F		X	X	X
Parco® Cleaner 319™	596645	5 Gallon	X	X	X		X	X	120°F-180°F		X	X	X
	593897	55 Gallon	X	X	X		X	X	120°F-180°F		X	X	X
Parco® Cleaner 319MM™	772258	5 Gallon	X	X	X		X		110°F-160°F	X	X		X
	594588	55 Gallon	X	X	X		X		110°F-160°F	X	X		X
Parco® Cleaner 338™	593916	55 Gallon		X	X	X	X	X	140°F-180°F	X		X	X
Parco® Cleaner 470™	772222	5 Gallon	X	X	X	X		X	80°F-160°F	X		X	X
	594051	55 Gallon	X	X	X	X		X	80°F-160°F	X		X	X
Parco® Cleaner 907™	772075	5 Gallon	X		X	X		X	140°F-170°F	X	X	X	X
	594608	55 Gallon	X		X	X		X	140°F-170°F	X	X	X	X
Ridoline® RT 153™	1194731	5 Gallon	X	X	X		X	X	80°F-153°F	X	X	X	X
	1194733	55 Gallon	X	X	X		X	X	80°F-153°F	X	X	X	X
Ridoline® RT 180™	1366502	55 Gallon	X	X	X	X	X	X	80°F-120°F		X	X	X

* Steel, Zinc, Aluminum
Most products require multiple components. For a Technical Process Bulletin please visit www.henkelna.com/industrial, consult a Henkel representative or call 1-800-562-8483.



Alkaline Cleaners

ALKALINE CLEANERS

Novaclean™ 120LF™ – Alkaline high-performance, non-etch, non-silicated, powdered cleaning concentrate that has been designed to handle heavy soil loads and give long bath life.

Parco® Cleaner 800™ – Liquid alkaline cleaner especially designed for cleaning hard soils on steel galvanized and aluminum surfaces. It contains a unique blend of surfactants, giving it superior cleaning capability plus low foaming tendencies. This low-foaming, phosphate-free product provides “interstage corrosion protection” by utilizing non-nitrite chemistries.

Ridoline® 18 – Powdered, silicate-free, mildly alkaline cleaner designed to remove oils and light oxide films from aluminum and its alloys.

Ridoline® 56 – Concentrated liquid alkaline cleaner used in immersion systems for cleaning aluminum alloys, copper and copper alloys, cast iron and steel, as well as zinc and cadmium plated surfaces.

Ridoline® 212™ – Concentrated, liquid, silicate-free, mildly alkaline cleaner designed to remove oils and light oxide films from aluminum and its alloys.

Ridoline® 298™ – Liquid, non-silicated, immersion cleaner for aluminum and aluminum alloys. It is formulated for use in anodizing and conversion coating lines. It is free rinsing and will remove a variety of soils including oils, greases, inks and wax based markings.

Ridoline® 336™ – Powdered, silicate-free, mildly alkaline cleaner designed to remove oils and light oxide films from aluminum and its alloys in either immersion or spray application.

Ridoline® 412™ – Heavy duty liquid, silicate-free, mildly alkaline cleaner removes oils and light oxide films from aluminum and its alloys.

SC-78BK™ – High performance cleaning system designed to handle heavy soil loads and give long bath life. The removal of cutting oils, buffing compounds and other soils is accomplished rapidly and completely with SC-78BK™. It performs exceptionally well as an aluminum cleaner prior to bright dipping and anodizing operations. Copper, brass, magnesium, steel, titanium and other metals can also be cleaned using SC-78BK™. The powdered cleaning concentrate (SC-78BK™ POWDER) coupled with a detergent additive (SC-78BK™ ADDITIVE) that is packaged in a separate container.

Turco® Altrex 24 – Is an inhibited, non-etching, concentrated liquid alkaline cleaner for cleaning aluminum and aluminum alloys. Turco® Altrex® 24 is an effective remover of most soils found on aluminum plus other metals, and can be used in a variety of cleaning operations. It is recommended to be applied in immersion application only.

ALKALINE PRECLEANERS

Parco® Preclean 2960™ – Concentrated, water-based cleaner. It is effective in the body shop as well as in the hand wipe operation of industrial assembly lines.

Parco® Preclean 2978™ – Concentrated, water-based cleaner that contains no volatile hydrocarbons. It is applied by hand wipe or misting in the preclean operation of industrial assembly lines.

Parco® Preclean 2990™ – Concentrated, alkaline, water-based cleaner that is free of volatile hydrocarbons. It provides excellent cleaning and gives long-term corrosion protection and ease of control. As a hand-applied preclean chemical, its slow-drying characteristic helps to suspend loosened soils. The product exhibits excellent detergency without creating a foaming problem in the process cleaning bath.

ALKALINE CLEANERS

Click on IDH # to learn more information, if a link is not available then please call 1-800-562-8483 for more information. Can't find what your looking for? then click [here](#) to do a product search.

Products	Order Item Number	Container Size	Liquid	Spray	Immersion	Substrate			Etch Heavy Etch on Al & Zn	Temperature Operating Temperature	Builders				
						Steel/Heavy Duty	Aluminum/Magnesium	Multi-Metal*			Sodium	Potassium	Phosphate	Glucuronate	Inter-Stage Protection
Novaclean™ 120LF™	594478	5 Gallon	X		X		No Magnesium	X		140°F-155°F	X	X			X
Parco® Cleaner 800™	772091	5 Gallon	X	X	X		X	X		110°F-160°F	X	X			X
	592906	55 Gallon	X	X	X		X	X		110°F-160°F	X	X			X
Ridoline® 18	594304	55 Gallon			X		No Magnesium	X		140°F-185°F	X		X		
Ridoline® 56	772125	5 Gallon	X	X	X			X		120°F-140°F		X			
	594819	55 Gallon	X		X			X		120°F-140°F		X			
Ridoline® 212™	597967	5 Gallon	X	X	X		No Magnesium	X		100°F-185°F			X		
	593946	55 Gallon	X	X	X		No Magnesium	X		100°F-185°F			X		
Ridoline® 298™	654998	5 Gallon	X		X		No Magnesium	X		130°F-180°F	X		X		
	643705	55 Gallon	X		X		No Magnesium	X		130°F-180°F	X		X		
Ridoline® 336™	772036	50 lb. Pail		X	X		No Magnesium	X		100°F-185°F	X		X		
	838286	350 lb. Drum		X	X		No Magnesium	X		100°F-185°F	X		X		
Ridoline® 412™	736390	5 Gallon	X	X	X		No Magnesium	X		130°F-180°F	X		X		
	627028	55 Gallon	X	X	X		No Magnesium	X		130°F-180°F	X		X		
SC-78BK™	594507	55 Gallon			X	X	X	X		120°F-190°F	X		X		X
Turco Altrex® 24	598901	5 Gallon	X		X			X		120°F-180°F	X	X		X	
	594452	55 Gallon	X		X			X		120°F-180°F	X	X		X	

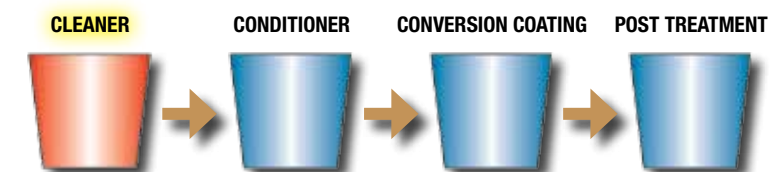
* Steel, Zinc, Aluminum
Most products require multiple components. For a Technical Process Bulletin please visit www.henkelna.com/industrial, consult a Henkel representative or call 1-800-562-8483.

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ALKALINE PRECLEANERS

Products	Order Item Number	Container Size	Spray	Concentration (% by volume)	Mild Steel Etch	Temperature Operating Temperature	Contents			
							Liquid	Phosphate-Free	Phosphoric Acid	Citric Acid
Parco® Preclean 2960™	738220	5 Gallon	X	10%-100%		Ambient	X	X		
	594352	55 Gallon	X	10%-100%		Ambient	X	X		
Parco® Preclean 2978™	595223	5 Gallon	X	10%-100%		Ambient-115°F	X			
	594394	55 Gallon	X	10%-100%		Ambient-115°F	X			
Parco® Preclean 2990™	772089	5 Gallon	X	10%-100%		Ambient-115°F	X	X		

Most products require multiple components. For a Technical Process Bulletin please visit www.henkelna.com/industrial, consult a Henkel representative or call 1-800-562-8483.



For technical assistance or a comprehensive list of products and package sizes, call: **1.800.562.8483**

In-Process Cleaners With Rust Preventatives

IN-PROCESS CLEANERS WITH RUST PREVENTATIVES

Applied by spray or immersion, these neutral-based cleaners include corrosion inhibitors designed for short term protection. Cleaners with rust prevention are recommended for light to moderate duty cleaning and protecting needs.

P3-Neutraceutical® 5088™ – Liquid aqueous cleaner concentrate designed as a solvent-free vapor degreasing replacement. It can be used in either spray or immersion applications and contains non-nitrite ferrous and yellow metal corrosion inhibitors which provide in-process rust protection when clear water rinses are not employed.

P3-Neutraceutical® 5156™ – Neutral-based in-process cleaner with corrosion inhibitors designed for short term corrosion protection on ferrous and aluminum alloys. Its unique composition of alkalinity, corrosion inhibitors, surfactants and biocides provides a durable low-foaming product for light to moderate duty cleaning and protecting needs.

P3-Neutraceutical® 5175™ – Neutral-based in-process cleaner with corrosion inhibitors designed for short term corrosion protection on ferrous alloys only. Its unique composition of alkalinity, corrosion inhibitors, surfactants and builders provides a durable low-foaming hard water stable product for light to moderate duty cleaning and protecting needs.

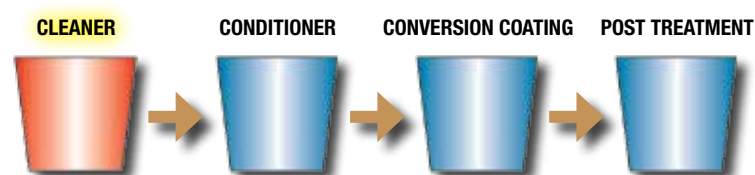
P3-Neutraceutical® 5220-1™ – Neutral-based in-process cleaner with corrosion inhibitors designed for short term corrosion protection on ferrous, galvanized and aluminum alloys. Its unique composition of builders, corrosion inhibitors and surfactants provides a durable low-foaming product for today's light to moderate duty cleaning and protecting needs.

IN-PROCESS CLEANERS WITH RUST PREVENTATIVES

Click on IDH # to learn more information, if a link is not available then please call 1-800-562-8483 for more information. Can't find what your looking for? then click [here to do a product search.](#)

Products	Order Item Number	Container Size	Organic	Emulsion	Oil Splitting	Temperature			Builders			Application		Metals			
						Ambient to 120F	120 to 160F	160F+	Borates	Phosphates	Silicates	Spray	Immersion	Ferrous	Aluminum**	Copper	
P3-Neutraceutical® 5088™	597978	5 Gallon	X		X	X						X	X	X	X		
	593241	55 Gallon	X		X	X						X	X	X	X		
P3-Neutraceutical® 5156™	596348	5 Gallon	X		X	X						X	X	X			
	594045	55 Gallon	X		X	X						X	X	X			
P3-Neutraceutical® 5175™	1265826	5 Gallon	X		X	X	X	X				X	X	X			
	1265623	55 Gallon	X		X	X	X	X				X	X	X			
P3-Neutraceutical® 5220-1™	595321	5 Gallon	X		X	X	X	X				X	X	X	X	X	
	594241	55 Gallon	X		X	X	X	X				X	X	X	X	X	

* Individual alloys should be tested prior to recommendation
 Note: To achieve rust protection do not rinse.
 Most products require multiple components. For a Technical Process Bulletin please visit www.henkeln.com/industrial, consult a Henkel representative or call 1-800-562-8483.



For technical assistance or a comprehensive list of products and package sizes, call: **1.800.562.8483**

Rust Preventatives

RUST PREVENTATIVES

Rust preventatives are designed to provide short-term protection for moderate duty corrosion protection needs.

P3-Prevox™ 501™ – In-process synthetic corrosion inhibitor designed for up to two week corrosion protection on ferrous alloys.

P3-Prevox™ 505™ – Synthetic corrosion inhibitor designed for short-term corrosion protection on ferrous alloys.

P3-Prevox™ 4232™ – Synthetic corrosion inhibitor designed for short-term corrosion protection on ferrous alloys.

P3-Prevox™ 5800™ – Soluble oil corrosion inhibitor designed for extended corrosion protection on ferrous and non-ferrous alloys.

P3-Prevox™ 6767™ – Soluble oil corrosion inhibitor designed for extended corrosion protection on ferrous alloys.

P3-Prevox™ 4141™ – Solvent-based corrosion inhibitor designed for extended corrosion protection on ferrous and non-ferrous alloys.

P3-Prevox™ 6041CR™ – Solvent-based corrosion inhibitor designed for longer-term corrosion protection on ferrous and galvanized alloys.

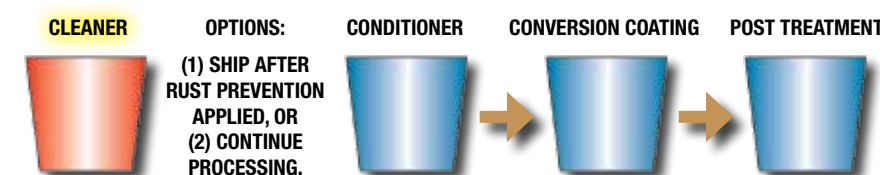
Multan® PL 101™ – Multi-functional petroleum based corrosion inhibitor designed for longer-term corrosion protection on ferrous and non-ferrous alloys.

RUST PREVENTATIVES

Click on IDH # to learn more information, if a link is not available then please call 1-800-562-8483 for more information. Can't find what your looking for? then click [here to do a product search.](#)

Products	Order Item Number	Container Size	Storage	% Solids	Typical Dilution	Typical Storage Time*	Application		Film				Metals			
							Spray	DIP	Wax	Tacky	Oil	Fluid	Plastic/Crystalline	Steel	Cast Iron	Non-Ferrous**
P3-Prevox™ 501™	595486	5 Gallon	In Process	45	3-20%	2 wk	X	X		X		X	X	X		
	594014	55 Gallon	In Process	45	3-20%	2 wk	X	X		X		X	X	X		
P3-Prevox™ 505™	596698	5 Gallon	Short Term	49	3-20%	4 wk	X	X			X		X	X		
	594827	55 Gallon	Short Term	49	3-20%	4 wk	X	X			X		X	X		
P3-Prevox™ 4232™	595511	5 Gallon	Short Term	35	3-20%	4 wk	X	X			X		X	X	X	
	594762	55 Gallon	Short Term	35	3-20%	4 wk	X	X			X		X	X	X	
P3-Prevox™ 5800™	772736	5 Gallon	Extended	99	3-20%	3 mo	X	X		X			X	X	X	
	772735	55 Gallon	Extended	99	3-20%	3 mo	X	X		X			X	X	X	
P3-Prevox™ 6767™	593229	5 Gallon	Extended	100	3-20%	3 mo	X	X		X			X	X	X	
	595793	55 Gallon	Extended	100	3-20%	3 mo	X	X		X			X	X	X	
P3-Prevox™ 4141™ 143°F Flash Point	879525	5 Gallon	Extended	10	100%	6 mo	X	X	X				X	X	X	
	879524	55 Gallon	Extended	10	100%	6 mo	X	X	X				X	X	X	
P3-Prevox™ 6041CR™ 142°F Flash Point	596092	5 Gallon	Extended	24	100%	6 mo	X	X		X			X	X	X	
	594850	55 Gallon	Extended	24	100%	6 mo	X	X		X			X	X	X	
Multan® PL 101™ 280°F Flash Point	594059	5 Gallon	Extended	100	100%	6 mo	X	X		X			X	X	X	
	594526	55 Gallon	Extended	100	100%	6 mo	X	X		X			X	X	X	

* Typical Storage Time - Will Vary Depending Upon Concentration, Environmental Conditions and Storage ** Individual alloys should be tested prior to recommendation
 Most products require multiple components. For a Technical Process Bulletin please visit www.henkeln.com/industrial, consult a Henkel representative or call 1-800-562-8483.



Acid Cleaners

ACID CLEANERS

Acid cleaners are used prior to applying conversion coatings and are designed to remove inorganic soils such as weld and laser scale, and other oxides such as rust. Acid cleaners are also widely used as maintenance cleaners.

Deoxidine® 172A™ – Spray phosphoric acid detergent-type metal cleaner and surface rust remover that removes rust and light deposits of mill oil and destroys corrosion stimulators.

Deoxidine® 182B™ – Phosphoric acid-based, detergent-type metal cleaner designed to remove rust and oxides left from laser cutting and welding on steel surfaces.

Deoxidine® 457™ – Nonflammable, phosphate-free, surfactant-based cleaner, brightener and pre-paint conditioner for magnesium and aluminum. Deoxidine® 457™ should not be used on high copper bearing aluminum alloys or aluminum castings.

Deoxidine® 7005™ – Mixed mineral acid-solvent-detergent liquid metal cleaner and rust remover.

Deoxidine® 7150™ – Acidic composition which, when diluted with water, produces a spray cleaning solution designed for removing light rust and oxidation from iron and steel surfaces. For effective derusting, articles must be free from grease and oil before cleaning in the Deoxidine® 7150™ solution.

Deoxidine® NP 7200™ – Phosphorous-free, acid based metal pickle designed to remove rust and oxides left from laser cutting and welding on steel surfaces. Deoxidine® NP-7200™ has been designed for use in spray or immersion systems that are compatible with sulfuric acid.

Metalprep® 79 – Nonflammable, multi-purpose, phosphoric, acid-based cleaner and prepaint conditioner for most metals.

Novaclean™ 1721™ – Acid cleaner concentrate formulated to clean aluminum and its alloys prior to chrome phosphate conversion coating and other surface treatments requiring a thoroughly clean surface. Novaclean™ 1721™ removes organic soils and provides a slight surface etch and can be used with steel and/or stainless steel equipment.

Parco® Purge 2510™ – Specially formulated inhibited acid supplied in liquid form. Particularly advantageous in removing scale-like deposits from pipes, nozzles and heating coils in phosphate spray systems.

Deoxidine® 2520™ – Nitric acid-based cleaner specifically formulated for removal of scale from closed loop stainless steel heat transfer systems.

Deoxidine® 2530™ – Acidic and specifically formulated for removal of scale from closed loop stainless steel heat transfer systems.

Parco® Purge 2550™ – Cleaner solution that is phosphoric acid-based and is specifically formulated for removal of scale from closed stainless steel heat transfer surfaces.

Parco® Purge A-200™ – Concentrated, acidic liquid specially designed to clean and prepare spray stages for a reliable, fast and effective method for removing sludge and scale from tanks and spray equipment. Parco® Purge A-200™ is used as an additive to a caustic soda bath.

ACID CLEANERS

Click on IDH # to learn more information, if a link is not available then please call 1-800-562-8483 for more information. *Can't find what your looking for? then click [here](#) to do a product search.*

Products	Order Item Number	Container Size	Liquid	Spray	Immersion	Heavy Duty/ for Steel	Temperature	Contents				
							Operating Temperature	Phosphoric Acid	Glycolic Acid	Citric Acid	Sulfuric	
Deoxidine® 172A™	771994	5 Gallon	X	X	X	X	Ambient-180°F	X				
	594838	55 Gallon	X	X	X	X	Ambient-180°F	X				
Deoxidine® 182B™	772293	5 Gallon	X	X	X	X	Ambient-180°F	X				
	596557	55 Gallon	X	X	X	X	Ambient-180°F	X				
Deoxidine® 457™	772302	5 Gallon	X	X	X	Aluminum & Magnesium	Ambient		X			
	597508	55 Gallon	X	X	X	Aluminum & Magnesium	Ambient		X			
Deoxidine® 7005™	595269	55 Gallon	X		X	X	120°F-190°F	X				X
Deoxidine® 7150™	772286	5 Gallon	X	X		X	135°F-165°F		X	X		
	596730	55 Gallon	X	X		X	135°F-165°F		X	X		
Deoxidine® NP 7200™	1481477	5 Gallon	X	X	X	X	Ambient-140°F					X
	1481476	55 Gallon	X	X	X	X	Ambient-140°F					X
Metalprep® 79	594305	5 Gallon	X	X	X	X	Ambient	X				
	598920	55 Gallon	X	X	X	X	Ambient	X				
Novaclean™ 1721™	771966	5 Gallon	X	X	X	Aluminum	110°F-150°F	X				
	593841	55 Gallon	X	X	X	Aluminum	110°F-150°F	X				

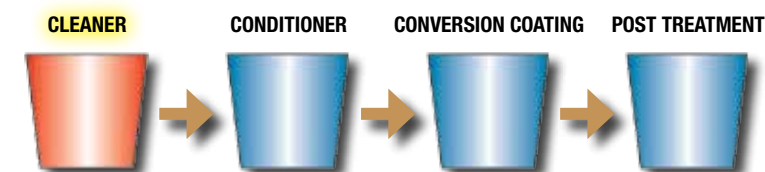
Most products require multiple components. For a Technical Process Bulletin please visit www.henkelna.com/industrial, consult a Henkel representative or call 1-800-562-8483.

ACID PURGE CHEMICALS

Click on IDH # to learn more information, if a link is not available then please call 1-800-562-8483 for more information. *Can't find what your looking for? then click [here](#) to do a product search.*

Products	Order Item Number	Container Size	Liquid	Spray	Immersion	Heavy Duty/ for Steel	Temperature	Contents				
							Operating Temperature	Phosphoric Acid	Hydrochloric Acid	Nitric Acid	Gluconic Acid	
Parco® Purge 2510™	593872	55 Gallon	X	X	X		Ambient-115°F		X			
Deoxidine® 2520™	693244	5 Gallon	X				120°F-150°F			X		
	598893	55 Gallon	X				120°F-150°F			X		
Deoxidine® 2530™	772406	5 Gallon	X				120°F-150°F	X				
	598923	55 Gallon	X				120°F-150°F	X				
Parco® Purge 2550™	594545	55 Gallon	X			X	120°F-150°F	X				
Parco® Purge A-200™	599065	5 Gallon	X	X	X	X	Ambient-180°F					X
	594611	55 Gallon	X	X	X	X	Ambient-180°F					X

Most products require multiple components. For a Technical Process Bulletin please visit www.henkelna.com/industrial, consult a Henkel representative or call 1-800-562-8483.



For technical assistance or a comprehensive list of products and package sizes, call: **1.800.562.8483**

Industrial Cleaners

INDUSTRIAL CLEANERS

Industrial cleaners can be used for general maintenance cleaning.

P3® Grato™ 3000™ Cleaner – Water-based, phosphate-free cleaning product designed for the exteriors of trains, cars, lorries, tarpaulin covers and other vehicles. Foaming cleaner especially suitable for car- and train-washes and transport companies with cleaning gantries.

P3® Hi-Lite 2495™ Wipes – Quarter-folded, nonwoven wipes saturated with a low viscosity, petroleum-based sheet metal highlighting aid. The pre-saturated wipe applies an even, highly reflective film, which greatly enhances the visual or automated inspection of stamped, metal surfaces for defects.

P3® Lavoxyd™ Acid – Foaming acid cleaner that has been specially developed for cleaning the exterior of railroad cars, buses and tank wagons. P3® Lavoxyd™ Acid removes soils, brake dust and oils from painted surfaces, glass windows, aluminum, stainless steel and plastic surfaces.

P3® Grato™ 14 Marine (US) Cleaner – Concentrated, moderately alkaline liquid formulated to meet the requirements of industrial general maintenance cleaning needs.

P3® Grato™ 50 Marine (US) Cleaner – Highly alkaline concentrated product designed for steam gun or high pressure manual applications on steel, copper, copper alloys and most plastics. It is ideal for cleaning large stationary equipment and machine parts in plants as well as the plant itself. It is also good for cleaning large vessels, tanks and containers.

Parco® 2280™ Clean-up – Blue liquid with a mild, pleasant aroma. Formulated to meet the properties required by automotive and other industrial general maintenance cleaning needs.

Parco® Maintenance Cleaner 2235™ – Concentrated blue liquid having a mild aroma. Formulated to meet the requirements of automotive and other industrial general maintenance cleaning needs.

Click on IDH # to learn more information, if a link is not available then please call 1-800-562-8483 for more information. Can't find what your looking for? then click [here to do a product search.](#)

Products	Order Item Number	Container Size	Application/System			Temperature	Contents			
			Spray	Concentration (% by volume)	Mild Steel Etch		Liquid	Phosphate-Free	Phosphoric Acid	Citric Acid
P3® Grato™ 3000™ Cleaner	1371210	5 Gallon	X	2%-5%	X	110°F-160°F	X	X		X
	1290334	55 Gallon	X	2%-5%	X	130°F-150°F	X		X	
P3® Hi-Lite 2495™ Wipes	593058	600/Pack		2%-5%	X	130°F-150°F		X		X
P3® Grato™ 14 Marine (US) Cleaner	611375	55 Gallon	X	3%-50%		Ambient-175°F	X		X	
P3® Grato™ 50 Marine (US) Cleaner	611514	55 Gallon	X	1%-5%		70°F-120°F	X			
Parco® 2280™ Clean-up	596168	5 Gallon		0.5%-20%		Ambient	X	X		
	594614	55 Gallon		0.5%-20%		Ambient	X	X		
Parco® Maintenance Cleaner 2235™	597788	5 Gallon		0.5%-50%		Ambient	X	X		
	594792	55 Gallon		0.5%-50%		Ambient	X	X		

Most products require multiple components. For a Technical Process Bulletin please visit www.henkelna.com/industrial, consult a Henkel representative or call 1-800-562-8483.

SOLVENT BLEND CLEANERS

Solvent blend cleaners are wide spectrum solvent blends for prepaint, equipment and general-purpose cleaning applications. Supplied in the form of saturated wipes, pails and drums.

Parcosol® 263™ Wipes – Liquid cleaner used to moisten a woven or nonwoven wipe to facilitate the removal of excess sealers, adhesives, sanding dust and general soils from bare metals, sheet molding compounds or E-Coated surfaces. The cleaner contains no Hazardous Air Pollutants (HAPs) and no Superfund Amendments and Reauthorization Act (SARA) reportables.

Parcosol® 264™ Wipes – Nonwoven wipes saturated with a low viscosity, low odor, petroleum-based solvent. The pre-saturated wipes are useful for cleaning and removal of solvent soluble soils from metal surfaces prior to or after painting or alkaline cleaning.

Parcosol® 277™ WB – HAPS-free, low-VOC, water-soluble, proprietary activator/amine purge blend used for internal and external cleaning of waterborne paint application equipment. The product is specifically formulated to aggressively remove wet, semi-dry and dry waterborne paint.

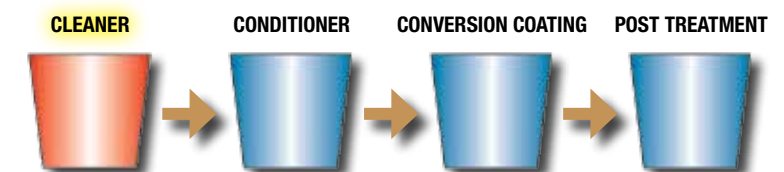
Parcosol® 283™ – HAPS-free (Hazardous Air Pollutants), 2F flash point, organic solvent blend used for internal and external cleaning of solvent-borne paint application equipment and metal surfaces.

Click on IDH # to learn more information, if a link is not available then please call 1-800-562-8483 for more information. Can't find what your looking for? then click [here to do a product search.](#)

Products	Order Item Number	Container Size	Application/System					Temperature	Characteristics
			Wipe	Solvent-Borne Paint	Waterborne Paint	E-Coat System	General Soil Cleanup		
Parcosol® 263™ Wipes	598224	Case	X				X	None	
Parcosol® 264™ Wipes*	598616	Case	X				X	M	
Parcosol® 277™ WB	694064	Drum		X	X			<90°F L	
Parcosol® 283™	693246	Drum		X	X	X		<150°F None	

* Minimum batch order – 5 cases.

Most products require multiple components. For a Technical Process Bulletin please visit www.henkelna.com/industrial, consult a Henkel representative or call 1-800-562-8483.



For technical assistance or a comprehensive list of products and package sizes, call: **1.800.562.8483**

Cleaners and Conditioners

PLASTIC CLEANERS

Plastic cleaners are specially formulated, water-based cleaners designed to prepare a wide range of plastics for painting.

Polyprep® 2303™ Cleaner – Alkaline cleaner suitable for a wide range of plastics including SMC, polyurethane and polyurea RIM, ABS, TPO, TPE, PVC and polyethylene. It is free of solvents, ethoxylated phenol-type surfactants, silicates, fluorides and any regulated heavy metals such as molybdenum.

Polyprep® 2635™ Cleaner – Acidic cleaner used in spray wash systems prior to the application of paint films or other surface treatments. It is suitable for a wide range of plastics including primed and raw SMC, polyurethane and polyurea RIM, ABS, TPO, TPE, PVC and polyethylene.

Click on IDH # to learn more information, if a link is not available then please call 1-800-562-8483 for more information. Can't find what your looking for? then click [here](#) to do a product search.

Products	Order Item Number	Container Size	Application/System			Temperature Operating Temperature	Contents	
			Spray	Concentration (% by volume)	Mild Steel Etch		Liquid	Phosphate-Free
Polyprep® 2303™ Cleaner	772520	55 Gallon	X	2%		120°F-160°F	X	X
Polyprep® 2635™ Cleaner	897898	5 Gallon	X	2%		120°F-150°F	X	X
	598136	55 Gallon	X	2%		120°F-150°F	X	X

Most products require multiple components. For a Technical Process Bulletin please visit www.henkeln.com/industrial, consult a Henkel representative or call 1-800-562-8483.

LIGHT METAL ACID DEOXIDIZERS

Light metal acid deoxidizer products are designed to remove surface oxides and smut from the aluminum substrate after the alkaline cleaning or etching stages in multi-stage conversion coating process lines. For multi-metal applications, see the Acid Cleaners section on page 18.

Deoxalume® 151™ – Deoxalume 151™ is a liquid, non-fluoride material that is suitable for deoxidizing and/or slight etching of aluminum and its alloys.

Deoxidizer HX-357™ – Sulfuric-based fluoride containing acid deoxidizer for aluminum and its alloys.

Deoxalume® MF – Dry acid fluoride approved for use in Boeing Specification BAC 5765 for deoxidizing aluminum alloys.

Click on IDH # to learn more information, if a link is not available then please call 1-800-562-8483 for more information. Can't find what your looking for? then click [here](#) to do a product search.

Products	Order Item Number	Container Size	Application/System			Temperature Operating Temperature	Contents		
			Spray	Immersion	Concentration (% by volume)		Mild Steel Etch	Liquid	Phosphate-Free
Deoxalume® 151™	594445	55 Gallon	X	X	3%-6%	X	90°F-120°F	X	X
Deoxalume® MF	595471	100 lb. Pail		X	8 oz./gallon in 20% Nitric Acid	X	Ambient		X
Deoxidizer HX-357™	598128	5 Gallon	X	X	1.5%-3%	X	90°F-120°F	X	
	593987	55 Gallon	X	X	1.5%-3%	X	90°F-120°F	X	

Most products require multiple components. For a Technical Process Bulletin please visit www.henkeln.com/industrial, consult a Henkel representative or call 1-800-562-8483.

Surface treatment conditioners for manganese and zinc phosphate processes are used prior to the conversion coating stage with no rinse between the stages to leave a chemical deposit of conditioner to aid in the development of the proper phosphate crystals on the metal surface.

CONDITIONERS FOR MANGANESE PHOSPHATE

Fixodine® M – Powdered conditioning agent used for articles of iron and steel, ahead of a Parco® Lubrite™ treatment. It promotes the formation of a dense and fine crystalline phosphate coating.

Click on IDH # to learn more information, if a link is not available then please call 1-800-562-8483 for more information. Can't find what your looking for? then click [here](#) to do a product search.

Products	Order Item Number	Container Size	Liquid	Powder	Spray	Immersion	Application	
							Manganese Phos Coatings	Temperature Range
Fixodine® M	771836	50 lb. Pail		X		X	X	120°F-190°F
	594557	Drum		X		X	X	120°F-190°F

Most products require multiple components. For a Technical Process Bulletin please visit www.henkeln.com/industrial, consult a Henkel representative or call 1-800-562-8483.

CONDITIONERS FOR ZINC PHOSPHATE

Fixodine® Z-10™ – Specially formulated to prepare iron, steel, aluminum, zinc and zinc-alloy surfaces for subsequent phosphate coating applications. These surfaces may be treated individually or in mixed production by either spray or immersion processing.

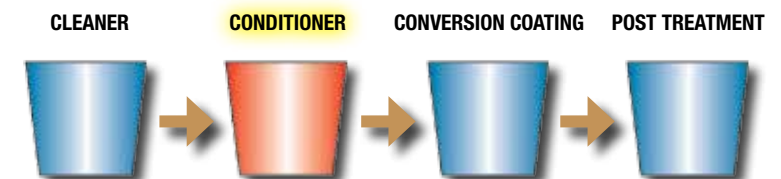
Prepalene™ X – Easy-to-handle liquid conditioning rinse that prepares iron, steel, aluminum, zinc and zinc-alloy surfaces for subsequent phosphate coating applications.

Fixodine® ZL – Fixodine ZL™ is a concentrated liquid which is pumpable and goes easily into water. Specially formulated to prepare iron, steel, aluminum, zinc and zinc-alloy surfaces for subsequent phosphate coating applications. These surfaces may be treated individually or in mixed production by either spray or immersion processing.

Click on IDH # to learn more information, if a link is not available then please call 1-800-562-8483 for more information. Can't find what your looking for? then click [here](#) to do a product search.

Products	Order Item Number	Container Size	Liquid	Powder	Spray	Immersion	Application	
							Zinc Phos Conditioner	Temperature Range
Fixodine® Z-10™	771875	15 Gallon		X	X	X	X	Ambient-120°F
	593993	55 Gallon		X	X	X	X	Ambient-120°F
Fixodine® ZL	593918	55 Gallon	X		X	X	X	Ambient-120°F
Prepalene™ X	772525	5 Gallon	X		X	X	X	Ambient-120°F
	687530	55 Gallon	X		X	X	X	Ambient-120°F

Most products require multiple components. For a Technical Process Bulletin please visit www.henkeln.com/industrial, consult a Henkel representative or call 1-800-562-8483.



Iron Phosphate Cleaner Coaters

IRON PHOSPHATE CLEANER COATERS

Cleaner coaters are process chemicals designed to both clean and deposit an iron phosphate conversion coating on the metal surface prior to painting. Wipe-on, spray wand and three-stage washer products are available.

Galvaprep® SG – Nonflammable phosphoric acid-based coating chemical that is designed to produce a uniform zinc phosphate coating on steel and galvanized surfaces.

Parco® Spray Wand 101™ – Concentrated liquid product designed for steam gun and high pressure manual applications on steel surfaces for simultaneous cleaning and conversion.

Parco® Spray Wand 200™ – Designed to simultaneously clean and impart an iron phosphate conversion coating on aluminum and zinc surfaces by use of a spray wand application.

Parco® Spray Wand 330™ – Nonflammable phosphoric acid, surfactant-based cleaner, brightener and prepaint conditioner for aluminum. Parco® Spray Wand 330™ should not be used on high copper bearing aluminum alloys or aluminum castings.

Prep-N-Cote® 2557L™ – Prep-N-Cote® 2557L™ simultaneously cleans and coats the metal surface. Formulated for spray or immersion application on steel, aluminum and galvanized surfaces.

Prep-N-Cote® 300L Plus™ – Formulated for spray or immersion application on steel, aluminum and galvanized surfaces. Prep-N-Cote® 300L Plus™ simultaneously cleans and coats the metal surface and has been optimized to prevent telegraphing of the phosphate coating through the light paint finishes.

Prep-N-Cote® 500LT™ – Iron phosphate cleaner- and coater-in-one has been formulated for spray application of steel surfaces to simultaneously clean and coat metal surfaces.

Prep-N-Cote® 505™ – Formulated for spray application to steel surfaces to simultaneously clean and develop a conversion coating. The process converts the metal surfaces to a nonmetallic, iron phosphate coating, which retards corrosion and increases the adhesion and durability of paint finishes.

Prep-N-Cote® 700™ – Formulated for spray and immersion application to simultaneously clean and develop a conversion coating on steel, zinc and aluminum surfaces. This process produces a uniform nonmetallic phosphate coating, which inhibits corrosion and increases the adhesion and durability of paint finishes.

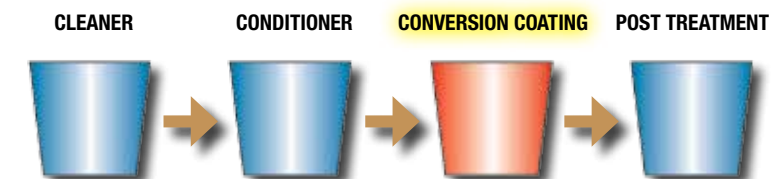
Prep-N-Cote® GS 755™ – Formulated for spray and immersion application to simultaneously clean and develop a conversion coating on steel, zinc and aluminum surfaces. This process produces a uniform nonmetallic phosphate coating, which inhibits corrosion and increases the adhesion and durability of paint finishes. Prep-N-Cote® GS 755™ is formulated to minimize flash rusting and protect against interstage corrosion.

Prep-N-Cote® LS 756™ – A Henkel Technologies proprietary product, especially designed to attack laser scale, light rust and conventional weld scale on steel substrates. Prep-N-Cote® LS 756™ simultaneously attacks the scale and imparts a uniform, nonmetallic conversion coating, which inhibits corrosion and increases the adhesion and durability of paint finishes to the steel substrate as a whole.

Click on IDH # to learn more information, if a link is not available then please call 1-800-562-8483 for more information. Can't find what your looking for? then click [here](#) to do a product search.

Products	Order Item Number	Container Size	Liquid	Spray	Immersion	Spray Wand	Substrate		Acceleration		Temperature	
							Steel	Multi-Metal	Organic	Fluoride	Surfactant	Temperature Range
Parco® Spray Wand 101™	772110	5 Gallon	X	X		X	X		X		X	120°F-190°F
	594296	55 Gallon	X	X		X	X		X		X	120°F-190°F
Parco® Spray Wand 200™	772101	5 Gallon	X	X		X	X	X	X	X	X	130°F-190°F
	594643	55 Gallon	X	X		X	X	X	X	X	X	130°F-190°F
Parco® Spray Wand 330™	772145	5 Gallon	X	X		X		Al only			X	Ambient-120°F
	595382	55 Gallon	X	X		X		Al only			X	Ambient-120°F
Prep-N-Cote® 2557L™	593908	55 Gallon	X	X	X	X	X	X			X	90°F-160°F
Prep-N-Cote® 300L Plus™	1267531	5 Gallon	X	X	X	X	X	X			X	120°F-160°F
	1267395	55 Gallon	X	X	X	X	X	X			X	120°F-160°F
Prep-N-Cote® 500LT™	771987	5 Gallon	X	X	X	X	X				X	70°F-140°F
	593944	55 Gallon	X	X	X	X	X				X	70°F-140°F
Prep-N-Cote® 505™	593932	55 Gallon	X	X	X	X	X		X		X	90°F-140°F
Prep-N-Cote® 700™	772086	5 Gallon	X	X	X	X	X	X	X	X	X	110°F-150°F
	594268	55 Gallon	X	X	X	X	X	X	X	X	X	110°F-150°F
Prep-N-Cote® GS 755™	772257	5 Gallon	X	X	X	X	X	X	X	X	X	110°F-150°F
	594140	55 Gallon	X	X	X	X	X	X	X	X	X	110°F-150°F
Prep-N-Cote® LS 756™	818814	55 Gallon	X	X	X	X	X		X		X	125°F-160°F

Most products require multiple components. For a Technical Process Bulletin please visit www.henkelna.com/industrial, consult a Henkel representative or call 1-800-562-8483.



For technical assistance or a comprehensive list of products and package sizes, call: **1.800.562.8483**

Iron Phosphate Conversion Coatings

IRON PHOSPHATE CONVERSION COATINGS

Following the proper cleaner and rinse stages, these products convert the metal surface to a nonmetallic, iron phosphate coating that inhibits corrosion and increases the adhesion and durability of paint finishes.

Bonderite® 1020™ – Formulated for spray and immersion application to steel surfaces. The process produces a uniform, nonmetallic phosphate coating, which inhibits corrosion and increases the adhesion and durability of paint finishes.

Bonderite® 1030™ – Treatment designed for low temperature spray application to steel surfaces. The Bonderite® 1030™ process converts the metal surface to a nonmetallic, iron phosphate coating.

Bonderite® 1070™ – Formulated for spray and immersion application to steel, aluminum and zinc surfaces to simultaneously clean and develop a conversion coating. The process produces a uniform, nonmetallic phosphate coating.

Bonderite® 1080™ – Formulated for spray and immersion application to simultaneously clean and develop an iron phosphate conversion coating on steel. This process produces a uniform, nonmetallic phosphate coating. Bonderite® 1080™ RP is formulated to minimize flash rusting and protect against interstage corrosion.

Bonderite® 1090™ – Imparts an amorphous, non-heavy metal phosphate conversion coating that treats steel and multi-metal substrates simultaneously. It is formulated for spray and immersion application to produce uniform, nonmetallic phosphate coatings.

Click on IDH # to learn more information, if a link is not available then please call 1-800-562-8483 for more information. Can't find what your looking for? then click [here](#) to do a product search.

Products	Order Item Number	Container Size	Liquid	Spray	Immersion	Substrate		Acceleration			Temperature Range
						Steel	Multi-Metal	Organic	Fluoride	Surfactant	
Bonderite® 1020™	772085	5 Gallon	X	X	X	X		X	X	X	110°F-150°F
	593875	55 Gallon	X	X	X	X		X	X	X	110°F-150°F
Bonderite® 1030™	593941	55 Gallon	X	X	X	X			X		100°F-120°F
Bonderite® 1070™	593818	55 Gallon	X	X	X	X	X	X	X	X	110°F-150°F
Bonderite® 1080™	598878	5 Gallon	X	X	X	X	X		X	X	100°F-150°F
	598608	55 Gallon	X	X	X	X	X		X	X	100°F-150°F
Bonderite® 1090™	772192	5 Gallon	X	X	X	X	X	X	X	X	110°F-150°F
	594281	55 Gallon	X	X	X	X	X	X	X	X	110°F-150°F

Most products require multiple components. For a Technical Process Bulletin please visit www.henkelna.com/industrial, consult a Henkel representative or call 1-800-562-8483.

DRY IN PLACE

This unique chemistry allows for either a wipe-on or mist-on step to apply a quality conversion coating without the need of a final rinse.

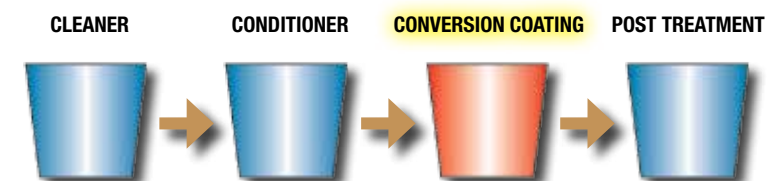
Bonderite® 1455-W™ Wipes – Pre-saturated wipes create a conversion coating on cold rolled steel, hot rolled steel, galvanized and armor plate surfaces. This reaction greatly enhances adhesion and corrosion resistance of paints, sealers and adhesives.

Bonderite® 7400™ – Formulated for dry-in-place, conversion coating use on steel, galvanized steel and aluminum. The process produces a uniform coating, which improves adhesion and improves bare corrosion resistance of aluminum, zinc and iron surfaces. The process does not need to be rinsed following the coating treatment, which eliminates a water rinse stage and the need for treatment of that water.

Click on IDH # to learn more information, if a link is not available then please call 1-800-562-8483 for more information. Can't find what your looking for? then click [here](#) to do a product search.

Products	Order Item Number	Container Size	Spray	Wipe	Substrate			Crystal Type	Temperature Range
					Steel	Zinc	Aluminum		
Bonderite® 1455-W™ Wipes	1545630	Case of 6		X	X	X		Nano	Ambient
Bonderite® 7400™	599060	5 Gallon	X		X	X	X	Nano	Ambient
	597816	55 Gallon	X		X	X	X	Nano	Ambient

Most products require multiple components. For a Technical Process Bulletin please visit www.henkelna.com/industrial, consult a Henkel representative or call 1-800-562-8483.



For technical assistance or a comprehensive list of products and package sizes, call: **1.800.562.8483**

Conversion Coatings

MANGANESE PHOSPHATE

These corrosion-resistant coatings consist chiefly of iron and manganese phosphates, and reduce wear on such articles as pistons, rings, liners, camshafts, tappets, motor blocks and similar bearing surfaces. Other beneficial effects are: permits rapid break-in of moving parts without scuffing or welding by preventing metal-to-metal contact between the bearing surfaces, increases lubrication of treated surfaces due to the oil-absorptive coating, and removes light metal scratches remaining from machining operations.

Parco® Lubrite 2 – Formulated to produce nonmetallic, oil-absorptive coatings on iron and steel bearing surfaces. These corrosion-resistant coatings consist chiefly of iron and manganese phosphates, and reduce wear on such articles as pistons, rings, liners, camshafts, tappets, motor blocks and similar bearing surfaces.

Parco® Lubrite LT 10 – Same as Parco® Lubrite 2 except used at lower temperatures.

Click on IDH # to learn more information, if a link is not available then please call 1-800-562-8483 for more information. Can't find what your looking for? then click [here](#) to do a product search.

Products	Order Item Number	Container Size	Liquid	Immersion	Steel	Acceleration	Temperature
							Temperature Range
Parco® Lubrite 2	805661	5 Gallon	X	X	X	Internal	205°F-210°F
	593889	15 Gallon	X	X	X	Internal	205°F-210°F
	593831	55 Gallon	X	X	X	Internal	205°F-210°F
Parco® Lubrite LT 10	772339	5 Gallon	X	X	X	Internal	140°F-160°F
	598100	55 Gallon	X	X	X	Internal	140°F-160°F

Most products require multiple components. For a Technical Process Bulletin please visit www.henkelna.com/industrial, consult a Henkel representative or call 1-800-562-8483.

NON-PHOSPHATE / NANO TECHNOLOGY

These next generation nano technology conversion coatings provide an environmentally responsible alternative to traditional phosphate coatings. Tremendous cost savings are achieved due to the low energy, low maintenance and low waste treatment costs associated with this technology.

Bonderite® NT-1™ – This zirconium-based nanotechnology provides a green alternative to traditional iron phosphate. It runs at low temperatures and is completely phosphate- and regulated heavy metal-free, to reduce energy consumption and waste removal.

TecTalis® 1200™ (Spray Process) and **TecTalis® 1800 (Immersion Process)** – Phosphate-free reactive ambient conversion coating formulated for use in the treatment of steel, zinc and aluminum surfaces. The pretreatment is free of regulated organic components and increases the corrosion resistance of painted metal surfaces.

Click on IDH # to learn more information, if a link is not available then please call 1-800-562-8483 for more information. Can't find what your looking for? then click [here](#) to do a product search.

Products	Order Item Number	Container Size	Spray	Immersion	Substrate			Temperature Range
					Steel	Zinc	Aluminum	
Bonderite® NT-1™	772427	5 Gallon	X	X	X	X	X	55°F-100°F
	611359	55 Gallon	X	X	X	X	X	55°F-100°F
TecTalis® 1200™ Makeup A	1245934	5 Gallon	X		X	X	X	55°F-110°F
	1245931	55 Gallon	X		X	X	X	55°F-110°F
TecTalis® 1800™ Makeup A	1247386	5 Gallon		X	X	X	X	55°F-110°F
	1246859	55 Gallon		X	X	X	X	55°F-110°F

Most products require multiple components. For a Technical Process Bulletin please visit www.henkelna.com/industrial, consult a Henkel representative or call 1-800-562-8483.

ZINC PHOSPHATE

These products convert the metal surface to a nonmetallic, polycrystalline zinc phosphate coating.

Bonderite® 3410™ – Chemicals formulated for treating mixed production of steel, galvanized steel, aluminum and zinc alloy coated steel. The Bonderite® 3410™ process converts the metal surface to a nonmetallic, fine-crystal, zinc phosphate coating that inhibits corrosion and increases the adhesion and durability of paint finishes.

Bonderite® 769 M™ – Process converts the metal surface to a nonmetallic, polycrystalline coating containing manganese, cobalt and zinc phosphates. This coating provides high alkaline resistance and is preferred as a paint base offering superior adhesion and durability.

Bonderite® 880™ – This product is formulated with an internal crystal-refining agent. When applied to steel, the process converts the surface to a nonmetallic, corrosion-resistant zinc phosphate coating. The coating has great adherence, is of an absorptive nature, and provides protection from rust by bonding the final finish of oil, wax or paint to the articles treated.

Bonderite® 952™ – Polycrystalline conversion coating process formulated for immersion application to steel, galvanized steel, electrogalvanized steel, zinc-alloy coated steel and aluminum. The metals may be treated individually or in mixed production.

Bonderite® 958™ – Polycrystalline conversion coating process formulated for spray application to steel, galvanized steel, electro-galvanized steel, zinc-alloy coated steel and aluminum. The metals may be treated individually or in mixed production.

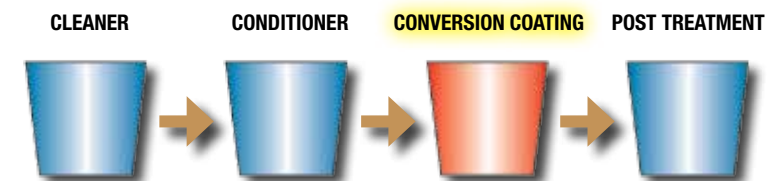
Bonderite® ZMX™ – This zinc phosphate conversion coating converts metallic substrate surfaces to a fine-crystalline, nonmetallic, zinc phosphate coating that inhibits corrosion, and increases the adhesion and durability of organic paints and finishes.

Parkerizing® 210™ – Heavy Zinc Phosphate Process: The treatment solution is formulated to produce nonmetallic, zinc phosphate coatings that are highly resistant to corrosion on iron and steel surfaces. The coatings have great adherence, are of an absorptive nature and provide substantial protection from rust by bonding the final finish of stain, oil, wax or paint to the articles treated. The treatment produces a uniform coating on all surfaces, which the solution can reach, and is especially suitable for rust-proofing threaded pieces and articles with small holes or recesses.

Click on IDH # to learn more information, if a link is not available then please call 1-800-562-8483 for more information. Can't find what your looking for? then click [here](#) to do a product search.

Products	Order Item Number	Container Size	Substrate			Acceleration	Crystal Type	Contents		Temperature Range	
			Spray	Immersion	Steel			Zinc	Aluminum		Manganese
Bonderite® 3410™	594677	55 Gallon	X	X	X	X	External	Micro	X	X	140°F-160°F
Bonderite® 769 M™	595066	55 Gallon	X	X	X	X	External	Micro			120°F-135°F
Bonderite® 880™	771811	5 Gallon		X	X	X	External	Micro			165°F-185°F
	595236	55 Gallon		X	X	X	External	Micro			165°F-185°F
Bonderite® 952™	594349	55 Gallon	X		X	X	External	Micro	X	X	120°F-130°F
Bonderite® 958™	594297	55 Gallon		X	X	X	External	Micro	X	X	110°F-120°F
Bonderite® ZMX™	772424	5 Gallon	X	X	X	X	Internal	Micro	X		120°F-135°F
Parkerizing® 210™	771847	5 Gallon		X	X		Internal	Heavy		X	170°F-190°F
	594916	55 Gallon		X	X		Internal	Heavy		X	170°F-190°F

Most products require multiple components. For a Technical Process Bulletin please visit www.henkelna.com/industrial, consult a Henkel representative or call 1-800-562-8483.



Light Metals

LIGHT METALS

The Alodine® light metal conversion coating products provide an excellent paint base and bonding surface for aluminum substrates. RoHS compliant, chrome-free or trivalent chrome environmentally responsible products are available. Standard chromate conversion coatings for MIL-Spec applications are also part of the product line.

Alodine® 1000™ Liquid – Liquid chemical used to produce a protective coating on aluminum and aluminum alloys. The coating provides protection for aluminum and this coating provides an excellent bond for organic coatings. Develops a clear or colorless protective coating and it should be used when the characteristic aluminum appearance or finish must be retained. Approved for use under Boeing Specification BAC 5719 for Class B.

Alodine® 1000™ RTU – Ready-to-use, aqueous solution for producing a protective coating on aluminum and its alloys. Light coatings do not significantly change the appearance of the aluminum surface. The coating provides excellent protection for painted and unpainted aluminum and bonds paint well.

Alodine® 1001™ – A MIL-DTL-81706B approved hexavalent chromic acid based coating chemical that will produce a clear chromate conversion coating on aluminum and its alloys.

Alodine® 1132™ Touch-N-Prep® Coating – A MIL-DTL-81706 approved pen for applying the Class 1A chromate conversion coating for MIL-DTL-5541.

Alodine® 120™ Brush Kit – Brush Alodine® Chemical Kit NO. 120 contains products formulated for treating aluminum to conform to MIL-C-5541C, Class 1A. This kit contains sufficient chemicals for cleaning and coating approximately 100 square feet of aluminum surface.

Alodine® 1200S™ – Powdered chemical used to produce a protective coating on aluminum, which minimizes corrosion and provides an improved bond for paint. Surfaces treated with the Alodine™ 1200S® process range in color from a light iridescent golden to tan. Alodine™ 1200S® coating chemical, listed on Qualified Product List QPL-81706, is an approved material to produce Class 1A and Class 3 coatings, bare or painted, in accordance with Military Specifications MIL C-5541C.

Alodine® 1200S™ RTU Brush – Ready-to-use liquid product that produces a chromate conversion coating on aluminum and its alloys. The coating produced provides excellent protection for unpainted aluminum and bonds paint well.

Alodine® 1201™ – Nonflammable, chromic acid-based, coating chemical that will produce a chrome conversion coating on aluminum and its alloys. The coating formed by Alodine® 1201™ is gold to tan in color and it becomes a part of the aluminum surface. This chrome conversion coating offers the best affordable substrate for both paint adhesion and corrosion resistance.

Alodine® 1500™ – Liquid chemical used to produce a protective coating on aluminum or aluminum alloys. The coating provides protection for aluminum and is an excellent bond for clear organic coatings. Alodine® 1500™ should be used when the characteristic aluminum appearance must be retained. Alodine® 1500™ is listed on the register for QPL-MIL-C-81706 and is approved to be used by Methods A and C (spray and immersion processing) to produce class 3 coatings in accordance with Military Specification MIL-C-5541 (current issue). Alodine® 1500™ may also be used to process aluminum under Specification MIL-S-5002; however, in processing certain exterior aircraft surfaces, approval of the procuring agency should be secured.

Alodine® 1600™ – Concentrated liquid two-package chemical used to produce a chromate conversion coating on aluminum and all its alloys. The color ranges from light iridescent gold to tan. Alodine® 1600™ can be applied by immersion or spray method and it does not contain complex cyanides. Alodine® 1600™ is approved for use under MIL-DTL-81706A, formally MIL-C-81706, Classes 1A and 3, Form, I, Method C and BAC-5719.

Alodine® 1600™ RTU – Ready-to-use liquid product that produces a chromate conversion coating on aluminum and its alloys. The coating produced provides excellent protection for unpainted aluminum and greatly improves paint bonding.

Alodine® 600™ – Powdered chemical used to produce a chromate conversion coating on aluminum and its alloys, which ranges in color from light, iridescent gold to tan. Can be applied by immersion or spray method, does not contain complex cyanides, and is particularly recommended where a low dielectric resistance coating is desired. Alodine® 600™ is approved under MIL-C-81706 for use by Application Methods A and C, classes 1A and 3; and its listing on QPL 81706 indicates its acceptance under the MIL-C-5541 document of current issue.

Alodine® 600™ RTU – Ready-to-use liquid product which produces a chromate conversion coating on aluminum and its alloys. The coating produced provides excellent protection for unpainted aluminum and bonds paint well.

Alodine® 713™ – Conversion coating bath formulated for the treatment of aluminum and its alloys. Applied by immersion, the solution advantageously treats assemblies of aluminum alloys with small amounts of other metal such as brass, copper, cadmium plate, zinc plate, mild steel and stainless steel. Better results are obtained by treatment of the complete assembly rather than the individual parts before assembly. No sludge develops.

Alodine® 871™ Touch-N-Prep® Coating – Non-hexavalent chromium dry-in-place conversion coating designed for use on aluminum and its alloys. The applicator used to deliver this product provides an easy and safe method of repairing bare areas of aluminum surfaces. Alodine® 871™ is formulated for both bare corrosion protection such as ASTM 921-02 and bonding applications when combined with organic coatings or structural adhesives.

Alodine® T 5900™ – Trivalent chrome conversion coating approved to MIL-DTL-81706/MIL-DTL-5541F Class 1A and 3.

Alodine® T 5900™ RTU – Ready to use trivalent chrome conversion coating approved to MIL-DTL-81706/MIL-DTL-5541F Class 1A and 3.

Alodine® 2600™ – Cobalt-based conversion coating for aluminum.

Alodine® 4595™ – Chromium-free zirconium/polymer product for treating aluminum to provide an excellent base for organic finishes and bonding.

Alodine® 5200™ – Treatment is a chromium-free product specifically formulated for treating non-ferrous alloys. Spray or immersion applications may be used. This process provides an excellent base for bonding of adhesives and organic finishes.

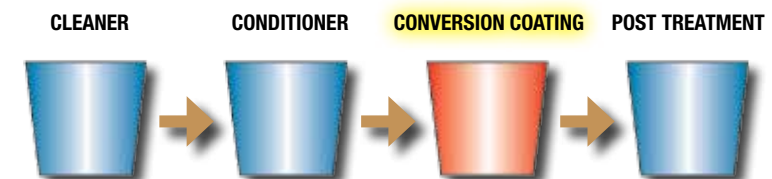
Alodine® 5700™ – Ready-to-use version of Alodine® 5200™, also available in convenient wipes.

Alodine® 5700™ Wipes – Ready-to-use version of Alodine® 5200™, also available in convenient wipes.

Click on IDH # to learn more information, if a link is not available then please call 1-800-562-8483 for more information. *Can't find what your looking for? then click [here](#) to do a product search.*

Products	Order Item Number	Container Size	Form				Application Method				Substrate			Chemistry		
			Liquid	Spray	Immersion	Brush	Magnesium	Aluminum	Reactive	Dry in Place	Military Approvals	Hex Chrome	Tri Chrome	Non-Chrome		
Alodine® 1000™ Liquid	595895	55 Gallon	X	X	X	X		X	X				X			
Alodine® 1000™ RTU	598168	5 Gallon	X	X	X	X		X	X				X			
Alodine® 1001™	595852	55 Gallon	X	X	X	X		X	X				X			
	594417	Case of 4 - 1 Gallon	X	X	X	X		X	X				X			
Alodine® 1132™ Touch-N-Prep® Coating	1445846	Case of 12 Pens				X		X		X	X	X				
Alodine® 120™ Brush Kit	592726	Kit	X			X		X	X			X	X			
Alodine® 1200S™	593964	60 lb. Pail		X	X	X		X	X			X	X			
Alodine® 1200S™ RTU Brush	595232	55 Gallon	X			X		X	X				X			
Alodine® 1201™	594418	Case of 4 - 1 Gallon	X	X	X	X		X	X			X	X			
Alodine® 1500™	777781	5 Gallon	X	X	X	X		X	X			X	X			
	594237	55 Gallon	X	X	X	X		X	X			X	X			
Alodine® 1600™	1006652	5 Gallon	X		X			X	X			X	X			
	594871	55 Gallon	X		X			X	X			X	X			
Alodine® 1600™ RTU	772466	5 Gallon	X	X	X			X	X				X			
Alodine® 600™	594038	60 lb. Pail		X	X	X		X	X			X	X			
Alodine® 600™ RTU	594094	5 Gallon	X	X	X	X		X	X			X	X			
Alodine® 713™	595582	55 Gallon	X	X	X			X	X				X			
Alodine® 871™ Touch-N-Prep® Coating	1446363	Case of 12 Pens				X		X		X	X		X			
Alodine® T 5900™	756391	5 Gallon	X	X	X	X	X	X	X			X		X		
	756387	55 Gallon	X	X	X	X	X	X	X			X		X		
Alodine® T 5900™ RTU	772744	5 Gallon	X	X	X	X	X	X	X			X		X		
	772743	55 Gallon	X	X	X	X	X	X	X			X		X		
Alodine® 2600™	595129	55 Gallon	X	X	X			X	X							X
Alodine® 4595™	599011	5 Gallon	X	X	X			X	X							X
	599033	55 Gallon	X	X	X			X	X							X
Alodine® 5200™	596088	5 Gallon	X	X	X			X	X	X	X					X
	594142	55 Gallon	X	X	X			X	X	X	X					X
Alodine® 5700™	595996	5 Gallon	X	X	X			X	X	X	X					X
	592968	15 Gallon	X	X	X			X	X	X	X					X
	594136	55 Gallon	X	X	X			X	X	X	X					X
Alodine® 5700™ Wipes	869854	Case of 250 Wipes				X		X	X	X	X					X

Most products require multiple components. For a Technical Process Bulletin please visit www.henkelna.com/industrial, consult a Henkel representative or call 1-800-562-8483.



For technical assistance or a comprehensive list of products and package sizes, call: **1.800.562.8483**

Light Metals Post Treatment

LIGHT METALS POST TREATMENT

These products are designed to enhance the performance of our conversion coating products for light metal applications especially aluminum substrates.

Deoxylyte® 100 NC™ – Liquid chromium-free, sealing rinse for aluminum that promotes paint adhesion and provides additional corrosion protection when used over conversion coatings.

Deoxylyte® 200 NC™ – Liquid chromium-free, sealing rinse for aluminum that promotes paint adhesion and provides bare corrosion protection when used over conversion coatings. It also produces a hydrophilic surface.

Click on IDH # to learn more information, if a link is not available then please call 1-800-562-8483 for more information. *Can't find what your looking for? then click here to do a product search.*

Products	Order Item Number	Order Item Number	Reactive	Spray	Immersion	Substrate							Paint System		
						Steel	Galvanized	Aluminum	Non-Chrome	Organic	Ambient	DIW Rinse/After	Wet	Powder	E-Coat
Deoxylyte® 100 NC™	643710	5 Gallon	X	X	X			X	X	X	X	X	X	X	X
	595234	55 Gallon	X	X	X			X	X	X	X	X	X	X	X
Deoxylyte® 200 NC™	597704	5 Gallon	X	X	X			X	X			X	X	X	
	596751	55 Gallon	X	X	X			X	X			X	X	X	

Most products require multiple components. For a Technical Process Bulletin please visit www.henkelna.com/industrial, consult a Henkel representative or call 1-800-562-8483.

MULTI-METAL POST TREATMENT

These products are designed to enhance the performance of our conversion coating products for multi-metal applications.

Deoxylyte® 54 NC – Acidic, inorganic, liquid post treatment chemical used in immersion and spray final rinses to improve paint adhesion and to minimize under film corrosion and blistering.

Parcolene® 50NC™ – Treatment is designed for use over phosphate coatings and is applied by spray or immersion. The chromium-free conversion coating agent increases the corrosion resistance of the coatings when painted.

Parcolene® 7100™ – Post treatment chemical is a chromium-free post treatment especially formulated for use over iron phosphate conversion coatings.

Parcolene® 7100™ RTU – Ready-to-use, chromium-free, post treatment chemical especially formulated for use over iron phosphate conversion coatings.

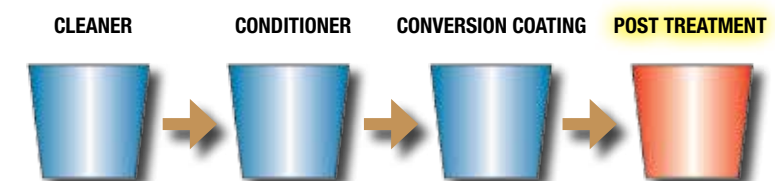
Parcolene® 99 CWN™ – Chromium-free product specifically formulated as a conversion coating/post-treatment process designed for zinc phosphate lines that process a high percentage of aluminum metal.

Parcolene® 99X™ – Chromium and phosphate-free post treatment that increases paint adhesion and corrosion resistance of metal surfaces for use over all types of conversion coatings used in the pretreatment of steel, zinc, and aluminum surfaces.

Click on IDH # to learn more information, if a link is not available then please call 1-800-562-8483 for more information. *Can't find what your looking for? then click here to do a product search.*

Products	Order Item Number	Container Size	Reactive	Spray	Immersion	Substrate							Paint System		
						Steel	Galvanized	Aluminum	Non-Chrome	Organic	Ambient	DIW Rinse/After	Wet	Powder	E-Coat
Deoxylyte® 54 NC	621105	55 Gallon	X	X	X	X	X	X	X		X	X	X	X	X
Parcolene® 50NC™	771997	5 Gallon	X	X	X	X	X	X	X		X	X	X	X	X
	594378	55 Gallon	X	X	X	X	X	X	X		X	X	X	X	X
Parcolene® 7100™	596456	5 Gallon	X	X		X	X		X	X	X			X	
	594309	55 Gallon	X	X		X	X		X	X	X			X	
Parcolene® 7100™ RTU	772221	5 Gallon	X	X		X	X		X	X	X			X	
	595421	55 Gallon	X	X		X	X		X	X	X			X	
Parcolene® 99 CWN™	772288	5 Gallon	X	X	X	X	X	X	X	X	X	X	X	X	X
	596354	55 Gallon	X	X	X	X	X	X	X	X	X	X	X	X	X
Parcolene® 99X™	717257	5 Gallon	X	X	X	X	X	X	X	X	X	X	X	X	X
	665553	55 Gallon	X	X	X	X	X	X	X	X	X	X	X	X	X

Most products require multiple components. For a Technical Process Bulletin please visit www.henkelna.com/industrial, consult a Henkel representative or call 1-800-562-8483.



For technical assistance or a comprehensive list of products and package sizes, call: **1.800.562.8483**

Paint Strippers

PAINT STRIPPERS

These are formulated hot strippers to remove cured paint from a variety metal substrates.

P3® Hot Stripper 50 – Especially formulated for immersion or spray application on painted steel surfaces.

P3® Hot Stripper 3000™ – Designed for the removal of cured paint from metal substrates. Highly recommended for aluminum, providing excellent etch resistance and performance.

P3® Hot Stripper 301™ – Paint hot stripper for aluminum, various soft metals and steel substrates.

Click on IDH # to learn more information, if a link is not available then please call 1-800-562-8483 for more information. *Can't find what your looking for? then click [here](#) to do a product search.*

Products	Order Item Number	Container Size	Application/System		Substrate		Temperature
			Immersion	Spray	Steel	Aluminum	Operating Temperature
P3® Hot Stripper 50	897780	5 Gallon	X	X	X		200°F-240°F
	594431	55 Gallon	X	X	X		200°F-240°F
P3® Hot Stripper 3000™	979781	55 Gallon	X		X	X	225°F-290°F
P3® Hot Stripper 301™	677484	5 Gallon	X		X	X	158°F-176°F
	738215	55 Gallon	X		X	X	158°F-176°F

Most products require multiple components. For a Technical Process Bulletin please visit www.henkelna.com/industrial, consult a Henkel representative or call 1-800-562-8483.

PAINT STRIPPER ADDITIVES

These are formulated additives to enhance the performance and extend the bath life of our hot stripper products.

P3® Hot Stripper Additive 15 – Especially formulated for use in highly alkaline solutions to assist in the removal of paint.

P3® Hot Stripper Additive 16 – Organic, liquid product designed specifically for accelerating paint stripping operations in conjunction with P3® Hot Stripper 50.

P3® Hot Stripper Additive 19 – Especially formulated for use in highly alkaline solutions to assist in the removal of paint. It is used to permit the removal of the most difficult to strip finishes and also to accelerate the removal process.

Click on IDH # to learn more information, if a link is not available then please call 1-800-562-8483 for more information. *Can't find what your looking for? then click [here](#) to do a product search.*

Products	Order Item Number	Container Size	Application/System		Substrate		Temperature
			Immersion	Spray	Steel	Aluminum	Operating Temperature
P3® Hot Stripper Additive 15	967452	5 Gallon	X		X	X	200°F-240°F
	594246	55 Gallon	X		X	X	200°F-240°F
P3® Hot Stripper Additive 16	595127	55 Gallon	X		X	X	200°F-240°F
P3® Hot Stripper Additive 19	772409	5 Gallon	X		X	X	200°F-240°F
	772408	55 Gallon	X		X	X	200°F-240°F

Most products require multiple components. For a Technical Process Bulletin please visit www.henkelna.com/industrial, consult a Henkel representative or call 1-800-562-8483.

Specialty Products

ACID INHIBITORS

Rodine® is the worldwide standard for acid inhibitors – a reputation earned by on-the-job performance and proven results. Rodine® acid inhibitors are formulated to insure cost-saving dependability, without slowing production.

Rodine® 102™ – Powdered chemical designed to inhibit the attack of sulfamic and sodium bisulfate solutions on mild steel, stainless steel, copper and/or brass during industrial cleaning operations.

Rodine® 103™ NPF – Unique liquid inhibitor designed specifically for use in industrial cleaning operations to prevent acid attack on mild steel, stainless steel and copper or brass.

Rodine® 145L™ – Liquid inhibitor especially designed for the reduction of acid attack on zinc and galvanized surfaces. It will also help protect mild steel, copper, brass and stainless steel from attack by several acids.

Rodine® 2010™ – Low toxicity, nonflammable, highly soluble, low viscosity, liquid metal loss inhibitor for use especially in tetraammoniated ethylenediaminetetraacetic acid (EDTA) cleaning solutions.

Rodine® 213 SF™ – Organic, liquid, cationic corrosion inhibitor especially designed to inhibit the attack of hydrochloric acid on iron and steel during industrial cleaning operations. It also inhibits acid attack on copper and brass.

Rodine® 31A™ – Liquid, cationic acid inhibitor designed specifically for use in chemical cleaning operations where chloride-free solvents such as citric, hydroxyacetic and formic acids are used.

Rodine® 3305™ – Low viscosity liquid, non-foaming inhibitor for use in hydrochloric acid continuous or batch type pickling operations.

Rodine® 426™ – Low toxicity organic liquid, cationic corrosion inhibitor especially designed to inhibit the attack of hydrochloric acid on iron and steel during industrial cleaning operations.

Rodine® 55 – Amber-colored, powdered inhibitor designed for use in conventional sulfuric acid pickling operations.

Rodine® 85 – Soluble, low-foaming, liquid inhibitor formulated for use in conventional sulfuric acid pickling operations. Effective on any type of steel, and can be used at any acid concentration.

Click on IDH # to learn more information, if a link is not available then please call 1-800-562-8483 for more information. Can't find what your looking for? then click [here to do a product search.](#)

Products	Order Item Number	Container Size	Form	Maximum Temperature	Main Use	Used With the Following Acids	NSF Registered	Compatible Metals
Rodine® 102™	594881	100 lb. Drum	Powder	180°F	Acid Inhibitor	Sulfuric, Sodium bisulfate	Yes	See Technical Process Bulletin
	594613	350 lb. Drum						
Rodine® 103™ NPF	693536	5 Gallon	Liquid	150°F	Acid Inhibitor	Phosphoric, Sulfuric, Hydrochloric, Hydroxyacetic (Glycolic), Citric, Oxalic, Sulfamic, Tataric, Sodium bisulfate, Acetic	Yes	See Technical Process Bulletin
	621410	55 Gallon						
Rodine® 145L™	899060	5 Gallon	Liquid	120°F	Acid Inhibitor	Sulfamic, Citric, Hydrochloric, Sulfuric	No	See Technical Process Bulletin
	898822	55 Gallon						
Rodine® 2010™	1380617	5 Gallon	Liquid	350°F	Boiler Clean Out	EDTA and Ammoniated EDTA	No	See Technical Process Bulletin
	1314676	55 Gallon						
Rodine® 213 SF™	1393855	5 Gallon	Liquid	220°F	Acid Inhibitor	Hydrochloric	No	See Technical Process Bulletin
	1393854	55 Gallon						
Rodine® 31A™	592762	1 Gallon	Liquid	180°F	Acid Inhibitor	Phosphoric, Sulfuric, Hydroxyacetic (Glycolic), Citric, Formic, Oxalic, Sulfamic, Tataric, Sodium bisulfate	No	See Technical Process Bulletin
	592763	5 Gallon						
	593979	55 Gallon						
Rodine® 3305™	831469	55 Gallon	Liquid	See TPB*	Acid Inhibitor	Hydrochloric	No	See Technical Process Bulletin
Rodine® 426™	594279	55 Gallon	Liquid	220°F	Acid Inhibitor	Hydrochloric	No	See Technical Process Bulletin
Rodine® 55	596737	100 lb. Drum	Powder	190°F	Acid Inhibitor	Sulfuric	No	See Technical Process Bulletin
	595794	300 lb. Drum	Powder	190°F	Acid Inhibitor	Sulfuric	No	See Technical Process Bulletin
Rodine® 85	594521	55 Gallon	Liquid	195°F	Acid Inhibitor	Phosphoric, Citric, Oxalic, Sulfamic, Sodium bisulfate, Acetic	No	See Technical Process Bulletin

Most products require multiple components. For a Technical Process Bulletin please visit www.henkeln.com/industrial, consult a Henkel representative or call 1-800-562-8483.

ANTI-WELD SPATTER

This is an easily cleaned coating applied to metal prior to welding to reduce the adherents of weld spatter that can cause surface imperfections.

Parco® AWS 104™ – Water-based anti-weld spatter agent material that stays wet after application.

Click on IDH # to learn more information, if a link is not available then please call 1-800-562-8483 for more information. Can't find what your looking for? then click [here to do a product search.](#)

Products	Order Item Number	Container Size	Liquid	Concentration	Application		Temperature Range
					Spray	Hand Wipe	
Parco® AWS 104™	593055	5 Gallon	X	100%	X	X	Ambient
	593056	55 Gallon	X	100%	X	X	Ambient

Most products require multiple components. For a Technical Process Bulletin please visit www.henkeln.com/industrial, consult a Henkel representative or call 1-800-562-8483.

PLASTIC RINSE AID

This specially formulated product prevents water spotting prior to painting plastic surfaces.

P3® Polyprep® Rinse 400™ – Rinsing aid especially designed for use after plastic cleaning in plastic pretreatment operations. P3® Polyprep® Rinse 400™ assists in the displacement and removal of solids-laden water, thereby minimizing water spotting on cleaned plastic and painted plastic parts.

Click on IDH # to learn more information, if a link is not available then please call 1-800-562-8483 for more information. Can't find what your looking for? then click [here to do a product search.](#)

Products	Order Item Number	Container Size	Application	Substrate	Concentration	Temperature		Contents	
						Operating Temperature	Liquid	Phosphate-Free	
P3® Polyprep® Rinse 400™	598718	5 Gallon	Spray	Plastic	0.03-0.07%	70°F-110°F	X	X	
	593070	55 Gallon	Spray	Plastic	0.03-0.07%	70°F-110°F	X	X	

Most products require multiple components. For a Technical Process Bulletin please visit www.henkeln.com/industrial, consult a Henkel representative or call 1-800-562-8483.

Engineering Services

Henkel Corporation offers complete engineering services for projects demanding expertise and support beyond the limits of our standard technical services. As a result, our engineers and scientists can quote the following value-added services:

- On-site engineering assistance
- Joint product development programs
- Prototype testing, fixture preparation and consultation
- Contract lab services and testing
- Custom formulations

In today's volatile and fluid market landscape, a manufacturer's survival and success are directly related to its technical capability. Rapidly emerging, innovative processes and materials mandate an unprecedented breadth and depth of engineering savvy. Not every company can house the equipment and engineering staff necessary to compete in today's marketplace.



THE ENGINEERING SERVICES GROUP OF HENKEL UNDERSTANDS THE NECESSITY OF PARTNERING WITH MANUFACTURERS AND SHARING THIS EXPERTISE WITH THE INDUSTRY THROUGH COST-EFFECTIVE, CUSTOM-TAILORED PROGRAMS.

These programs range from specialized field teams that evaluate specifications and in-line process requirements, to the development of adhesives, sealants and surface treatments, and the design, construction and implementation of dispensing and curing systems. Whether you need competent recommendations on chemical properties or a turnkey process line, the engineering services group of Henkel can provide solutions through the seamless integration of mechanical, electrical, industrial manufacturing and chemical engineering teams.

The Engineering Centers play host to a battery of testing equipment. Here, experienced technicians conduct a multitude of tests, such as surface contamination, corrosion resistance, deforming, fixture, tensile and peel strength.

CUSTOM TEST FIXTURES AND PROTOCOLS CAN BE DEVELOPED TO MEET SPECIFIC END-USE REQUIREMENTS

Crucial in the engineering process is determining whether the customer's application and the adhesive or surface treatment criteria can withstand the gauntlet of rigorous strength tests performed by Henkel. Custom test fixtures and protocols can be developed to meet specific end-use requirements.



OUR PROTOTYPING CAPABILITY PROVIDES VALUABLE DATA REGARDING THE FEASIBILITY OF FULL-SCALE MANUFACTURE

Henkel engineers are frequently called upon to provide process simulations of customer parts on short production runs. Our prototyping capability provides valuable data regarding the feasibility of full-scale manufacture.



MANUFACTURERS CAN BE CONFIDENT IN THE DURABILITY AND LONGEVITY OF AN ASSEMBLY IN THE FIELD

Our engineers can also create environmental conditions that simulate, and even exceed, the most severe conditions. With heat aging, salt fog, humidity and thermal cycling chambers, manufacturers can be provided with confidence in the durability and longevity of an assembly in the field.



OEM Training Services

Educate your engineers on how to cut costs, improve quality and increase production through the integration of adhesives, sealants and surface treatments into your new product design process. Each instructional event touches on the wide array of Henkel product solutions including adhesives, sealants, surface treatments, dispensing and curing equipment, as well as the unmatched technical support of our product specialists.

PRODUCT WORKSHOPS	<p>OEM WORKSHOP Full or half-day on-site product training customized to address specific design needs at your manufacturing location.</p> <p>OEM CUSTOMER TRAINING SCHOOL Full or half-day off-site training designed specifically for design, process, material and manufacturing engineers responsible for assemblies involving the use of adhesives, sealants or surface treatments.</p>
	<p>DESIGNING PUMPS WITH ADHESIVES SEMINAR Two- to four-hour training on adhesives, coatings, lubricants and the performance improvements that their implementation provides to pump manufacturers.</p> <p>DESIGNING ELECTRIC MOTORS WITH ADHESIVES SEMINAR This half-day seminar reviews in detail the many ways motor manufacturers are using adhesives and sealants to improve performance, reduce costs and enhance manufacturability. The seminar includes many hands-on demonstrations and real-world case histories.</p> <p>MEDICAL ADVANCED WORKSHOP A four- to seven-hour off-site program providing solutions to medical device manufacturers on design and assembly challenges. The workshop is designed specifically for material, manufacturing and design engineers, and includes hands-on demonstrations of adhesives and equipment.</p> <p>MEDICAL TECHNOLOGY ON-SITE SEMINAR Select from a menu of seven of the most requested medical device adhesive topics or create a customized seminar to meet your specific requirements. Courses are conducted at your location, and include instruction, hands-on demonstrations, samples and technical guides.</p> <p>HENKEL OFFERS MANY OTHER WORKSHOPS WHICH CAN BE CUSTOMIZED TO PROVIDE TRAINING FOR VARIOUS INDUSTRIES AND DEVICES.</p>
SERVICES	<p>PLANT SURVEY A detailed manufacturing process evaluation performed by a Henkel Specialist to identify and document potential cost savings and process improvements.</p>

Conversion Coatings

Product Index

CONVERSION COATINGS

MIL-DTL-81706B

Click on Product Name to learn more information, if a link is not available then please call 1-800-562-8483 for more information.
 Can't find what your looking for? then click [here](#) to do a product search.

Type 1 Composition with Cr ⁶⁺	Class		Material Form						Application Method			
	1A	3	1	2	3	4	5	6	A	B	C	D
			Form I Concentrated Liquid	Form II Powder	Form III Premix Liquid	Form IV Premix Liquid Thixotropic	Form V Premix Powder Thixotropic	Form VI Premix Liquid (Applicator)				
Alodine® 1001™		X	X						X		X	
Alodine® 1132™ Touch-N-Prep® Pen	X	X						X				X
Alodine® 1200S™	X			X					X	X	X	
Alodine® 1200S™		X		X							X	
Alodine® 1201™ (Brush-On)	X				X					X		
Alodine® 1500™		X	X						X		X	
Alodine® 1600™	X	X	X								X	
Alodine® 600™	X	X		X					X	X	X	
Turco® Liquid Accelagold™	X				X					X		
Type 2 Composition with no Cr ⁶⁺	Class		Material Form						Application Method			
	1A	3	1	2	3	4	5	6	A	B	C	D
			Form I Concentrated Liquid	Form II Powder	Form III Premix Liquid	Form IV Premix Liquid Thixotropic	Form V Premix Powder Thixotropic	Form VI Premix Liquid (Applicator)				
Alodine® T 5900™	X	X	X						X	X	X	
Alodine® T 5900™ RTU	X	X			X				X	X	X	
Alodine® 871™ Touch-N-Prep® Pen	X	X						X				X

Alodine® 47S	11	Galvaprep® SG	24	Parco® Purge 2550™	18, 19
Alodine® 120™ Brush Kit	30, 31	Fixodine® M	23	Parco® Purge A-200™	18, 19
Alodine® 407™	11	Fixodine® Z-10™	23	Parco® Spray Wand 101™	6, 24, 25
Alodine® 600™	30, 31, 40	Fixodine® ZL	23	Parco® Spray Wand 200™	6, 24, 25
Alodine® 600™ RTU	30, 31	Metalprep® 79	18, 19	Parco® Spray Wand 330™	24, 25
Alodine® 713™	30, 31	Multan® PL-101™	17	Parcolene® 50NC™	33
Alodine® 871™ Touch-N-Prep® Coating	30, 31	Novaclean™ 120LF™	14, 15	Parcolene® 99 CWN™	33
Alodine® 871™ Touch-N-Prep® Pen	40	Novaclean™ 1721™	10, 11, 18, 19	Parcolene® 99X™	6, 7, 8, 9, 33
Alodine® 1000™ Liquid	30, 31, 40	P3-Neutrarcare® 5088™	16	Parcolene® 7100™	4, 6, 7, 8, 9, 33
Alodine® 1000™ RTU	30, 31	P3-Neutrarcare® 5156™	16	Parcolene® 7100™ RTU	33
Alodine® 1000™	40	P3-Neutrarcare® 5175™	16	Parcosol® 263™ Wipes	21
Alodine® 1001™	30, 31, 40	P3-Neutrarcare® 5220-1™	16	Parcosol® 264™ Wipes	21
Alodine® 1132™ Touch-N-Prep® Coating	30, 31	P3-Prevox™ 501™	17	Parcosol® 277™ WB	21
Alodine® 1132™ Touch-N-Prep® Pen	40	P3-Prevox™ 505™	17	Parcosol® 283™	21
Alodine® 1200S™	10, 11, 30, 31, 40	P3-Prevox™ 4232™	17	Parkerizing® 210™	29
Alodine® 1200S™ RTU Brush	30, 31	P3-Prevox™ 5800™	17	Polyprep® 2303™ Cleaner	22
Alodine® 1201™	30, 31, 40	P3-Prevox™ 6767™	17	Polyprep® 2635™ Cleaner	22
Alodine® 1500™	30, 31, 40	P3-Prevox™ 4141™	17	Prep-N-Cote® 2557L™	24, 25
Alodine® 1600™	30, 31, 40	P3-Prevox™ 6041CR™	17	Prep-N-Cote® 300L Plus™	24, 25
Alodine® 1600™ RTU	30, 31	P3® Grato™ 14 Marine (US) Cleaner	20	Prep-N-Cote® 500LT™	6, 7, 24, 25
Alodine® 2600™	30, 31	P3® Grato™ 50 Marine (US) Cleaner	20	Prep-N-Cote® 505™	24, 25
Alodine® 4595™	30, 31	P3® Grato™ 3000™ Cleaner	20	Prep-N-Cote® 700™	24, 25
Alodine® 5200™	11, 30, 31	P3® Hi-Lite 2495™ Wipes	20	Prep-N-Cote® GS 755™	24, 25
Alodine® 5700™	30, 31	P3® Hot Stripper 50	34	Prep-N-Cote® LS 756™	24, 25
Alodine® 5700™ Wipes	30, 31	P3® Hot Stripper 301™	34	Prepalene™ X	8, 9, 23
Alodine® T 5900™	11, 30, 31, 40	P3® Hot Stripper 3000™	34	Ridoline® 18	14, 15
Alodine® T 5900™ RTU	30, 31, 40	P3® Hot Stripper Additive 15	35	Ridoline® 56	14, 15
Bonderite® 769™	8, 9	P3® Hot Stripper Additive 16	35	Ridoline® 212™	10, 11, 14, 15
Bonderite® 769 M™	29	P3® Hot Stripper Additive 19	35	Ridoline® 298™	14, 15
Bonderite® 880™	29	P3® Lavoxyl™ Acid	20	Ridoline® 336™	14, 15
Bonderite® 952™	29	P3® Polyprep® Rinse 400™	37	Ridoline® 412™	14, 15
Bonderite® 958™	29	Parco® 2280™ Clean-up	20	Ridoline® RT 153™	2, 12, 13
Bonderite® 1020™	26	Parco® AWS 104™	37	Ridoline® RT 180™	2, 12, 13
Bonderite® 1030™	26	Parco® Cleaner 305™	12, 13	Rodine® 426™	36
Bonderite® 1070™	6, 7, 26	Parco® Cleaner 305 N™	2	Rodine® 2010™	36
Bonderite® 1080™	26	Parco® Cleaner 319™	12, 13	Rodine® 3305™	36
Bonderite® 1090™	6, 7, 26	Parco® Cleaner 319MM™	2, 12, 13	Rodine® 31A™	36
Bonderite® 1455-W™ Wipes	27	Parco® Cleaner 338™	12, 13	Rodine® 55	36
Bonderite® 3410™	8, 9, 29	Parco® Cleaner 470™	12, 13	Rodine® 85	36
Bonderite® 7400™	27	Parco® Cleaner 800™	2, 14, 15	Rodine® 102™	36
Bonderite® NT-1™	4, 5, 28	Parco® Cleaner 907™	12, 13	Rodine® 103™ NPF	36
Bonderite® ZMX	8, 9, 29	Parco® Cleaner 1520A™	12, 13	Rodine® 145L™	36
Deoxalume® MF	22	Parco® Cleaner 1533R™	2	Rodine® 213 SF™	36
Deoxalume® 151™	10, 11, 22	Parco® Cleaner 1533 A™	2, 12, 13	SC-78BK™	14, 15
Deoxidine® 172A™	18, 19	Parco® Cleaner 1533 S™	2	TecTalis® 1200™	28
Deoxidine® 182B™	3, 18, 19	Parco® Cleaner 2087X™	12, 13	TecTalis® 1200™ Makeup A	4
Deoxidine® 457™	18, 19	Parco® Cleaner 2988™	12, 13	TecTalis® 1200™ Makeup B	4
Deoxidine® 2520™	18, 19	Parco® Cleaner ZX-2™	2	TecTalis® 1200™ Replenisher R35	4
Deoxidine® 2530™	18, 19	Parco® Cleaner ZX-4™	2	TecTalis® 1800™	28
Deoxidine® 7005™	18, 19	Parco® Lubrite 2	28	TecTalis® 1800™ Makeup A	4, 28
Deoxidine® 7150™	3, 18, 19	Parco® Lubrite LT 10	28	TecTalis® 1800™ Makeup B	4
Deoxidine® NP 7200™	3, 18, 19	Parco® Maintenance Cleaner 2235™	20	TecTalis® 1800™ Replenisher R27	4
Deoxidizer HX-357™	22	Parco® Preclean 2960™	14, 15	Turco® Altrex® 24	10, 11, 14, 15
Deoxylyte® 54 NC™	33	Parco® Preclean 2978™	14, 15	Turco® Liquid Accelagold™	40
Deoxylyte® 100 NC™	32	Parco® Preclean 2990™	6, 14, 15		
Deoxylyte® 200 NC™	32	Parco® Purge 2510™	18, 19		

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