

# Bond Guard KL-5 Plus

## *Iron Phosphate Bonding Treatment*

KL-5 Plus is a 5 stage "LO-TEMPERATURE" iron phosphate conversion coating for steel, cast iron, and aluminum and zinc-galvanize. KL-5 Plus provides a higher level of acceleration for Non-Ferrous Metals (Aluminum, Zinc Galv).

KL-5 Plus provides superior bonding and corrosion resistance for powder and wet coatings. Offering coating weights up to 80 mg/ft<sup>2</sup>. Easy to control system.

KL-5 Plus is a premium product which is internally accelerated with a highly stabilized acid balance to provide maximum quality. Also used for bonding adhesives and elastomers.

Meets requirements of MIL SPEC TTC-490 TYPE II.

## Features & Benefits

- High solids liquid which provides ease of chemical feeding & monitoring.
- Balanced acid system for greater process control.
- Stabilized ph.
- Superior quality 5 stage processes.
- Extended coating weight range over standard 3 stage systems or detergent type products. Excellent salt spray, humidity and water immersion resistance with improved impact and bend resistance.
- Significantly improves corrosion resistance and bonding performance.
- Satisfies requirements of "Tide" test as defined by appliance industry.
- Resistant to hard water.
- Meets military spec TT-C-490, Type II.

## Physical Data

pH	2.8~
Product Type	Liquid
Spec. Gravity	1.13
lbs./gal.	9.42
Foam, 0 = Low, 9 = High	0
Shelf-Life Years	5 Years
Freeze Information	Not damaged by freezing



## Product Bulletin

Product Name: Bond Guard KL-5 Plus  
Product Code: 2201919  
Revision Date: May 7, 2025

### Typical Processing

1. Pre-clean: 1023 Lo Foam alkaline detergent, 2-5%, 60", 130 F.
2. Rinse
3. KL-5 Plus Iron Phosphate, 100-140 F., 45+ seconds, 2-4% , PH 4.4 -5.5
4. Rinse
5. Treated rinse, non-chrome toner sealer NCS-100, .5%, AMBIENT,.. 50 sec.  
PH 8+ "OPTIONAL" D.I. OR R.O. WATER.
6. Air blow off
7. To coating line

### Packaging

Container Type	Poly
Net Units	518
Tare Wt.	25
Gross Wt.	535
DOT_Name	UN 1805, Phosphoric acid solutions, 8, PG III
DOT Hazard	Corrosive
Tarriff ID	

### Use Parameters

Concentration Range	2% - 5%
Temperature Range	100 – 170 Deg. F.
Time Range	30 - 180 seconds
Agitation	Spray

### Waste Disposal

Adjust pH as needed. Remove fats, oils and grease.

### Holding Tank Materials of Construction

Acid resistant, stainless or poly.



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### Other Information

It is important that the OSHA DATA, "Material Safety Data Sheet" be carefully read and reviewed with the users of this product. OSHA data is required to be posted in the work area by law.

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