

Picklex® is environmentally safe, non-hazardous, water based and water soluble **Conversion coating** used for complete surface preparation/pre-treatment of steel (including **stainless steel**), **galvanized steel & aluminum** (any ferrous and non-ferrous metal) before finishing, such as powder coating, liquid painting, e-coating, galvanizing, some specific electroplating (chrome plating) etc. Replaces phosphate processes for steel and chromate conversion coating for aluminum before finishing. Performs multiple jobs in one step. Also, **replaces Nitric Acid for passivating Stainless Steel**.

Picklex® removes light surface rust (also weld & laser scale) and white rust from the metal surface while providing a composite conversion coating in one application. **Picklex® Process** uses fewer steps, less time & labor and is very cost effective compared to phosphate & chromate systems. It also eliminates the **EPA & OSHA** regulations. Conversion to the **Picklex® Process** usually does not involve any major equipment change.

Picklex® can also **replace acid pickling** through phosphating or application of rust inhibitor. **Picklex®** removes the **heat treat scale** or **mill scale** from the metal surface, conditions the metal and provides a protective coating (conversion coating), all in one dipping process.

Features/Benefits : **VALUE ADDED PRODUCT**

TESTED/VERIFIED BY US EPA

- ❖ **Environmentally safe**, non-hazardous, water based and water soluble **Conversion coating**
- ❖ Can be applied by spraying or dipping process
- ❖ Simple **maximum 4-step pre-treatment process** (de-greasing, **Picklex®**, rinse and final rinse)
- ❖ Simple **one-step** dipping process for de-scaling/de-rusting/pickling and coating (after de-greasing)
- ❖ Saves space and initial equipment costs (for new set up)
- ❖ **Both Steel & Aluminum** including **galvanized steel** can be processed in same bath
- ❖ **Removes light surface rust, laser scale, weld scale** (replaces blasting or acid etching)
- ❖ **Removes white rust** from non-ferrous metal surface
- ❖ Eliminates phosphate, chromate, chemical sealer, rust inhibitor, **blasting** (for aluminum, galvanized steel) etc.
- ❖ **Eliminates Nitric acid** for **passivating Stainless steel** surface
- ❖ **Removes heat treat scale** (mill scale, heat treated steel), heavy rust etc. and provides better bonding
- ❖ Apply by **dipping or spraying process (manual or automated)**
- ❖ **Coverage** – Very high coverage
- ❖ Used **As Is**, therefore no mixing, no regular monitoring, no regular concentration adjustment needed
- ❖ Easy modification of conventional process with no major equipment change
- ❖ There is **no waste disposal or waste treatment** from **Picklex®** or final rinse tank
- ❖ **No heavy metal** goes in the rinse tank (**Picklex® does not etch**)
- ❖ **No sludge** is generated and no cleaning of the dip tank or spray booth is necessary. Also **no down time**
- ❖ Easy clean up – Since **Picklex®** is water soluble
- ❖ For small operations, the **final rinse water can be continuously disposed to the drain**
- ❖ **Reduces production cycle time**, labor and overall pre-treatment cost
- ❖ **Eliminates EPA & OSHA** involvement

Typical Applications:

As a Replacement of Acid Pickling: **Picklex®** replaces the complete process of acid pickling through the application of rust inhibitor or phosphate coating in one step. In **one-step dipping process** (any oil on the surface has to be removed separately), **Picklex®** removes rust, mill scale, heat-treat scale, conditions/pickles and provides a conductive **conversion coating** (protective coating). It prepares a **rust/contamination free** surface. Then air dry. **Picklex®** provides a very long term indoor rust protection (in terms of years depending on the environmental condition of that area). Also, the coating allows welding (with no weld spatter) and finishing.

As a Replacement of chromate conversion coating: Picklex® completely replaces the chromate conversion coating process for preparing **aluminum and galvanized steel** for finishing. In **one-step** dipping or spraying process (any oil on the surface has to be removed separately), **Picklex® removes white rust** from the surface and provides a conversion coating (prepares a rust/contamination free surface). Then the part is rinsed with regular water (no chemical sealer) and oven dried before finishing. **Picklex® coating provides years of indoor rust protection.** Also, **Picklex®** provides excellent bonding and corrosion resistance with the top coating.

As a Replacement of phosphate coating: Picklex® completely replaces the phosphate pre-treatment process for preparing new cold rolled steel (or sandblasted steel) for finishing. In one-step dipping or spraying process (any oil on the surface has to be removed separately), **Picklex®** removes surface rust, weld scale, laser scale and provides a conversion coating (prepares a rust/contamination free surface). Then the part is rinsed with regular water (no chemical sealer) and oven dried before finishing. **Picklex®** provides excellent bonding and corrosion resistance with the top coating.

Note: Picklex® works on cold rolled **steel, stainless steel, galvanized steel, aluminum** etc. (any ferrous and non-ferrous metal). Therefore, both cold rolled steel, sandblasted steel and aluminum can be processed at the same time in same **Picklex®** bath. Since **Picklex® does not etch** while removing rust & scale, therefore **no heavy metal** goes into subsequent rinse water. Also, rust or scale removed by **Picklex® does not contaminate Picklex®** bath. **Picklex®** after complete drying provides a **very long term rust protection** when shipped under covered area or stored indoors (in terms of years depending on the environmental condition of that location).

Web Site : www.picklex.com

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Technical Information :

Properties:

Product Name _____	Picklex®
Color _____	Green
Phosphoric acid _____	Around 5% by volume
Flash point _____	> 200°F
Freezing point _____	< 30°F
P _H _____	< 2.0 (still non-hazardous in nature)
VOC _____	< 0.01 lbs/gal (not traceable)
Solubility in water _____	Highly soluble
Storage temperature _____	Ambient
Shelf life _____	> 10 years
Shipping _____	No special DOT regulation (Class 55)

