

PICKLEX® 20

INTERNATIONAL CHEMICAL PRODUCTS, INC.

1209 MEADOW PARK DRIVE

HUNTSVILLE, AL – 35803

Ph: 256-650-0088

e-mail: rsen@icpi.net



Green Technology

ONE STEP METAL PREP

TECHNICAL DATA

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PICKLEX® 20 is a combination of a high performance **100% rust remover**, **100% rust converter**, **rust inhibitor** (indoor rust protection for years), **pre-treatment/conversion coating**, metal surface cleaning and conditioning compound (for both **ferrous & non-ferrous** metal surface, such as **carbon steel**, **stainless steel**, **aluminum**, **galvanized steel** etc.). **PICKLEX® 20** completely prepares the metal surface for priming, liquid painting, electrostatic painting, powder coating etc., **without sanding or blasting the new metal surface**. Applied by spraying, brushing, wiping or dipping process.

PICKLEX® 20 does not cover up rust. It **removes flash rust/white rust completely** while providing a pre-treatment (conversion coating). In case of mill scale, heavy rust and micro-rust, **Picklex® 20** chemically changes **100% rust/scale** into a conversion coating. There is no washing involved and the coating stops the oxidation process for years when stored indoors. **PICKLEX® 20 is consumed completely**.

For new metal surfaces, **PICKLEX® 20**, in one step, will clean mill oil, dust and light surface rust while conditioning and providing a conductive **conversion coating**. **PICKLEX® 20** eliminates quite a few traditional steps and along with **very high coverage**, it saves labor, time and cost considerably. **PICKLEX® 20 is MADE IN USA**.

Features/Benefits: **VALUE ADDED PRODUCT** **TESTED/VERIFIED BY US EPA**

- ◆ **Environmentally safe** – water based, non-toxic, non-hazardous, non-flammable and water-soluble
- ◆ **Ready to use**, no mixing or stirring needed
- ◆ Works on **steel (including stainless steel)**, **aluminum**, **galvanized steel** surfaces (ferrous & non-ferrous metal)
- ◆ **Eliminates sanding or blasting of new metal surface**
- ◆ **Eliminates the use of toxic Wash Primer with Chromate**
- ◆ **Eliminates Nitric acid passivation** for preparing **Stainless steel** surface for clear coating or laminating
- ◆ Used at **room temperature**
- ◆ **No washing** involved
- ◆ **Removes mill oil, light surface rust** from metal surface
- ◆ **100% Rust/Scale converter**: Completely **Converts** pitted rust, **mill scale**, weld scale and laser scale to a **conversion coating** for better bonding
- ◆ The coating can withstand very high temperature (**around 2000 °F**)
- ◆ **Rust Protection** – provides very long term rust protection (**in terms of years**), when stored indoors
- ◆ Easy cleanup – **Picklex® 20** is water-soluble
- ◆ Eliminates - flash rust problems
- ◆ **Coverage** - only one very thin coat is required, covers around **1600 sq.ft. per gallon** on bare metal surface
- ◆ Eliminates quite a few steps, **Saves a lot of cost, labor and time**
- ◆ Prepares a **zero rust/contamination surface**
- ◆ Flexible – coating will not crack when the metal is bent or expands or contracts
- ◆ Prepares metal surface for **welding, priming, liquid painting, electrostatic painting, powder coating**
- ◆ **Welding** - **Increases weld strength** considerably and forms **no weld spatter**
- ◆ **No waste disposal**

Typical Applications:

Welding: **Picklex® 20** prepares the metal surface by cleaning mill oil (heavy oil or grease has to be removed separately), dust, surface rust and provide conversion coating at the same time. Welding can be performed on the **Picklex® 20** coating after complete drying (air drying or heat drying). **Picklex® 20 increases the weld strength considerably** and does not form any weld spatter (**anti-spatter**). For hot rolled steel with mill scale, **Picklex® 20** completely converts the mill scale to a conversion coating over which welding can be performed (the weld strength will still be higher than the welding performed after removing the mill scale completely, as per AWS specification). Therefore **removal of mill scale is not needed** before welding. After welding is completed, spraying **Picklex® 20** on the hot weld will reduce heat scaling, provide

a protective coating on the weld for rust protection and prepare the weld surface for better bonding. **Picklex® 20** provides long term rust protection underneath the weld on metal surface as well as over the weld. **Picklex® 20** does not cause hydrogen embrittlement and therefore the chances of weld failure are negligible.

The above one-step process eliminates the following steps:

- a) Remove mill oil, surface rust
- b) Remove mill scale & clean
- c) Clean weld spatters

Liquid Painting, Electrostatic painting, Powder Coating: By spraying/brushing **Picklex® 20** on **steel (including stainless steel), aluminum or galvanized steel**, it will remove mill oil (heavy oil or grease has to be removed separately), clean the surface by removing dust, surface rust including white rust for aluminum and galvanized steel, convert weld/laser scale and provide a conversion coating for better bonding. **Wipe off or blow off the excess chemical completely** from the surface down to the metal (wipe dry) and then air dry (**allow enough time for complete drying**). After complete drying, the coating will provide a very long term rust protection if stored indoors. Priming (**do not use self etching primer**), liquid painting, electrostatic painting, powder coating can be performed on the coated surface right after complete drying. Provides excellent bonding and corrosion resistance. **Note:** Sometimes a **brownish yellow tint** may be noticed on steel which is a part of the coating.

The above one-step process eliminates the following steps:

- a) Solvent cleaning
- b) Blasting, sanding or acid etching to remove surface rust
- c) Wash primer with Chromate

One-Step De-Rust / De-scale hot rolled steel, small tools and parts: Dipping rusted tools / metal parts or hot rolled steel with **mill scale** or **heat-treat scale** in **Picklex® 20** at room temperature, will de-rust/de-scale and coat the metal with a conversion/protective coating at the same time for very long-term rust protection (**without etching the metal surface**). Strain or filter the chemical for **re-use**. Priming (**do not use self etching primer**), liquid painting, powder coating can be performed on the coated surface right after complete drying. **Compatible materials** for dipping are **high density plastic (HDPE)** and **stainless steel**. This dipping process does not have waste disposal or waste treatment.

Long term indoor storage/shipping: Spray/brush the new metal surface with **Picklex® 20** for a very long-term indoor storage (**in terms of several years depending on location**) with complete rust protection (**wipe off the excess chemical completely** down to the metal surface). The coating also protects from rusting while in transit. For **outdoor** rust protection during storage, cover with plastic to prevent contact with water. Provides long term rust protection after **sand/beam blasting** (where flash rust forms immediately) and prepares the metal surface for welding and finishing. **Picklex® 20** coating **does not have to be removed** before welding & finishing).

NOTE: Longer treatment time in **Picklex® 20** (by dipping process) will provide longer term corrosion protection in steel.

Web Site : www.picklex20.com **Technical Support:** **Ph:** 256-650-0088 **e-mail:** rsen@icpi.net

TECHNICAL INFORMATION

Property	
Product name.....	Picklex® 20
Color.....	Green
Phosphoric Acid	<10% by volume
Flash Point	>200°F
Boiling point @ 760 mm Hg	275°F
Freezing point	Below 30°F
PH.....	< 2 (still non-hazardous in nature)
V.O.C. (Volatile Organic Compounds)	< 0.01 lbs/gal
Storage temperature	Ambient
Loading/unloading temp.	Ambient
Coverage	Around 1600 sq.ft. per gallon on bare metal surface
Shelf Life	> 10 years (keep indoors in cool & dry area)
Shipping	No special DOT regulation by ground transportation IATA & RoHs compliant Can be shipped by UPS or Fed Ex, Class 55)