

E-Pik™ 218

Neutral Deruster

E-Pik 218 is a uniquely formulated liquid concentrate used for rust and scale removal from steel and cast iron. The product is used diluted with water at a neutral pH range of 6.0 to 7.5 and operates at room temperature or at elevated temperatures.

E-Pik 218 eliminates the health and handling hazards associated with the use of strong and corrosive mineral acids or high caustic/gluconated products that are normally used by the metal finishing industry for rust and scale removal. Unlike mineral acids, there is no danger of hydrogen embrittlement with the use of **E-Pik 218** since during the derusting process no hydrogen gas is evolved. The derusting is brought about by the complexation of the iron oxides. In this regard, **E-Pik 218** is considered ideal for use on high precision engineering tools, dies, etc.

E-Pik 218 does not attack copper, brass, zinc diecastings and aluminum. Hence, it offers the added advantage of rust removal from steel even in the presence of other mixed non-ferrous metals.

EQUIPMENT

Tank: Mild steel lined with rubber, koroseal or polypropylene or a drop in liner. In small installations all plastic tanks may be used. Large polypropylene tanks must be reinforced.

Ventilation: Not required, but it is a good practice with all heated solutions.

Heating: Stainless steel elements or coils.

OPERATION

Concentration: 10 to 25% by volume of **E-Pik 218** in water

pH 6.0 to 7.5

Temperature: 70 to 140°F

Time: 3 to 5 minutes of immersion for light rust; 15 to 30 minutes for heavy rust and scale removal.

Note: Generally for light rust removal, use **E-Pik 218** at the lower recommended concentration and temperature. For heavy rust and/or heat treat scale removal, use at the higher recommended concentration and temperature.

SOLUTION CONTROL AND MAINTENANCE

E-Pik 218 solution pH will normally tend to rise during use. When the solution pH rises above 7.5, adjust with 10% Sulfuric Acid to a pH between 6 and 7. **E-Pik 218** concentration, when desired, can be checked by a laboratory titration method available from **EPI**. During the rust and scale removal process, the **E-Pik 218** bath starts to build up iron causing the rate of rust removal to slow down and eventually the bath becomes exhausted. When that happens it is advisable to dump and recharge.

WASTE TREATMENT

Spent solutions of **E-Pik 218** will contain dissolved iron which can be removed through precipitation at pH 9.5 to 10.5. Contact **EPI** technical service for details.

CAUTION

E-Pik 218 concentrate is a mild skin irritant. **Do not** work with **E-Pik 218** without first reading and understanding the **MATERIAL SAFETY DATA SHEET** furnished by **EPI**.

PACKAGING

E-Pik 218 is a dark amber liquid packaged in five (5) and 55 gallon non-returnable containers.

IMPORTANT NOTICE! For Industrial Use Only

The following is made in lieu of all warranties, expressed or implied, including the implied warranties of merchantability and fitness for purpose: seller's and manufacturer's only obligation shall be to replace such quantity of the product as proved to be defective. Before using, user shall determine the suitability of the product for its intended use, and user assumes all risk and liability whatsoever in connection therewith. **Neither seller nor manufacturer shall be liable either in tort or in contract for any loss or damage, direct, incidental or consequential, arising out of the use or the inability to use the product.**