## Clean.

#### **E-Kleen SR** helps you finish it right the first time!

Achieve sparkling clean metal with a brighter finish & improved adhesion. *EPi's E-Kleen SR* will make it happen. Use *E-Kleen SR* to save time and labor. Multi-functional, our *E-Kleen SR* products reduce costs, working in soak cleaners, electrocleaners and acid pickles.



# Simply Simply Simply

#### What you should know about us -

We were founded in Milwaukee, Wisconsin in 1954 and our name has been synonymous with plating and metal finishing excellence.

Our impressive track record includes:

- Development of *E-Brite 23-11R,* the first single additive brightener for cyanide copper plating
- First with a bright, leveling single additive nickel plating process, *E-Brite* 717
- First with a single additive brass plating process, *E-Brite B-150*
- First with a non-cyanide alkaline copper plating process, *E-Brite 30/30*
- Developed *Insta-Blak 333*, the state of the art technology for room temperature blackening of metals
- Developed a non-cyanide alkaline silver plating process, *E-Brite 50/50*

*EPi* provides a wide range of top quality products, all of which can be used in both rack and barrel operations. *EPi* offers you superb technical advice, outstanding laboratory service from knowledgeable technicians utilizing up-to-the-minute lab facilities and fast response–all at competitive prices.

ISO 9001:2008 Certified



New Berlin, Wisconsin | Phone: 262-786-9330 us-sales@epi.com | www.epi.com/ekleen-sr



#### Smut Removing Soak Cleaners

#### **E-Kleen SR revolutionary** cleaning processes!

#### E-Kleen SR is available in 4 formulations:

- 1- *E-Kleen SR* that can be added directly to your soak cleaner, electrocleaner or acid pickle.
- 2- E-Kleen SR 102, 102-E, 148-E, 163, and 196 soak cleaners with the SR formulated into the product.
- 3- *E-Kleen SR 1020/1021/1022* electrocleaner additives that you mix with your own sodium / potassium hydroxide, saving you money.
- 4- E-Kleen SR-A acid pickle additive.

#### Using *E-Kleen SR* results in the following advantages:

- Eliminate cleaning rejects, finishing it right the first time!
- Increase plating process adhesion, finishing it right the first time!
- Achieve bright plated finishes, finishing it right the first time!
- · Save money in waste treatment costs, no gluconates!

#### E-Kleen SR tackles the difficult to clean:

- Carbon smut on steel.
- Metal working fluids (stamping and cutting fluids and drawing compounds).
- Baked on oily greasy and heavily stained metal surfaces.
- Water soluble oils, waxes, petroleum, and animal fat buffing compounds.
- · Smutty / scaly steel and cast iron substrates.





Without E-Kleen SR

With E-Kleen SR

#### E-Kleen SR 102/102-E

Liquid Heavy Duty, High Caustic, Non-silicated Soak Cleaner for Steel.

*E-Kleen SR 102* floats the oils offering extended bath cleaning life. Do not use without an oil skimmer. *Temperature 130-195°F (55-90°C)* 

*E-Kleen* SR 102-*E* emulsifies the oils and offers long bath life. *Temperature* 130-195°*F* (55-90°*C*)

#### E-Kleen SR 148-E

Liquid Emulsifiable Low Caustic, Silicated Soak Cleaner for All Metals.

*E-Kleen* SR 148-*E* emulsifies oils and does not contain any chelators. *Temperature* 100-170°F (38-75°C)

#### E-Kleen SR 163

Neutral Phosphated Multi-Metal Cleaner.

*E-Kleen* SR 163 emulsifies oils and cleans buffing compounds. *Temperature* 120-200°F (49-93°C)

Bath Make-Up:	% by Volume
E-Kleen SR 163:	5 - 15%

#### E-Kleen SR 196

Liquid Non-Emulsifying Low Caustic, Silicated Soak Cleaner for All Metals.

*E-Kleen SR 196* floats the oils offering extended bath cleaning life. Do not use without oil skimmer. *Temperature 140-220°F (60-104°C)* 

#### E-Kleen SR 1040/1041

Liquid Additive Concentrate for Smut Removing Soak & Electrocleaner for Steel.

**E-Kleen SR 1040/1041–** Liquid Additive Concentrates for finishers to mix their own caustic (sodium/potas-sium base) resulting in a combination high caustic soak and electrocleaner on steel. Contains no phosphates, silicates or chelators.

- E-Kleen SR 1040 Emulsifies oil - E-Kleen SR 1041 Floats oil

Before **E-Kleen SR** Soak Cleaners

> After E-Kleen SR Soak Cleaners

#### Smut Removing Acid Pickles

#### E-Kleen SR-A

#### Smut Remover for Steel Substrates In Acid Pickles.

*E-Kleen SR-A* is soluble in all mineral acids. It is also compatible with acid inhibitors such as *E-Pik Inhibitor* and *E-Hib* 979. It removes the smut that can form in mineral acids and offers extra acid based cleaning power resulting in stain free and brighter parts.

Bath is controlled by quality of the work (no smut on steel) and the acid bath life. Large quantities of oil can shorten bath life. If you are searching to emulsify oil in an acid bath, try our *E-Kleen SR-AE*.

Bath Make-Up:	% by Volume	
E-Kleen SR-A:	0.25 - 1.25%	
E-Kleen SR-AE:	0.25 - 1.25%	



Before **E-Kleen SR** Acid Pickle After E-Kleen SR Acid Pickle

#### **Electrocleaners**

#### E-Kleen SR 1020/1021/1022

High Performance, Non-Gluconated, Heavy-Duty Desmutter/Electrocleaner Additive For Steel.

**E-Kleen SR 1020/1021/1022** additives are mixed with your own caustic (sodium/potassium) saving you money and improving your cleaning performance. It removes difficult to clean carbonaceous smut on steel substrates without using gluconates, making it easier to waste treat your spent electrocleaner. You can now use sodium salts instead of calcium salts for waste treatment, generating less sludge.

You can achieve the desmutting qualities you require without waste treatment worries when using gluconated electrocleaners.

*EPi* offers nine solutions for electrocleaning: 3 sodium based, 3 potassium based and 3 that are mixed sodium/potassium based.

Product:	Silicate	Chelator
E-Kleen SR 1020:	NO	NO
E-Kleen SR 1021:	YES	NO
E-Kleen SR 1022:	YES	YES



Before E-Kleen SR Electrocleaners After **E-Kleen SR** Electrocleaners

**E-Kleen SR** products work well with precision chemical metering and monitoring equipment.

Take the E-Kleen SR challenge! Request a sample at: www.epi.com/ekleen-sr

Have a specific cleaning challenge? Call one of our chemists at **262-786-9330** to develop a custom solution.

### Simply Superior.

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