



AquaKlean EF 145 - Highly alkaline etchant & cleaner

Application Notes:

AquaKlean EF 145 a highly alkaline liquid cleaner & etchant with low to no foam for use in agitated tank applications. The non-phosphated formula will not sludge or scale-up. AquaKlean EF 145 may be used as an aluminum etchant and cleaner. Provides cleaning on both ferrous and non-ferrous metals while enabling an aggressive etch on aluminum alloys. Other acceptable materials include: Magnesium, plastics, ceramics and glass.

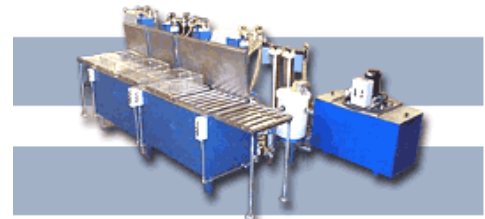
AquaKlean EF 145 was formulated to both etching aluminum alloys clean while providing reduced residues, scaling and sludging of tanks. EF 145 cleans: inks, polishing and buffing compounds, grease, oils, fingerprints, drawing compounds and metalworking fluids.

Application Procedure:

AquaKlean EF 145 is effective at ambient temperatures. However, it is normally used at 10 to 20% by volume of water at 120 to 190 °F for 5 seconds to 5 minutes. The parameters can vary due to the type and extent of soils to be removed and the etch rate desired on aluminum alloys. Temperatures and concentration may be increased to shorter cycle times. For best results tanks should have adequate agitation to ensure uniform cleaning and etching. Agitation ensures that fresh chemical comes into contact with the surface and that oils are removed allowing for uniform etching. Safe on magnesium. Test for discoloration on cuprous alloys.

Typical usage parameters:

AquaKlean EF 145	
Description	Highly alkaline cleaner/etchant
Concentration Range – Spray	5-10%
Concentration Range – Immersion and ultrasonic tanks	10%-20%
Operating temps	70F and up but, Best >120 to 165 °F



Physical Properties:

AquaKlean EF 145	
pH, concentrate	13.6
pH, @ 5% b.v.	13.1
Bulk Density, #/gal	10.4
Flash point	None
Solubility in water	Complete
Biodegradable	Yes
Chelates	Yes (2% EDTA)
Corrosive	YES
Silicates	NO
VOC (concentrate)	Zero g/L
Ozone friendly	Yes



Availability: Available in 5, 55 and 300 gallon containers. Bulk tank shipments also available.

Shipment: Freight classification is "Corrosive Liquid, NOS, 8, PGIII (Sodium hydroxide mixture) UN1760."

Storage: Keep out of direct sunlight. Keep from freezing. Store between 50-120 °F.

Disposal: Dispose of in accordance with local, state, & federal regulations. For assistance with disposal contact NuGeneration Technologies at 888-99-Nugen or e-mail: info@nugentec.com.

