ORISON

EVAPO-RUST

EVAPO-RUST REMOVES RUST 100%

EVAPO-RUST® is an amazing safe rust REMOVER which is utilized by the U.S. Army, U.S. Navy, U.S. Air Force, FBI, NATO, Government Contractors, Engine Builders, Auto Enthusiasts, Gunsmiths, Forensic Labs, OEM's, Farmers, Antique Restorers and more.

TYPICAL PROPERTIES:

Hq Color Pale to dark yellow

Specific Gravity 1.04 Spent S.G. 1.08

Operating Temp. 60° to 200° F.

Flash Point None Water Solubility Complete

VOC's none known

HAP's none **Evaporation Rate** Same as water

Boiling Point >200° F.



Picture above US Navy Engine Rebuild Facility Southwest Regional Maintenance Center - San Diego Before & After Immersion in Evapo-Rust.

EVAPO-RUST IS SAFE AND EASY TO USE

Not a primary eye irritant	SCAQMD Certified	No Acids				
Not a skin irritant	No HAP's	No Caustics				
Non-Toxic dermally or orally	No Solvents	Non-Corrosive				
Non-Hazardous	Biodegradable	Non-Flammable				

EVAPO-RUST® is non-hazardous rust remover. EVAPO-RUST® is designed as a soak (dip) and will remove even deep rust on all types of mild steel and iron. EVAPO-RUST® is not for rust stains; rust stains and rust are two different things. Fully immerse the rusted item in EVAPO-RUST®; no scrubbing necessary. Soak times will vary from 30 minutes to 24 hours depending on severity of rust, type of steel, and bath temperature (bath temp must be above 60° F.). Because EVAPO-RUST® is water based, the effectiveness will slow down as temperature decreases and increase as temperature increases. EVAPO-RUST® works through selective chelation at a pH of 6.1 to 7.0 (neutral) and does not require any special equipment or personal protective wear. It is non-corrosive to steel and does not harm brass, copper, aluminum, gold, lead, titanium, steel, cast iron, chrome solder points, vinyl, plastic, rubber, silicone, glass, cork, or wood (not for use with magnesium) so there is not need to dismantle. EVAPO-RUST® has an indefinite shelf life* and can be used over and over until it absolutely stops working. On average, one gallon de-rusts up to 300 pounds of light to moderately rusted steel.

WEAPONS/COATINGS

EVAPO-RUST® is perfect for removing weapon finishes such as Bluing, Parkerizing, Zinc Phosphate, and Browning. Other coatings such as anodizing, powder coating, chrome, nickel, paint, and most other coatings

will not be removed as long as they are still adhered to the surface and do not contain oxides. EVAPO-RUST® is highly recommended by the NRA gunsmithing school and is utilized by FBI, CIA, NATO and other law enforcement and forensics agencies.

THE ONLY THING YOU HAVE TO LOSE IS RUST

AWARD - Top 100 Inventions of the Year

AWARD - Outstanding Technology in Industrial Cleaning

NOMINATED - The Presidential Green Chemistry Challenge Award

PACKAGING	NSN		
4 x 1 Gallon	6850-01-498-3625		
5 Gallon	6850-01-498-3610		
55 Gallon	6850-01-498-3606		







*Shelf life is for un-opened product. Once opened, The life of the bath will vary due to biodegradability (bacteria introduced into the solution)

EVAPO-RUST®

EVAPO-RUST HEALTH AND ENVIRONMENTAL ANALYTICAL RESULTS

RESULT	TEST METHOD	PERFORMING LAB		
Non-toxic (oral) at 5g/kg in rats.	16CFR1500.3 Federal Hazardous Substances Act, Acute Oral Toxicity Test in Rats	Celsis Laboratory Group 6200 S Lindbergh Boulevard St Louis Mo. 63123		
Not an eye irritant. 0.0 total mean score	P202, Study # 12837, Primary Eye Irritation Study in Rabbits	Product Safety Laboratories 2394 Rt. 130 Dayton NJ 08810		
Not a skin irritant Primary Irritation Index is 0.9	P201, Study # 12838, Primary Skin Irritation Study in Rabbits	Product Safety Laboratories 2394 Rt. 130 Dayton NJ 08810		
Not dermally toxic. LD50 is greater than 2000 mg/kg	P204, study # 12836, Acute Dermal Toxicity Study in Rate – Limit Test	Product Safety Laboratories 2394 Rt. 130 Dayton NJ 08810		
Non-Corrosive	NACE TH-0169	Laboratory Division Norfolk Naval Shipyard Portsmouth, VA 23709-5000		
NEAT FLUID TCLP=NonDetect	TCLP, Mercury (EPA 7470)& RCRA Metals (EPA 6010)	Anachem Inc, 8 Prestige Circle. Suite 104 Allen TX 75002		
SPENT FLUID TCLP = Non-Hazardous Flash point >150° F	TCLP Mercury (EPA 7470)& RCRA Metals (EPA 6010), Flash point	Trace Analysis Inc, 6701 Aberdeen Ave, Ste. 9 Lubbock, TX 79424		
Readily Biodegradable (>60% CO2 in 28 days)	Modified Sturm Test/Mineralization	ENVIREM S.R.L. Via Meucci 11 40138 Bologna, Italy		

METHODS OF CORROSION REMOVAL COMPARISON CHART

	Evapo-Rust	Acid	Caustic	Chemical Converters	Electrolysis	Blast - Grind
Toxic	NO	YES	YES	YES	YES	NO
Inhalation Hazard	NO	YES	YES	YES	YES	YES
Eye Irritant	NO	YES	YES	YES	YES	YES
Skin Irritant	NO	YES	YES	YES	YES	YES
PPE Required	NO	YES	YES	YES	YES	YES
Corrosive	NO	YES	YES	YES	YES	NO
Damages surfaces	NO	YES	YES	YES	YES	YES
Flammable/Explosive Process	NO	YES	NO	YES	YES	NO
Hazardous	NO	YES	YES	YES	YES	NO
VOC's	NO			YES		
Environmental Controls Required	NO	YES	YES	YES	YES	YES
Skilled/Trained Labor	NO	YES	YES	YES	YES	YES
Spill/Release Hazard	NO	YES	YES	YES	YES	NO
EPA Reporting	NO	YES	YES	YES	NO	NO
DOT Restrictions	NO	YES	YES	YES	NO	NO
Disposal Trea®ent/ Hazardous Waste	NO	YES	YES	YES	YES	YES
Rust Inhibitor	YES	NO	NO	YES	NO	NO
Removes ALL Rust	YES	YES	YES	NO	NO	NO
Speed on light rust	5-30 min.	5-10 min.	45-60 min.	3-5 min.	3-5 min.	5-10 min.
Equipment Cost	<\$150	>\$5000	>\$5000	<\$150	>\$60,000	>\$2000
Avg. \$/FT2	\$0.05	\$0.12	\$0.12	\$0.32	\$0.02	\$0.01
Application	Dip	Dip	Dip	Spray/Brush	Dip	Manual