

T.C. 772

Acidic Cleaning Compound

PRIMARY APPLICATION

T.C. 772 is a liquid acidic compound designed for removing light grease, oils, shop dirt, flux, rust, oxides and heat scale. It is also used for preparing metals for paint and for cleaning and conditioning aluminum prior to surface conversion processing. Another application, recommended by stainless steel manufacturers, is the use of T.C. 772 for cleaning stainless steel, removing direct and embedded soils and permitting uniform repassivation.

T.C. 772 meets the following United States Government Specifications: TT-C-490, Method VI; MIL-C-490A, Grade II, Type 5; MIL-M-10578B, Type I and MIL-C-46487 (Type II Finish).

CHEMICAL CHARACTERISTICS

Chemical composition	Mineral acid, solvents and surfactants
Physical form	Light amber liquid
Bulk density	11.4 lbs/gal
Specific density	1.370
Odor	Faintly aromatic
Viscosity	18 cps at 77°F (Gardner Bubble Vis.)
Flash point (undiluted)	240°F (Cleveland Open Cup)
Effect of prolonged boiling	Loss of solvent
Hygroscopic tendency	Slight
Foaming tendency	Moderate when circulated Severe when sprayed
Solubility	Infinite
Recommended diluent	Water
Rinseability	Good with hot water, fair with cold water
Biodegradable	Yes
Phosphate-free	No
Normal working concentration	2 to 50% by volume
Normal operating temperature range	140° to 160°F
pH at working concentrations	under 2.0 at 70°F
Effect on metals	Attacks steel, aluminum, zinc, brass, tin and magnesium

APPLICATION PROCEDURE

By tank – Use at 5% to 25% by volume at 140° to 160°F followed by rinsing and drying. For wipe-on methods – Use at 10% to 50% by volume at room temperature. Apply with rags or brushes. Allow to soak for 2 to 10 minutes. Rinse and wipe dry.

NOTES ON USE

Normal precautions for handling acid and solvent-type materials should be observed in using T.C. 772. Tanks for T.C. 772 may be made of ceramic, wood, acid-proof brick, Karbate or stainless steels 304 ELC, 316 ELC or 347. Do not use lead or monel equipment, linings of rubber or the “brush-on” protective types. Heating coils should be of impervious carbon or graphite, such as Karbate Nos. 12 or 22 and Norcordal, or stainless steels 304 ELC, 316 ELC or 347. T.C. 772 will attack ordinary steel tanks. In food plants, the use of T.C. 772 is limited to maintenance work and operations other than in the food processing areas. Dilute solutions of T.C. 772 may tend to become turbid when heated but will regain clarity upon cooling. This turbidity does not in any way alter the working qualities of the product.

DISPOSAL

If required by local regulations, neutralize to a pH of 8 – 9 with soda ash or available spent alkaline solutions. Allow settling and siphoning off liquid, or pour slowly into sewer while diluting with water. Discard sludge.

PACKAGING

T.C. 772 is packaged in non-returnable containers as follows:

Large fiber poly drums	455 lbs. net
Small fiber poly drums	225 lbs. net
Case of four 1-gallon poly bottles	46 lbs. net

SHIPMENT

May be shipped by any common carrier. Freight classification is “Cleaning Compound, NOIBN, Liquid”.

STORAGE

While freezing will not affect T.C. 772, for convenience of use it is advisable to store indoors or in moderate temperatures.

Effect of freezing	None
Effect of aging	Slight darkening
Effect of long-term high temperature storage	Slight darkening