

# TETRA-CHEM INDUSTRIES LTD.



SPECIALTY CHEMISTRY • INNOVATIVE ENGINEERING  
APPLICATION TECHNOLOGY • WASTE MANAGEMENT SYSTEMS

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Check out our Web Site !  
[www.tetra-chem.com](http://www.tetra-chem.com)

## PRODUCT APPLICATION PRESENTATION

**T C I 1 1 3 3 H. D.™**

**HOT CAUSTIC RADIATOR BOIL-OUT IMMERSION CLEANER**

### PRODUCT IDENTIFIER:

### PROCESS IDENTIFIER:

### PRODUCT PRESENTATION:

**TCI 1133 H.D.** is a dry, free flowing, granular, dust free, highly alkaline formulation of biodegradable detergents, special rust and lime scale removers, chelating agents, buffers and corrosion inhibitors.

**TCI 1133 H.D.** is charged to a volume of hot water at 85°C at a rate of 40-70 g/l.

(CONVERSION: 180°F at a rate of 6-11 oz./gal).

### WARNING:

DO NOT USE STRONG ALKALINE SOLUTIONS FOR CLEANING ALUMINUM, ITS ALLOYS OR OTHER WHITE METALS. CONSULT SERVICE REPRESENTATIVE FOR SAFE AND EFFICIENT APPLICATION OF **TCI 1133 H.D.**

### PROCESS SPECIFICITY:

Immersion cleaning of soiled ferrous and copper metals and their alloys pertaining to automotive and industrial radiator rebuilding. Soils effectively removed through alkaline immersion cleaning include; solder bloom (scale) dirt, oil, grease, carbon, metallic particles, paints and enamels, rust, phosphate coatings, heat treat scale and smut. The metals are cleaned by emulsification, dispersion, saponification, or a combination of these mechanisms. The cleaning solution comes in contact with the entire surface of the part. After the alkaline cleaner had affected the soil on the part, the soil is removed from the metal surface by convection currents in the solution which are created by heating units or through some mechanical means of solution movement.

### SOLUTION DISPOSAL:

The clean chemical solution is biodegradable, but according to the Ontario Ministry of the Environment and Energy "Regulation 347", and local municipal by-laws the cleaning process may have generated a hazardous or liquid industrial waste in which case it must be:

1. manifested and removed by a licensed carrier and received by a licensed receiver accompanied by a Generator Registration Number or
2. removed by a licensed carrier and received by a licensed receiver under a Service Contract providing a Garage License Number.

Contact: TETRA-CHEM INDUSTRIES LTD. for complete and complementary analytical tests in compliance with the regulations prior to sewer discharge.



### SOLUTION MAINTENANCE:

**TCI 1133 H.D.** alkaline cleaner is weakened by reactions with acid soils and hard water, by sludge resulting from common ion absorption on solids or emulsified oils, and by dilution resulting from water additions made to replenish dragout losses. Periodic tests should be made to monitor the solution strength with **TEST KIT 1133** provided.

**PACKAGING:** 100 kg, 200 kg

PLEASE CALL OUR **TECHNICAL SUPPORT LINE @ 1-888-658-5515** FOR SOLUTIONS TO YOUR INDUSTRY.  
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