



Standard Operation Procedure

ISO TANK TDI CLEANING PROCEDURE

HAZARD SUMMARY:

TDI is a poison and an inhalation hazard. Read and understand the [SDS](#). Read other information from the [EPA](#) and the [CDC](#). Treat with respect. When tank is charged with nitrogen there is a double health threat. Wear self-contained breathing apparatus while discharging nitrogen, collecting heel, or tooling up for a wash. When the following procedures are adhered to, tank washers should have no problems cleaning this product.

1. **PRESSURE CHECK:** Determine if tank is pressurized with nitrogen. If so, discharge via air-charge line and a long hose, away from the work area. This may take up to 30 minutes. Once tank is at zero pressure, open dome lid and discharge valve.
2. **INSPECT TANK:** Open dome lid and visually inspect tank from manway. If residues are fresh, skip to the next step. If tank appears set up, presolve with [LIQUI-FIRE RX](#) through using a diaphragm pump/spinner combination.
3. **COLLECT HEEL:** Allow as much heel as possible to drain from tank. See note below.
4. **WASH:** Wash with [MAGNUM](#)/Caustic solution for 30 minutes; longer if circumstances permit, and preferable if tank was somewhat set-up.
5. **COLD WATER RINSE:** Enter and inspect tank after cool-down. Remove all gaskets and dip tube, if present. Pressure wash or pad out areas missed by spinner system.
6. **REMOVE VALVES:** Remove rear discharge valve/internal valve assembly for additional cleaning and/or testing. If not completely clean, dip components in [LIQUI-FIRE RX](#) for 30 minutes, then pressure wash. Reinstall components.
7. **STEAM & DRY:**

Note: Chemical Usages

[LIQUI-FIRE RX:](#)

Use 2 gallons (8 L) through spraying device to thin out fresh TDI.

Use 10 gallons (38 L) through presolve device, so as to coat entire tank interior. Use only as needed, if tank is set up. May be diluted with diesel.

[MAGNUM:](#) Use Stripper Vat dilution. 5% NaOH by weight, and 10% Magnum by volume.

* The amount of heel removal will play a role in the longevity of the vat solution, as well as how much residual polymer will remain in the vats. It is best to remove as much TDI as possible before the actual wash. One way to accomplish extra heel removal is to heat steam coils to 55- 60° C and maintain for about 30 minutes. Additionally, LiquiFire RX or a mixture of Liqui-Fire RX and diesel, may be sprayed into the tank from the manway, covering the walls uniformly. This will assist in thinning the residues further, thus keeping even more product out of the vats. These solutions will work even better when applied to a hot tank.

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