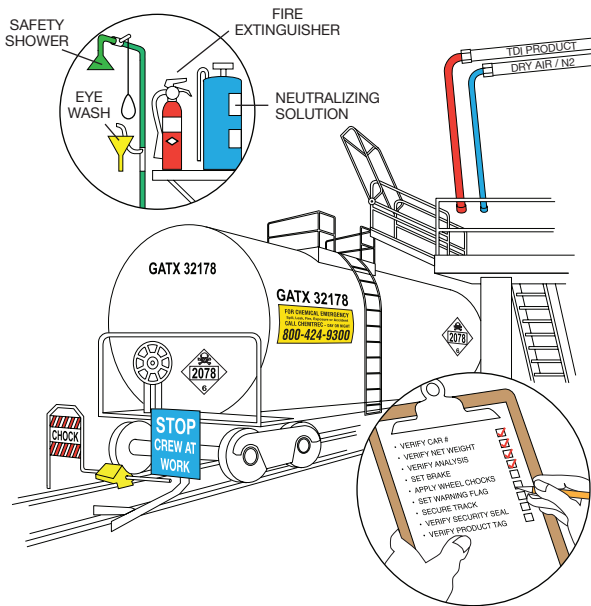


Unloading Toluene Diisocyanate (TDI) Rail Cars

1. Preparation for Unloading

During delivery, consider the following:

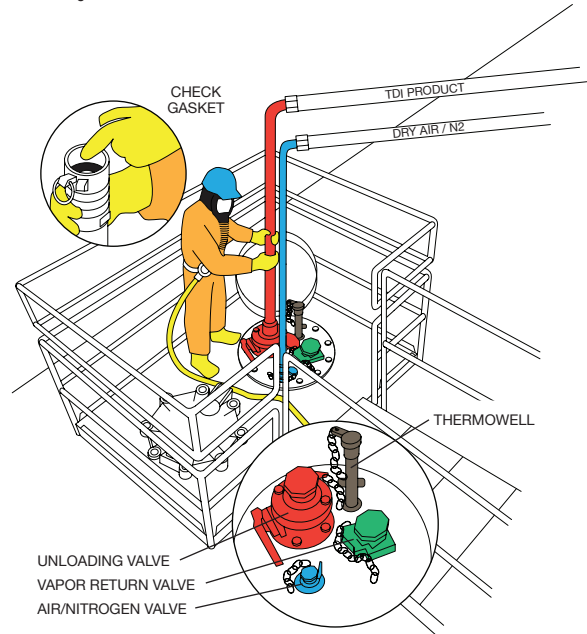
- ✓ Unloaders must be trained (49 CFR§172.700)
- ✓ Review unloading procedure
- ✓ Locate and check safety shower and eyewash
- ✓ Secure rail car and rail track (49 CFR§173.31(g))
- ✓ Restrict access to unloading area
- ✓ Verify that the correct receiving tank is being used and is in good condition
- ✓ Verify that receiving tank can hold contents of rail car
- ✓ Record start level in receiving tank



2. Hookup

During hookup, consider the following:

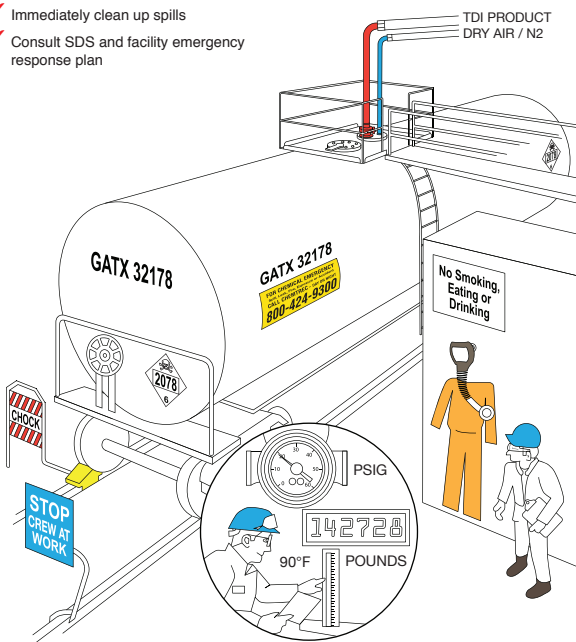
- ✓ Use personal protective equipment (PPE) specified in product safety data sheet (SDS)
- ✓ Verify that hoses, gaskets and fittings are in good condition
- ✓ Verify connection to proper receiving tank
- ✓ Secure unloading connections



3. Unloading

During unloading, consider the following:

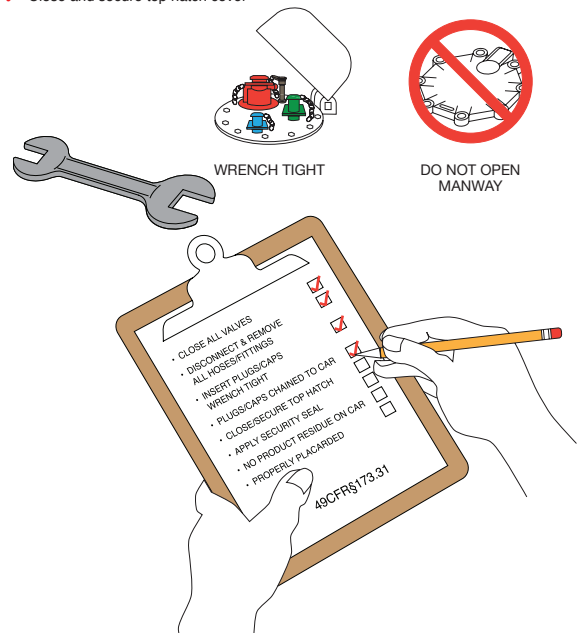
- ✓ Monitor hoses, fittings, and piping for leaks
- ✓ Monitor temperature, pressure, and level in receiving tank
- ✓ Maintain positive pressure on rail car
- ✓ Immediately clean up spills
- ✓ Consult SDS and facility emergency response plan
- ✓ Call CHEMTREC for 24 hour emergency assistance 1-800-424-9300



4. Returning Empty Car

When returning empty car, consider the following:

- ✓ Record stop level in receiving tank
- ✓ Maintain positive pad on rail car
- ✓ Do not open manway
- ✓ Ensure all plugs/caps are secured and wrench tight
- ✓ Close and secure top hatch cover
- ✓ Apply security seal
- ✓ No product residue on outside of rail car (49 CFR§173.24(b)(4))
- ✓ Complete unloading checklist



For additional information see the suppliers SDS and the Center for the Polyurethanes Industry's (CPI) guidance document, "Guidelines for Receiving and Unloading TDI" available at www.polyurethane.org.

The information contained herein is provided gratis and for informational purposes only. The American Chemistry Council (ACC) and Center for the Polyurethanes Industry (CPI) do not warrant, and assume no responsibility for the accuracy or completeness of any information contained in this guidance, all such information being given and accepted at your risk. This work is protected by copyright. Users are granted a nonexclusive royalty-free license to reproduce and distribute this document, subject to the following limitations: (1) the work must be reproduced in its entirety, without alterations; and (2) copies of the work may not be sold.

Published November 2022. This document may be updated. For the most current version, see www.polyurethane.org.



Center for the Polyurethanes Industry