

~~LOADING~~
~~STANDARD OPERATING PROCEDURE~~
FOR SOLVENT TANK TRUCK LOADING

Steps

Keypoints

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| <p>1. Spot truck at appropriate loading station and lower access ramp to truck.</p> <p>2. Examine PPG bill of lading, carrier bill of lading, and copy of customer order for product to be loaded, quantities of product, and any special loading or shipping instructions. Check the SKU number and the systems order number on the PPG bill and the customer bill.</p> <p>3. Check the Motor Carrier number (MC No.) of the tank, and the test date(s) stenciled on the front of the trailer. Record MC No. and test dates on PPG Bill of Lading.</p> <p>4. Check the interior of the trailer compartment(s) using the high intensity light source on the rack.</p> <p>5. Check the piping and valving on the tank.</p> | <p>2. This <u>must</u> be done to make sure customer gets correct product, and to comply with certain customer or sales office requests such as:</p> <ul style="list-style-type: none">a. Sending certificate of analysis to customer.b. Meeting special product specifications.c. Sealing truck for shipment.d. Amounts and size of hose required.e. Drum nozzle, if required. <p>3. The MC number signifies certain design features of the tank, such as valving, safety relief devices, and materials of construction.</p> <p>Solvents can only be loaded in certain type tanks (see chart - Tank Trailer - MC Type number).</p> <p>Do not load any truck which does not have the proper MC number or an expired test date.</p> <p>4. Any trash, moisture, or chemical(s) which would contaminate or react with solvents must be removed from the trailer before it is loaded. This may require having the truck returned to the terminal for cleaning.</p> <p>5. The tank must have, for each compartment, a primary and secondary outlet valve in the discharge piping and a dust cap for each discharge outlet.</p> |
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Steps

6. Check the discharge valves for operation with a small quantity of the appropriate product.

7. If required, check the trailer for safety relief devices and fusible disc caps.

Note: See Addendum No. 1

8. For vinylidene chloride shipments only.

Check trailer for leaks. If trailer is suitable to load, insert a purging lance through open hatch and purge trailer about five minutes to clear air from trailer. Remove lance after purging and secure hatch cover.

Keypoints

The primary valve is commonly called the internal valve and is located at the compartment discharge opening.

The secondary valve is at the end of the discharge piping for each compartment.

- 6a. Primary valves must operate and must not leak through regardless of product loaded.

- 6b. When checking the internal valve, a container must be used to collect any drips. Any solvents collected must be disposed of in ~~an organics box or the tank car sump.~~

- 6c. The spill containment pad is not to be used for disposing of solvents. The only function of the containment pad is collection of inadvertent drips or leaks.

- 6d. Secondary valves must operate and must not leak through, regardless of product loaded.

- 6e. The operation of the valves is the driver's responsibility. You merely have to witness the operation of the valves to make certain they operate.

7. For the following products:
Ethylene Dichloride
Vinylidene Chloride
The trailer must have at the top of each compartment at least one safety relief device and one fusible disc cap.

8. Trailer must be able to hold a nitrogen pad for vinylidene chloride shipments. Trailer must not leak. Check all fittings, valves, gaskets for leaks prior to loading. Use nitrogen when pressure checking and purging trailers.

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9. Determine the quantity of product to be loaded from applicable tables or charts. Check tank strappings to determine if the tank will hold the quantity of material ordered. Foreman will provide information regarding any blends that must be loaded.
10. If product is available in shipping tank, open appropriate valves to loading pump and line up to rack and start pump.

If product must come from operating unit, call the operator in unit and request transfer to product needed.

11. For vinylidene chloride and ethylene dichloride shipments only.

Connect grounding leads to trailer prior to loading product.

12. For solvents and ethylene dichloride shipments. ~~SHIPMENTS~~

Load trailer with product through opened hatch. ~~Flush several gallons product through discharge piping of truck to remove hidden trash or moisture that may be present. After loading, shut down loading pump.~~

13. For vinylidene chloride shipments only.

Connect loading hose to discharge piping of truck. Connect vent hose between vent control system and vent piping atop trailer. Open

Keypoints

9. Do not load any truck over 79,000 lbs. gross.
10. Always leave recirculation valve to tank open slightly to protect pump seal when discharge valve is closed on rack. Check pumps for seal leaks, excessive vibration, noise, or low oil levels. Oil should be added by the tankerman and all other problems is reported to the foreman. *OR Lead me*

As soon as the transfer from Operations is complete, contact the operating unit so that the pumps and piping can be utilized by the unit.

11. Connect one lead from rack to truck, and one lead from the loading line, upstream of the discharge valve, to the trailer. Grounding must be done in order to prevent static electricity build-up while loading flammable products. Check grounding lead on both ends with a continuity meter.

12. Spills must be avoided. Flush must be directed to flush collection system. Use meter to load truck, if operational, otherwise use outage gauge. Do not load ethylene dichloride through the meter.

OR Methylene chloride
Use stainless steel loading pipe when loading product.

13. Personnel exposure to and releases to the environment of liquid and vapor vinylidene chloride must be avoided. Vent must go to control system.

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vent valves on control system and on trailer. Open discharge valves on trailer. Open loading line valve and load trailer with product using in-line meter.

After trailer is loaded, clear loading line into truck using nitrogen. Shut down loading pump.

Clear vent line into trailer using nitrogen until pressure inside trailer is 12-15 psig. Disconnect vent line from trailer

Check trailer again for leaks. All leaks must be stopped before shipment is made.

14. Sample product in glass container. Properly identify sample and deliver to main laboratory for analysis.

For Solvents - Use ^{Quart}~~one-half~~ gallon glass bottle.

For Ethylene Dichloride - Use ^{Quart}~~one~~ gallon amber stained bottle

For VDCM - Use ~~stainless steel coil.~~

^{HALF PINT AMBER STAINED BOTTLE}

15. Attach product identification tag to hatch cover and discharge line of every loaded compartment of the truck.

16. Complete paperwork in office as follows:

1. Sign bills of lading. Do not sign demurrage tickets.
2. Identify on PPG bill of lading the content of each compartment trailer and have driver sign to acknowledge same.

Keypoints

The trailer must not be opened after loading has started to prevent exposure or releases.

Trailer must be able to hold nitrogen pad to avoid oxygen intrusion into trailer and contacting product.

14. Every shipment of solvents and ethylene dichloride must be sampled. Sample must be analyzed and cleared by main laboratory before shipment can be made.

Vinylidene chloride shipments will be sampled only under certain circumstances. Check with shipping foreman before sampling.

15. It is PPG policy that this identification be made before shipment is made. Use new identification tags for every shipment.

1. DOT regulations require signing of bill of lading.
2. Identify loaded as well as empty compartments. Driver must sign before he leaves plant.

Steps

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3. Provide driver with placards, if truck must be placarded. It is driver's responsibility to placard truck.
4. Provide driver with transportation safety data card for each product loaded on truck.
5. Raise access ramp to truck, disconnect grounding leads from truck, clear personnel from area, and release truck to weigh and depart plant.

3. Placard product shipments as follows:

Ethylene Dichloride - Un 1184
Vinylidene Chloride - UN 1303
Trichloroethylene - Un 1710
4. It is a PPG policy that this is is done and so states on the PPG bill of lading.

The traffic department normally provides the transportation safety data card. If there is no card notify the foreman.

ADDENDUM

- No. 1 Trailer must have at the
top of a single compartment
truck, at least one safety
relief device and three
fusible disc devices.

CASTANK, TK
CAUSTIC, TT

C12 RACK, HLP
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SOLVENT, TT