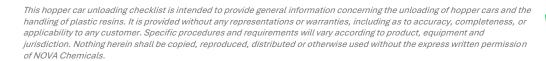


Hopper Car Unloading Checklist for Customers (Guidelines for Unloading Polyethylene)

| SI | EP 1: Inbound - Safety & Security Procedures | SI | EP 4: Completing Unloading Operations | |
|---------------------------------------|--|---|---|--|
| | Personal Protective Equipment (PPE) – Always follow your company safety procedures. Safety – Ensure derail, blue caution flag/sign and wheel chocks in place, and handbrake set. Security Inspection – No signs of tampering (e.g., broken/altered security seal), no visible pest contamination, suspicious items, vandalism, or other security concerns. | | Use a rubber mallet or plastic dead blow hammer to tap the outer side wall of the compartment to dislodge any pellets or granular powder that may be stuck/hung up. If safe to access top hatch, visually check the compartment to verify it is empty (< 500 kg/1100 lbs.) − If needed, use a non-metallic tipped rod/probe/pole through the hatch opening to move the resins into the draft tube. Reasonable care must be taken not to hit or damage the lining. Turn off conveying system. | |
| | Hopper Car Damage Inspection – No obvious signs of damage, inoperable, or missing parts. | | | |
| ST | EP 2: Setup – Preparing Hopper Car for Unloading | | If applicable, remove hatch filter, and close hatch. | |
| | If hopper car has vented hatches , ensure vents are clear of snow and ice. If no vented hatches : Cut off top hatch seal, open hatch cover, install hatch filter (only if safe to access top of hopper car). | | Close unloading valve, disconnect offloading hose, and remove air intake filters. Always follow your company operating procedures. Clean/purge the draft tube of any pellets or granular powder. Reinstall draft tube end caps, locking arm, install pin, and apply security seal. Clean up any spilled pellets or granular powder released during unloading operations. | |
| | Cut off seals to draft tube end caps on compartments to be unloaded. | | | |
| | Unlock and remove caps from both ends of draft tube (both sides of car). Purge/remove any pellets or granular powder, and | | | |
| | contamination inside the draft tube. Install inlet draft tube filter on air intake side. | STEP 5: Post-Unload / Pre-Trip Inspection | | |
| | Connect offloading hose to discharge side of draft tube. Connect bonding and grounding cables to hopper car, unloading hose/equipment, and grounding | | Safety – Unloading tools, equipment, and accessories removed from hopper car and rail track. Always follow your company operating procedures. Security Inspection – All valves and hatches closed, locked, and sealed. No visible pest contamination, suspicious items, or other security concerns. Environment – Spilled pellets or granular powder | |
| | source. Place pellet spill containment tray under offloading hose and draft tube connection. | | | |
| STEP 3: Starting Unloading Operations | | | cleaned up from floor/ground and hopper car. | |
| | Turn on conveying system. Open draft tube unloading valve in small increments to prevent large fluctuations of air pressure. Always follow your company operating | Ш | ☐ Hopper Car Damage Inspection – No obvious signs of damage, inoperable, or missing parts. | |



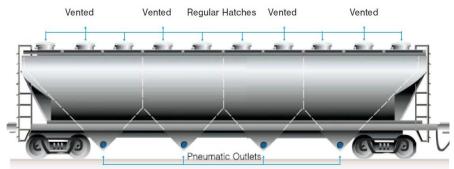
procedures.



TAKE THE OCS PLEDGE:

Do Your Part to Protect the Environment.

Operation Clean Sweep opcleansweep.org

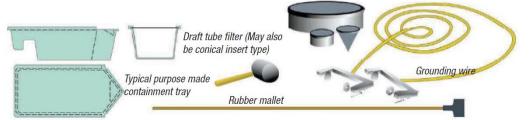


Typical NOVA Chemicals Hopper Car

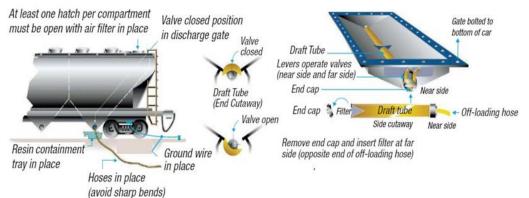
- State-of-the-art design
- Large (6200-6400 ft3) payload capacity
- Each compartment is equipped with a vented hatch cover to prevent implosions

Suggested Accessory Kit for Unloading a Hopper Car

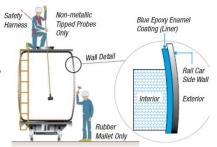
Air filters for top hatch opening are only required if top hatch is opened during unloading.



Non-metallic tipped probe



Unloading a Hopper Car



Securing/ Sealing End Caps & Top Hatch Cover





acceptable)



Top Hatch Covers

REPORT INCIDENTS

Hopper car damage, spills, partial unload, safety, or security. Call NOVA Chemicals at 1.800.561.6682

This hopper car unloading checklist is intended to provide general information concerning the unloading of hopper cars and the handling of plastic resins. It is provided without any representations or warranties, including as to accuracy, completeness, or applicability to any customer. Specific procedures and requirements will vary according to product, equipment and jurisdiction. Nothing herein shall be copied, reproduced, distributed or otherwise used without the express written permission of NOVA Chemicals.

