



BEET JUICE TIRE BALLAST HANDLING TIPS

DO:

- ◆ Store in a **clean food grade tank**.
- ◆ Use **metal valve stems** suitable for air and liquid.
- ◆ Make sure **all line connections are air tight**.
- ◆ Keep **pump pressure at 20-40 psi** when pumping ballast into tire.
- ◆ Place the **valve stem below the liquid level** while filling the tire.
- ◆ **Rinse all parts** of the pumps, valves and installation hoses after each installation.
- ◆ **Move the liquid inside during extremely cold weather.** This could be done by transferring the liquid from a tank to a tote (portable tank). This will make pumping the liquid easier.

DON'T:

- ◆ **Mix beet juice ballast** with any other liquid ballast.
- ◆ Use **rubber valve stems**. For the most part, they are not manufactured to hold liquid in a tire.
- ◆ **Lean anything against your tank.** Added pressure can cause tank to crack and lose product.

Other helpful hints:

- ◆ **No need to mess with tubes!** Although our product can be installed in tubes, feel free to take advantage of the non-corrosive nature of our product and pass the savings along to your customer.
- ◆ You shouldn't experience foaming when pumping out a tire. If for some reason this does occur, give us a call and **we will assist**.



Beet Juice Tire Ballast Handling Tips

- Completely Non Corrosive
 - Freeze Protected to -35F
 - Non toxic
 - Weighs 10.7 – 11 lbs/gal US
- Rim Guard is formulated using a byproduct of sugar production from sugar beets as its primary raw material. What makes this raw material such an effective liquid tire ballast is its organic makeup that provides both significant weight and freezing protection as well as making it safe as an animal feed. Because of the natural variation in sugar beet crops and the sugar production process, Rim Guard itself can vary somewhat from batch to batch. The organic makeup of the product has a natural tendency to produce foam when agitated excessively with air. To minimize any foaming during installation, the following procedures should be followed:
 - Keep pump pressure at 20-40 psi to minimize agitation during installation, the lower the better. Placing the valve stem below the liquid level (4:00 o'clock position) while filling will prevent foaming. Spraying Rim Guard at high pressure against the rim (12:00 o'clock position) can create foam and make the tire fill process less efficient.
 - Make sure all line connections between the tank and pump and the pump and valve stem are air tight; otherwise, air can be sucked in and mixed with Rim Guard and foaming may result.
 - It is recommended that all internal passages of pumps, valves, and installation hoses be rinsed with water after each installation. If the pump is also used for other liquid tire ballasts, especially calcium chloride, it is recommended that the system be flushed with water before pumping Rim Guard.
 - If switching from a different tire ballast to Rim Guard, it is recommended that tires (and tubes if used) be rinsed with water if they have previously held other types of liquid ballast.
 - As with the installation of any liquid tire ballast, it is recommended that in tubeless tires **rubber valve stems** be replaced with metal valve stems. For the most part, rubber valve stems are not manufactured with the idea that they will be used to hold liquid in the tire. Over the years the quality and design of rubber valve stems has changed and they now seem to be more susceptible to having the adhesive, which holds the core in place in some rubber valve stems, dissolving when in constant contact with liquid. If the adhesive dissolves, the core can come out of the stem when the cap is removed and loss of liquid will result. Metal valve stems hold the core in place mechanically and do not have this risk.
 - Locate the storage tank where a semi-trailer (48' trailer plus tractor) can get within 20 feet of the tank. If the tank is located inside, have enough 2" hose to reach the discharge hose on the semi-trailer.



Beet Juice Tire Ballast Handling Tips cont.

- Rim Guard is somewhat slower to pump in extreme cold conditions. Transferring liquid to a tote (portable 275- or 330-gallon tank) from the main tank and moving the tote into the shop during extremely cold weather will improve pumping ease.
- Inflate all tires to the pressure specified by the load conditions once the desired fill level is reached.
- Radial Tires can be ballasted to further increase their traction. **Fill radials to the 2:00 valve stem level rather than 12:00 (for bias ply tires).** Filling a radial to the 12:00 position often makes a radial tire round out (act like it's over-inflated) and you lose the large footprint that radial tires provide. **MULTIPLY THE DATA ON THE FILL CHART BY .80 FOR RADIAL TIRES.**
- Rim Guard can be stored in any tank material suitable to handle its weight. Always try to draw Rim Guard from the bottom of the tank to minimize accumulation of solids that tend to settle out over time
- Do not mix Rim Guard with any other liquid ballast. Chemical reaction or foaming may result.
- It is not necessary to install tubes in tubeless tires for Rim Guard. Rim Guard coats the rims so they never rust. Minor tire punctures in tubeless tires can be plugged without removing Rim Guard.
- **Rear dual tire applications.** If the outside tires are going to be occasionally removed only fill the inside tires. This makes the outside tires easier to handle. If the outside tires are rarely removed fill all tires to 40% - 50%. This spreads the weight over a much larger surface area and reduces soil compaction.
- **Pumping Rim Guard Out of a Tire.** If foam has formed in the tire due to agitation of the rolling tire allowing the tractor to stay stationary for several hours before removing the liquid enables the foam to break down and go back to a liquid state. If you can't pump out any more liquid and there is excess foam in the tire, mix 1 – 4 cups of concentrated defoaming solution to a 5 gallon pail of water. Defoamer is available from Rim Guard. Pump this solution into the tire and turn the tire so the solution mixes thoroughly with the foam. Wait 5-10 minutes for the foam to dissipate and continue to pump out the liquid
- If you have questions, concerns, or other helpful hints about Rim Guard, please call us at 616-608-7745.