

Biodiesel

Manufacturer's Affirmative Statement of Compatibility
(As required by California Code of Regulations section 2631(k))



Manufacturer's Authorized Signature



Date

Date: 1/9/13

To whom it may concern

According to the Material Compatibility by National Biodiesel Board (quoted below), we confirm that our valves (T-SS-1001N Series) can be used for B20 (Biodiesel) applications.



Materials Compatibility

B100 Material Compatibility

B100 may degrade some hoses, gaskets, seals elastomers, glues and plastics with prolonged exposure. Natural or nitrile rubber compounds, polypropylene, polyvinyl, and Tygon materials are particularly vulnerable. More testing is being done to extend this list of vulnerable materials. **Most elastomers used after 1993 are compatible with B100 (Viton/Teflon).** Before handling or using neat biodiesel (B100) contact the equipment vendor to determine compatibility with fatty acid methyl esters.

Teflon, Viton, and Nylon have very little reaction to biodiesel and are among the materials that can be used to update incompatible equipment. B100 suppliers and equipment vendors should be consulted to ensure the most recent findings on compatibility. For the bulk fuel handlers of biodiesel it is highly recommended to speak with your hose suppliers to source hoses that are compatible with neat biodiesel.

Most tanks designed to store diesel fuel will be adequate for storing B100. Acceptable storage tank materials include aluminum, **steel**, fluorinated polyethylene, fluorinated polypropylene, **Teflon**, and most fiberglasses.

Brass, bronze, copper, lead, tin, and zinc may accelerate the oxidation process of biodiesel creating fuel insolubles or gels and salts. Lead solders and zinc linings should be avoided, as should copper pipes, brass regulators, and copper fittings. Affected equipment should be replaced with **stainless steel, carbon steel, or aluminum.**

B20 Material Compatibility

Biodiesel blends of 20% or less have shown a much smaller effect on these materials. The effects are virtually non-existent in low-level blends such as B2. When handling blends of B20 or less normal monitoring of hoses and gaskets for leaks is sufficient.

Blends of B20 and lower reduce the impact of **metal compatibility** issues.

Materials Compatibility Studies

The following summaries on material compatibility with biodiesel (methyl Oleate) are taken from research studies and compatibility guides from several o-ring and seal manufacturers.



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