

# LAB REPORT



**Seaman Corporation**

Technical Services  
1000 Venture Blvd. ▪ Wooster, Ohio 44691  
Phone: 330/262-1111 ▪ Fax: 330/263-6950  
[www.seamancorp.com](http://www.seamancorp.com)

## **Tech Notes**

### **Seaman Corporation Arctic Geomembranes**

#### **8228 Oil Resistant Low Temperature Arctic (ORLTA)**

The ORLTA is formulated to provide moderate resistance to volatile hydrocarbons and be more flexible in low temperature environments. The compound has only short term compatibility with volatile hydrocarbons such as jet fuel and gasoline and offers more moderate resistance to diesel fuel and specific oils. It should not be used as primary or secondary containment of volatile hydrocarbon fuels. While reaction rates are slower at lower temperatures, the product is not designed for containment of these fuels. Seaman Corporation offers products that are rated for this service. ORLTA can be used in secondary containment applications of diesel and oil (crude, #2 fuel, #6 fuel, etc.) in arctic environments and may be considered. However, if installation and operating conditions allow, XR-5® or 9923 OBUP should be used due to the broader window of chemical resistance.

8228 ORLTA has better cold weather flexing capabilities than many geomembranes, including XR-5®. However, it does not have the dynamic cold crack resistance of a Low Temperature Arctic (LTA) material. While laboratory testing indicates a cold crack resistance of -60° F according to ASTM D-2136, the actual recommended field installation temperature is much higher. Laboratory cold crack testing provides a baseline when comparing materials, however it does not take into consideration the dynamics found in field installation. Air temperatures above -25° F should be present when installing the product. In static service however, ORLTA should perform well in temperatures as low as -60° F. In comparison, 9923 OBUP has an ASTM D-2136 cold crack of -65° F and XR-5 has a cold crack of -30° F. For further assistance in determining the handling characteristics, contact Seaman Corporation

Contact the Seaman Corporation Technical Department with questions or application issues on this or any other Seaman Corporation Geomembrane product.