

**Sealing for a Safer and Greener Tomorrow** 

# The Origin<sup>TM</sup> RC510 Gasket

It is not just a product, it is a process



# ORIGIN™: A NEW DESIGN THAT IS TRULY UNIQUE

It's not often that a new gasket design is introduced to the sealing world. Especially an original design so innovative, that it makes one think the future is now present.

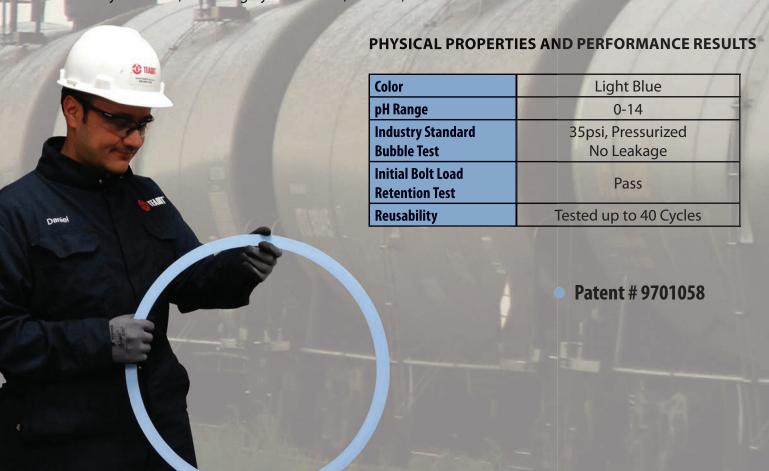
We are proud to introduce an ultimate level of sealing ability – Teadit's Origin™ RC510

The Origin™ RC510 is made with Tealon material, utilizing Origin™ technology. This design was developed with the challenges of rail car service in mind, while utilizing Teadit's Tealon structured, and filled, PTFE material. Teadit's Origin™ is not just a product, but a process brought to you by the PTFE experts at Teadit. PTFE is an integral part of Teadit not only through name, but culture.

Teadit's Origin™ gasket is a new and unique, patented product, as well as technology. It is designed to incorporate all of the best features of gasket products and properties that make for an effective seal, while being both easy to use and easy to install.

Teadit's Origin™ gasket is simplistic in nature, but brilliant in function. Found to be rugged and durable, yet environmentally friendly. Teadit's Origin™ process eliminates wasteful consumption of material and promotes reduction of scrap material. During the manufacturing process almost 100% of consumption of raw materials is achieved, which helps to make PTFE practical and affordable.

Finally, Teadit's Origin™ RC510 provides outstanding recovery potential. Similar to an elastomeric design, except it provides the superior chemical resistance of PTFE, a material which provides the best resistance to a wide array of media, including hydrocarbons, ethanol, and much more.



### **LAB TESTED**

The Origin™ RC510 is most robust, allowing for long-life in service. Rigorous evaluations have yielded results that show better performance at a multitude of levels than any rail car gasket in the market. There is truly nothing else like it.

The Origin™ RC510 is thoroughly tested to even the most extreme conditions. Look past a simple bubble test - the Origin™ RC510 has superior results in leakage rate, load retention (even under vibration), and durability over continued usage…it is the best in class. The Origin™ RC510 is the ultimate rail car gasket.

Teadit Origin™ RC510 after 40 Cycles



Competitor's Gasket after 10 Cycles



### **LEAKAGE TEST**

### **OBJECTIVE**

To quantify Teadit's Origin™ RC510 leakage rate, when subjected to 35 psi of pressure and 250ft-lbs of torque, in comparison to other designs used in the industry.

### **TEST PARAMETERS**

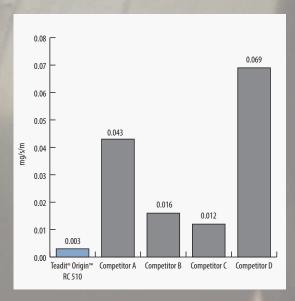
Pressurize the rig at 35 psi, and at room temperature. Leak measurements performed after a cycle is completed.

One cycle: Perform the 24 hour test, open/close lid each hour for eight hours, close lid and pressurize for next 16 hours.

## CONCLUSION

Teadit's Origin™ RC510 presents the best results in leakage rate, averaging 0.003mg/s/m. It outperformed all competitors in tests performed in Teadit's facility, in Texas/USA, as shown in the adjacent graphs. In the photos above, you can see that the competitors gasket shows through-body leakage visible with the precipitate on the outside of the surface.

# Leak Rate Average over Multiple Cycles



Teadit Origin\*\*\* - Test concluded at 40 cycles,
no noticeable decrease in performance.

Competitor A - Total failure after 20 cycles.

Competitor C - Total failure after 30 cycles.

Competitor D - Total failure after 10 cycles.



Teadit is a global leader in the development and production of a broad range of sealing solutions.

Our mission is to assist you in achieving leak-free and low-emission levels of performance.



The application parameters indicated in this brochure are typical. Specific applications should be looked at independently for an evaluation on compatibility. Please consult Teadit engineering for recommendations about specific use.

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