

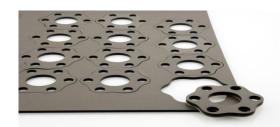




Alert #: SA 09-15 Date: 10/12/2015

Neoprene/Rubber Gaskets

This safety alert is intended to heighten awareness of recent issues concerning GIS personnel working with various types of neoprene/rubber gaskets. The areas of concern are primarily non-conformance of neoprene/rubber gaskets. This is due to Gaskets not meeting the stated specifications of hardness, needed for the bolted flange joints.



Recent Incident

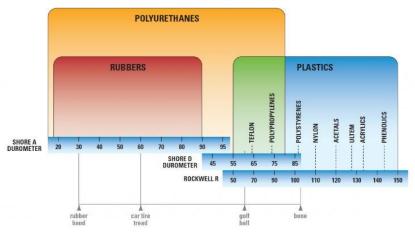
GIS recently placed numerous "shorts" (orders for immediate delivery) for various size neoprene/rubber gaskets with a vendor. The vendor did not follow the specifications submitted by GIS, resulting in the shipment of incorrect "duro hardness" rated gasket material. As the gaskets were installed in the bolted flange joints, the gasket material was squeezed from the effective sealing area. This created a path for future leaks from the joint. In this particular situation, leaks occur because the gasket material is too soft; with a hardness rating of 55-65 instead of the specified 75-85 duro rating. Because of this error, safety of personnel, the surrounding environment and the integrity of numerous flange joints could have been compromised.



In order to prevent this from happening again, GIS has implemented the following:

- **1.** GIS will request proper documentation on all orders to verify that specifications of the ordered gaskets are correct/accurate.
- **2.** All ordered neoprene/rubber gasket hardness ratings will be verified using a Durometer.
- **3.** All field installations of neoprene/rubber gaskets will utilize a Durometer on site to verify hardness, if improper material specifications are a concern.





4. Training on neoprene/rubber gaskets will be added to the GIS Bolting Training, currently being conducted. This will include the use of a Durometer, ISO reading of the Bill of Materials for the correct gasket rating and signs of an incorrect gasket once installed in the flange joint.



