CHLORIDE CONTENT IN POLYETHYLENE CLOSED CELL INSULATION PRODUCTS

Insulation products with high chlorine / halogen content present a problem with certain applications. In particular, stainless steel applications with fluid temperatures above 90°F can be subject to corrosion over a long period of time as halogens are considered to be a corrosive agent. This would also include stainless steel piping that is heat traced.

Nomaco polyethylene closed cell insulation products exhibit low leachable chloride content as shown below. Tests were conducted by an accredited independent laboratory in accordance with EPA Standard Methods / ASTM C 871 (Test Method for Chemical Analysis of Thermal Insulation Materials for Leachable Chlorides, Fluorides, Silicate and Sodium Ion).

Insulation Description	Total Chloride Content
Polyolefin / Polyethylene Insulation (Nomalock, Imcolock therma-cel, Arcticflex, Nomaply, Imcosheet)	5.0 ppm

The total chloride content of Nomaco polyethylene products would not cause a problem on stainless steel applications and have never been associated with stress crack corrosion issues. The total leachable chloride content in the polyethylene insulation product meets the requirements of ASTM C 795 (Specification for Thermal Insulation for Use in Contact with Austenitic Stainless Steel). The levels are below the base line of ASTM C 795 Figure 1 on acceptability of insulation materials. The 5.0 ppm is approaching the 1.0 ppm detectable limit of ASTM Test Method C 871 given the variability as indicated by its precision and bias statement.