Corrosion Protection in Hydrochloric Acid Service

Polycorp Protective Linings are used to protect railcar and truck tanks, storage vessels, process equipment, and pipes from corrosive and abrasive materials. Our customers benefit from our extensive product catalogue, superior technical support, and decades of experience in the rubber lining industry.

THE CHALLENGE

Hydrochloric acid (HCl) is used in a wide variety of industrial and commercial applications including the steel, fertilizer, textile, mining, and plastics industries. It is also frequently used in water treatment processes. Storage and transportation of hydrochloric acid requires that steel substrates be protected from this highly corrosive material. Managing this risk is a significant issue for producers and users of HCl.
THE SOLUTION

Polycorp Soft Natural Rubber Linings are the material of choice for hydrochloric acid applications including large storage tanks, railcars, and truck tanks. Many of the Polycorp products are strained to remove naturally occurring contaminants, further enhancing protection and extending service life.

Polycorp engineers have developed soft natural, pure gum, Rubber Linings with matching adhesive systems to protect equipment from corrosion by HCl. These protective linings maintain their characteristics well into the service life of the vessel. They remain flexible to offset expansion and contraction due to temperature changes and are designed for a low liquid absorption rate. Minimal cracking of the surface is seen over time and a long service life can be expected.

HCl Linings

- **1099** is a tan, 35A durometer strained pure gum rubber formulation. With decades of proven performance this is the defacto standard in the rail car industry. FDA compliant.
- **2000** is a tan, 35A durometer strained gum rubber. FDA compliant.
- **2001** is a black, 40A durometer strained soft natural rubber. FDA compliant.
- **4631** is a black, 55A natural/chlorobutyl blend specifically designed for the vapour pad area in rail cars.
- **Triflex™ 1000** is a tan, natural rubber, soft-hard-soft lining well suited to HCl storage tanks. FDA compliant.
- **T1000** is a tan, 40A durometer pure gum rubber. A cost effective alternative for applications where surface finish requirements are less stringent.