

### 2.3 ACCEPTABLE MATERIALS FOR CHLORINE SERVICE, BY FUNCTION

A survey was conducted in 2016 to determine what materials were in use among the Chlorine Institute membership. There were over 60 respondents, comprised of chlorine producer, chlorine packager, and chlorine user facilities. The results below are not endorsements or approval of the materials/products, but rather materials that have been found to be acceptable in the service indicated. The materials listed below are not intended to be an exhaustive list. Users may find other materials acceptable in chlorine service and are encouraged to review manufacturer compatibility information and/or conduct compatibility testing.

#### **Lubricants**

- Castrol Braycote (1728, 1729)
- Fluorolube® (GR-362, GR-554)
- Fluoramics Inc. LOX-8
- Halocarbon® (HC25-5S, HC-56)
- Krytox® (GPL-106, GPL-205, GPL 227)
- Loctite® 567™ PST
- Loctite® Grade AA (089)™

#### **Sealants on Threaded Connections**

- Climax® Lubricant FL-5
- CYL-SEAL® Compressed Gas Pipe Thread Sealant
- Fluoramics Inc. LOX-8
- High Side Chemical Leak Lock Joint Sealing Compound (Gold and Blue)
- Halocarbon® MT-3I
- Krytox® (GPL 220, GPL 226, TS4)

Teflon tape is not listed, but has been used. If used on threaded connections, small pieces of Teflon tape may dislodge and clog piping and internal surfaces of the valve(s) and other fittings downstream. In general, the use of Teflon® tape on threaded connections is not recommended.

#### **Sealant Material for Leak Clamps**

- Colt 290 (CS290)
- Teflon® (e.g. Deacon SP-375, Colt 590)
- Krytox®

**Cleaning Agents** NOTE: Must remove all cleaning agents before introducing chlorine

- Solvents ( e.g. acetone, methanol, methylene chloride, perchloroethylene, butyl carbitol, 5% citric acid, etc.) NOTE: Many solvents can have adverse health or environmental affects therefore a thorough evaluation of potential hazards should be performed before use