



## Rubber Lining Material Selection

### Soft Natural Rubber

**Polycorp Soft Natural Rubber** offers exceptional resistance to most inorganic chemicals. They exhibit outstanding abrasion resistance. Suitable for hydrochloric acid (HCl) applications, as well as general chemical and abrasion protection.

**Products - 1032, 1060, 1061, 1064, 1068, 1069, 1097, 1099, 2000, 2001, 2002, 2004, 2019, 2020, 2027, 2033, 2033P, 2041, 2042, 60714, T1000, T1001, T1003, T1004, T1004S**

### Hard Natural Rubber

**Polycorp Hard Natural Rubber** offers improved chemical and heat resistance over soft natural rubber. Excellent permeation resistance and heat resistance up to 200°F/93°C. Suitable for water treatment applications, oxidizing and plating service, brines and chlorines.

**Products - 1003, 1004, 1006, 1017, 1035, 1036, 1038, 1040, 1042, 1048, 1053, 2017, 3014**

### Chlorobutyl/Bromobutyl

**Polycorp Butyl** linings offer superior resistance to acids and caustic solutions up to 260°F/126°C. Linings are unaffected by cold weather or rapid temperature changes. Strongly recommended for super phosphoric acid, sodium hypochlorite and sulfuric acid.

**Products - 1024, 1051, 1054, 1055, 1056HT, 1058, 2006, 2007, 2040, 2055, 2056, 4631, 6511, T6005, T6105**

### Neoprene

**Polycorp Neoprene** is a synthetic rubber with physical properties similar to natural rubber. Superior to natural rubber in resistance to heat, ozone, sunlight, weather, flame, and oil.

**Products - 2010, 5621, 5821, T5009, T5109**

### Nitrile

**Polycorp Nitrile** materials offer good resistance to greases, oils, petroleum hydrocarbons and other non-polar solvents. They are unaffected by rapid temperature changes. Good heat resistance up to 200°F/93°C.

**Products - 2048**

### Triflex™

**Polycorp Triflex™** three ply natural rubber lining (soft—hard—soft) has excellent chemical and abrasion resistance. The semi-hard rubber center layer provides a non-permeable barrier and the soft exterior layer allows maximum adhesion to steel. These materials are able to withstand rapid temperature changes, have good abrasion and chemical resistance with low water absorption characteristics.

**Products - 1000, 1001, 1008, 1019HT, 1020HT, 1066, 1077HT, 3015, 3016**

## MATERIAL SELECTION GUIDE

To provide the longest service life and maximum protection of assets from corrosion and abrasion, it is critical to select the right lining material. With the extensive Polycorp product catalogue, our engineers and chemists are available to recommend the best material for your project. By providing the information listed below, we can ensure you make the optimum choice.

### ■ **History:**

- Has the asset been lined before
- Service life of the lining
- Type of lining used
- Reason for lining replacement

### ■ **Process or Operation:**

- Type and function of equipment
- Material of construction i.e. concrete, steel etc.
- Size and shape of vessel

### ■ **Chemicals and Concentration:**

- Full list of chemicals present
- Any solvents or oils
- Any additives used on an intermittent or recurring time frame

### ■ **Abrasive Materials:**

- Particle size
- Wet or dry abrasive
- Percent solids content
- Flow velocity and agitation

### ■ **Temperature and Pressures:**

- Minimum and maximum operating temperature
- Operating pressure
- Vacuum

### ■ **Food Related Service:**

- FDA compliance requirement

### ■ **Environment:**

- Location of equipment
- Exposure to sunlight and ozone
- Will equipment be put into service or stored