

# 3500

## Valvelon®

TECHNICAL  
**CHESTERTON®**  
PRODUCTS

### Description

Chesterton® 3500 Valvelon® is a dense, pure PTFE sealant that can be used as a non-hardening valve packing or flange gasket. The unique construction of the product allows it to squeeze in all directions to fill voids and conform to surfaces when installed in a valve or flange. It will not extrude under pressures of up to 35 kg/cm<sup>2</sup> due to its multi-layered structure.

Chesterton 3500 Valvelon is ready to use as received. Simply unwind and cut just enough for a particular application. Users can reduce expensive gasket and packing inventories by stocking this one convenient product.

Because it contains no surface lubricants or chemical fillers, the product has an unlimited shelf life.

The product can withstand a wide range of temperatures and be utilized with virtually all chemicals. It is non-hardening in service, and will remain permanently pliable.

### Typical Physical Properties

|                   |                       |
|-------------------|-----------------------|
| Form              | Solid Interwoven PTFE |
| Color             | White                 |
| Temperature Range | -240°C to 260°C       |

### Composition

Chesterton 3500 Valvelon is composed of 100% PTFE. No fillers or diluents are added. Its superior chemical resistance and thermal properties are due to the inertness of the polytetrafluoroethylene that make up this product.

What makes 3500 Valvelon so unique and gives it superior and versatile functionality is its multi-layered construction. Although it has the cold flow characteristics of PTFE and can conform to surfaces to seal, the multi-layered construction gives it very high tensile strength. This means 3500 Valvelon will not extrude even under pressures as high as 35 kg/cm<sup>2</sup>.

Chesterton 3500 Valvelon is inert and contains no graphite or metallic lubricants. It will therefore not cause pitting or galvanic corrosion like other sealants that are commonly used. It is non-reactive with virtually all chemicals and can withstand a pH from 0 to 14.

The pure PTFE in 3500 Valvelon is nontoxic and non-contaminating. Because this polymer is inherently a good lubricant, there are no additional surface lubricants used in the product which could wash out in fluid systems. Simply apply the product to valves and tighten.

### Applications

Use as a permanent packing for small valves and as a gasketing material to seal flange faces. Chesterton® 3500 Valvelon® can be used with steam, salt water, air, refrigerants, sulfuric acid, hydrochloric acid, nitric acid, chromic acid, sodium hydroxide, potassium hydroxide, kerosene, gasoline, perchloroethylene, hydrogen, ammonia, fluorinated solvents, chlorine, propane, butane, nitrogen and generally all substances within a pH range of 0 to 14. Do not use with liquid or gaseous oxygen, molten alkali metals and some rare halogenated compounds.

### Features

- Non-hardening
- 100% PTFE
- Nontoxic
- Unlimited shelf life
- Reduces packing and gaskets inventory
- Chemically inert
- Wide temperature range
- Conforms to surface shapes
- High tensile strength
- NSF P1 - Registration number 134013