

## Compound Data Sheet Parker O-Ring Division United States

## MATERIAL REPORT



CONTACT US

DATE: 09/22/99

**TITLE:** General evaluation of Parker Compound V8588-90.

**PURPOSE:** To obtain general data for Parker Compound V8588-90.

**CONCLUSION:** Parker Compound V8588-90 is an explosive decompression

resistant perfluorinated material.

Recommended temperature limits: 5 to 572 °F

Recommended For

Aliphatic and aromatic hydrocarbons

Chlorinated hydrocarbons

Polar solvents (acetone, methylethylketone, dioxane)

Inorganic and organic acids

Water and steam

High vacuum with minimal loss in weight

Petroleum oil Wet/dry chlorine

Not Recommended For

Fluorinated refrigerants (R11, 12, 13, 113, 114)

Uranium hexafluoride

Molten Metals

Gaseous and alkali metals



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## **REPORT DATA**

|  | V8588-90 Test Platen Results |
|--|------------------------------|
| Original Physical Properties Hardness, Shore A, pts.               | 91                           |
| Tensile Strength, MPa  | 21.8                         |
| Elongation, %, min.  | 112                          |
| Modulus @ 100% Elongation, MPa                                     | 19.7                         |
| Compression Set, 70 Hrs @ 200°C, ASTM D395 Method B, 2-214 O-Rings |                              |
| Permanent Set, %   | 29                           |
| Low Temperature Retraction, ASTM D1329                             |                              |
| TR-10 in degrees C   | -1                           |
| Volume Change, 70 Hrs @ RT, ASTM D471                              |                              |
| Acetone, % Volume Change   | 0.7                          |
| Methyl Ethyl Ketone, % Volume Change                               | 0.7                          |
| Methanol, % Volume Change  | 0.0                          |
| Benzene, % Volume Change   | 0.4                          |
| Toluene, % Volume Change   | 0.4                          |
| Dichloromethane, % Volume Change                                   | 1.8                          |
| Chloroform, % Volume Change  | 1.8                          |
| Ethyl Acetate, % Volume Change                                     | 0.6                          |
| MTBE, % Volume Change  | 0.9                          |

V8588-90 is certified per MERL for Explosive Decompression Resistance in Natural Gas