

## V1041-85 AFLAS™ (TFE/P Copolymer)

No. 5721B1-USA

**Parker Aflas™ compound  
V1041-85 fluoroelastomer with  
broad chemical resistance for  
Energy, Oil and Gas (EOG)  
environments**

### Applications

Aflas TFE/P (tetrafluoroethylene/propylene copolymer) materials are typically used in chemical processing, oilfield, pulp and paper mills, and other industrial environments that require broad chemical compatibility beyond the capabilities of standard fluorocarbon elastomers. Parker Aflas TFE/P elastomer applications include O-rings used in fluid handling systems, flow controls, pipeline delivery systems, mechanical seals, power generators, compressors and downhole drilling systems.

### Chemical Compatibility

V1041-85 is **recommended** for a wide range of chemicals including:

Concentrated bases	Hydraulic fluids
Sour (H <sub>2</sub> S) oil and gas	Bleaches
Steam/hot water	Acids
Steam/oil mixtures	Coolants
Phosphate esters	Oxidizing agents
Amines	Ozone/weathering
Drilling muds	Alcohols
Engine oils	Insecticides, herbicides
Pulp and paper liquors	Brake fluids
Power steering fluids	Transmission fluids

V1041-85 is **not recommended** for use in:

Aromatic fuels	Non-polar solvents
Ketones	Acetic acid
Carbon tetrachloride	Organic acetates
Ethers	



### Key Features

- Exhibits compatibility with concentrated bases (such as NaOH)
- Performs in temperatures up to 232°C (450°F)
- Exhibits excellent resistance to explosive decompression and extrusion
- Resists wider range of fluid chemistries and additive packages than standard fluorocarbon seal materials
- Provides improved chemical compatibility with sour (H<sub>2</sub>S) gas and oil (over standard fluorocarbon seal materials)
- Meets long-term sealing service requirements in applications where high temperatures and harsh chemicals are present

Aflas is a trademark of Asahi Glass.

Copyright © 2002, Parker Hannifin Corporation, Cleveland, OH. All Rights Reserved.

Parker Hannifin Corporation  
O-Ring Division  
2360 Palumbo Drive, Lexington, KY 40509  
Phone:(859) 269-2351 Fax:(859) 335-5128  
www.parkerorings.com

**Build With the Best!**  
QS 9000/ISO 9001/AS 9000  
Certified

**Parker** Seals

## Parker Compounds

## V1041-85

### Typical Physical Properties (Platens)

Hardness, Shore A, pts.	86
Tensile strength, psi	2864
Elongation, %	150
Modulus @ 50% elongation	963
Modulus @ 100% elongation	2074
Specific gravity	1.54

### Fluid Immersion, ASTM #3 Oil, (Platens)

#### 70 hrs @ 135°C (275°F)

Hardness change, pts.	-9
Tensile change, %	-14.7
Elongation change, %	+13.3
Volume change, %	+13.7

### Fluid Immersion, NACE A 5%/Water 95% (Platens)

#### 168 hrs @ 100°C (212°F)

Hardness change, pts.	-3
Tensile change, %	-14.0
Elongation change, %	+85.0
Modulus change, %	-49.0
Volume change, %	+12.5

### Compression set (2-214 O-rings)

#### 22 hrs @ 177°C (350°F)

% of original deflection	24.3
--------------------------	------

### Compression set (2-214 O-rings)

#### 70 hrs @ 177°C (350°F)

% of original deflection	34.3
--------------------------	------

### Compression Set (2-214 O-rings)

#### 168 hrs @ 204°C (400°F)

% of original deflection	50.0
--------------------------	------

Unless otherwise noted, these are test values from a limited number of samples and should not be used for establishing specific limitations.

04/02 2C-CE

Parker Hannifin Corporation  
O-Ring Division  
2360 Palumbo Drive, Lexington, KY 40509  
Phone:(859) 269-2351 Fax:(859) 335-5128  
www.parkerorings.com

**Build With the Best!**  
QS 9000/ISO 9001/AS 9000  
Certified

