



## **MATERIAL REPORT**

**TITLE:** Parker Compound KA453-80

**PURPOSE:** To provide documentation to the specification as well as provide a general profile of this material.

**CONCLUSION:** This compound passes ASTM D2000 specification  
M4DH817 A26 B36 EO16 EO36 Z1 Z2  
Z1= 125% min. elongation  
Z2= compression set 70h at 150C  
Z3= TR-10 -23C or colder

**Recommended Temperature Range:** -25°F to 300°F

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## REPORT DATA

|                                         |                          |                |
|-----------------------------------------|--------------------------|----------------|
| ASTM D2000                              | M4DH817A26               | KA453-80       |
| <u>ORIGINAL PHYSICALS</u>               | <u>B36EO16EO36Z1Z2Z3</u> | <u>Results</u> |
| Hardness                                | 80 ± 5                   | 84             |
| Tensile Strength, MPa, min.             | 17                       | 19.6           |
| Elongation, %, min. <b>(Z1)</b>         | 125                      | 187            |
| Specific Gravity                        | 1.26± .02                | 1.28           |
| A26 HEAT AGE                            |                          |                |
| <u>70 HRS. @ 150°C (302°F)</u>          |                          |                |
| Hardness Change, %                      | +10                      | +9             |
| Tensile Change, %                       | - 15                     | +19            |
| Elongation, %                           | - 25                     | -20            |
| B36 COMPRESSION SET,                    |                          |                |
| <u>22 HRS. @ 150°C (302°F)</u>          |                          |                |
| % of Original Deflection                | 35                       | 15             |
| <b>(Z2)</b> COMPRESSION SET             |                          |                |
| <u>70 HRS. @ 150°C (302°F)</u>          |                          |                |
| % of Original Deflection                | 30                       | 21             |
| EO16 FLUID IMMERSION                    |                          |                |
| ASTM #1 OIL                             |                          |                |
| <u>70 HRS @ 150°C (302°F)</u>           |                          |                |
| Hardness, pts (Chg, pts)                | -5 to +10                | +4             |
| Tensile Strength, psi (Chg %)           | -20 max                  | -4             |
| Elongation Decrease, (Chg %)            | -30 max                  | -11            |
| Volume Change, %                        | -10 to +5                | -6.7           |
| EO36 FLUID IMMERSION                    |                          |                |
| ASTM #3 OIL                             |                          |                |
| <u>70 HRS @ 150°C (302°F)</u>           |                          |                |
| Hardness, pts (Chg, pts)                | -15 max                  | -2             |
| Tensile Strength, psi (Chg %)           | -40 max                  | -11            |
| Elongation Decrease, (Chg %)            | -30 max                  | -22            |
| Volume Change, %                        | +25 max                  | +3.3           |
| <b>(Z3)</b> <u>LOW TEMP. RESISTANCE</u> |                          |                |
| TR-10, °C min                           | -23                      | -26            |