

# Material Properties

## Low Density EPDM (E70LD)

### Material code: 305

The Low Density EPDM is almost always used in phosphate ester type hydraulic fluids.

**NOTE** - All testing done on AS568-214 size O-rings

<b>Original Properties</b>	<b>NAS1613 Rev 6</b>	<b>Typical Values</b>
Shore M Durometer, ASTM D2240	80 ±5	82
Tensile Strength, psi, ASTM D1414	1400 min.	2800
Ultimate Elongation, %, ASTM D1414	125 min.	155
Modulus at 100% Elongation, psi, ASTM D1414	800 min.	1390
Specific Gravity, ASTM D297	As determined	1.20
<b>High Temperature Air Oven Age, ASTM D573, 70 hrs. at 300°F</b>		
Hardness change, Shore M, ASTM D2240	+10max.	+3
% Tensile Strength change, ASTM D412 Die C	-25 max.	+7.4
% Elongation change, ASTM D412 Die C	-10 max.	-1.7
<b>Low Temperature Retraction, ASTM D1329, 75% Strain</b>		
As Received, TR-10	-50 or colder	-67
TR-70	-18 or colder	-22
Fluid Soaked in Skydrol 500 B-4 for 70 hrs. at 160°F, TR-10, °F	-52 or colder	-62
Fluid Soaked in Skydrol 500 B-4 for 70 hrs. at 160°F, TR-70, °F	-3 or colder	-15
Fluid Soaked in Chevron Hyjet IV-A+ for 70 hrs. at 160°F, TR-10, °F	-52 or colder	-58
Fluid Soaked in Chevron Hyjet IV-A+ for 70 hrs. at 160°F, TR-70, °F	-3 or colder	-18
Fluid Soaked in Skydrol LD-4 for 70 hrs. at 160°F, TR-10, °F	-52 or colder	-59
Fluid Soaked in Skydrol LD-4 for 70 hrs. at 160°F, TR-70, °F	-3 or colder	-19
Fluid Soaked in Skydrol 5 for 70 hrs. at 160°F, TR-10, °F	-52 or colder	-60
Fluid Soaked in Skydrol 5 for 70 hrs. at 160°F, TR-70, °F	-3 or colder	-19
Fluid Soaked in Skydrol PE5 for 70 hrs. at 160°F, TR-10, °F	-52 or colder	-59
Fluid Soaked in Skydrol PE5 for 70 hrs. at 160°F, TR-70, °F	-3 or colder	-18
Fluid Soaked in Chevron Hyjet V for 70 hrs. at 160°F, TR-10, °F	-52 or colder	-59
Fluid Soaked in Chevron Hyjet V for 70 hrs. at 160°F, TR-70, °F	-3 or colder	-19

**Note:** Property values should be interpreted as typical rather than minimum value. All technical information and recommendations are presented in good faith, and based upon laboratory and real-world tests believe to be reliable and practical. However, K.C. Seals, Inc. cannot guarantee the accuracy or completeness of this information, and it is the customers' responsibility to determine product suitability to any given application.

