

### Basic Rubber Boot Material Data Comparison

**Neoprene** is the common brand name for Polychloroprene (technical abbreviation **CR**).

**Hypalon** is the common brand name for Chlorosulfonated Polyethylene (**CSM**).

**PUR HMD** is an advanced polyurethane quality optimized to be hydrolyse resistant, microbe resistant, low temperature resistant and to take dynamic stresses in outdoor use.

We have outlined the main property differences

	ASTM Norm	Unit	CR black	CR colored	CSM black	CSM colored	PUR HMD black	PUR HMD colored
<b>Properties</b>								
Density	D 1505	[g/cm <sup>3</sup> ]	1,45	1,45	1,40	1,40	1,10	1,10
<b>Tensile Strength</b>	<b>D 412</b>	<b>PSI</b>	<b>2250</b>	<b>2250</b>	<b>3300</b>	<b>3300</b>	<b>2100</b>	<b>2100</b>
Ultimate Elongation	D 412	Min %	350	350	400	400	600	600
Ozone 100 ppm	D 1149	20% strain 100°F/100 h	No cracks	No cracks	No cracks	No cracks	No cracks	No cracks
Aging 70 hrs at 70°C	D 573	Hardness Change	+3	+3	+3	+3	+4	+4
Aging 70 hrs at 70°C	D 573	Tens Streng Change	-15%	-15%	+10%	+10%	-10%	-10%
Aging 70 hrs at 70°C	D 573	Elongation Change	-20%	-20%	-10%	-10%	-15%	-15%
Shore hardness	D 2240	[Shore A]	60+/- 5	60+/- 5	65+/-5	65+/-5	60+/-5	60+/-5
Compression Set	D 395	22hrs 212°F	30%	30%	35%	35%	35%	35%
<b>Other Properties and Resistances</b>								
<b>Ozone</b>			<b>Good</b>	<b>Good</b>	<b>Good</b>	<b>Good</b>	<b>Excell.</b>	<b>Excell.</b>
Oils			Fair	Fair	Good	Good	Good	Good
Solvents			Fair	Fair	Good	Good	Fair	Fair
Dilute Acids & Bases			Good	Good	Good	Good	Fair	Fair
Abrasion Resistance			Excell.	Excell.	Excell.	Excell.	Excell.	Excell.
<b>Temperature Range</b>		<b>°C</b>	<b>-20/+90</b>	<b>-20/+90</b>	<b>-60+200</b>	<b>-60+200</b>	<b>-60/+80</b>	<b>-60/+80</b>
<b>Weather Resistance</b>			<b>Good</b>	<b>Poor</b>	<b>Good</b>	<b>Good</b>	<b>Excell.</b>	<b>Good</b>
Wear Resistance			Good	Good	Good	Good	Excell.	Excell.