

Product Data Sheet

# SUPRENE<sup>®</sup> 6075WF



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SUPRENE EPDM 6075WF is a non-aromatic oil extended 'friable bale' ENB type grade which contains 75phr of non-staining paraffinic oil.

SUPRENE EPDM 6075WF is possible to load it with high concentration of fillers etc. When blended with non-oil extended SUPRENE EPDM grade, the SUPRENE EPDM 6075WF improves the properties and processability (at mixing and extruding) of the non-oil extended grade and it has good physical properties at the low temperature. It can be formulated to make products of lower hardness. Its blend with diene-type rubber gives excellent physical properties.

SUPRENE EPDM 6075WF is mainly used in automotive parts such as window seal, hose, and various industrial parts.

## Raw Polymer Properties

	Test Method	Unit	Min.	Max.	Typical Value
Mooney Viscosity, (ML 1+4, 125°C unmilled)	ASTM D1646	-	46	54	50
Ethylene Content	ASTM D3900	wt%	58	62	60
ENB Content	ASTM D6047	wt%	4.2	5.2	4.7
Oil Content	-	phr	72	78	75
Volatile Matter	ASTM D5668	wt%	-	0.8	-
Ash	ASTM D5667	wt%	-	0.15	-
Physical Form, (kg/bale)	-	-	-	-	Friable Bale (25kg/bale)

\* Ethylene Content + Propylene Content = 100%



## SUPRENE<sup>®</sup> 6075WF

### Typical Properties

Properties	Test Method	S6075WF
Mooney Viscosity ML 1+4 @ 125°C	ASTM D1646	50.0
Ethylene Content, wt%	ASTM D3900	60.0
ENB Content, wt%	ASTM D6047	4.7

### Guide Formulation

	S6075WF
S6075WF	175.0
Silica	15.0
W-1900	10.0
CaCO <sub>3</sub>	90.0
ZnO	5.0
PEG-4000	4.0
Stearic Acid	2.0
SDA-21G	4.0
TiO <sub>2</sub>	4.0
MBT(M)	0.5
MBTS(DM)	0.5
TMTD(TT)	0.5
CBS(CZ)	0.5
ZnMDC(PZ)	0.4
Sulfur	1.4
<b>Total</b>	<b>312.8</b>

\* Unit: phr



Properties	Test Method	S6075WF
Compound Mooney Viscosity ML 1+4 @ 100°C	ASTM D1646	58.9
Pre-vulcanization characteristics Large Rotor at 125°C	ASTM D1646	
Minimum Viscosity (Vm)		39.6
t'5 (min)		11.35
t'35 (min)		18.98
Δt30		7.63
Rotorless Cure Meter (MDR, 160°C/15min)	ASTM D5289	
M <sub>L</sub> (lb·in)		2.1
M <sub>H</sub> (lb·in)		12.8
t <sub>S2</sub> (min)		2.41
t <sub>C50</sub> (min)		3.37
t <sub>C90</sub> (min)		8.25

**Cured at 160°C for 10 min**

Properties	Test Method	S6075WF
Specific Gravity	ASTM D792	1.16
Hardness (shore A)	ASTM D2240	43
Tensile Strength (kgf/cm <sup>2</sup> )	ASTM D412	32
Elongation (%)	ASTM D412	539
100% Modulus (kgf/cm <sup>2</sup> )	ASTM D412	7.6
Tear Strength (kgf/cm)	ASTM D624	12.3



### Heat Resistance

Properties	Test Method	S6075WF
Hardness (Change Point)	ASTM D2240	+2
Tensile Strength (Change %)	ASTM D412	-22
Elongation (Change %)	ASTM D412	-31

\* After 72 hours oven aging at 120 °C per ASTM D573

### Compression Set

Properties	Test Method	S6075WF
Compression Set (%)	ASTM D395 (Method B)	
After 72 hours at 100°C		21.4
After 72 hours at -50°C		53.8

