

Compounds for straight and corrugated multilayer fuel lines – liquid and vapor lines

Properties	Test method	Unit	nonconductive multi-layer tubes					conductive multi-layer tubes					
			MLT 1000.1	MLT 2030.1	MLT 7000.1	MLT 4300.1	MLT 4500.1	MLT 140.2	MLT 2040.2	MLT 4540.1	MLT 7040.1	MLT 7440.2	
Type of barrier layer			mod. PBT	mod. PVDF	EFEP	EVOH	EVOH	none	mod. PVDF	EVOH	EFEP	EVOH + EFEP	
Stress at yield	ISO 527-1/-2	MPa	27	28	23	31	29	25	29	32	23	29	
Strain at break		%	>150	>150	>150	>150	>150	>150	>150	>150	>150	>150	>150
Burst pressure test	23 °C 115 °C	SAE J2260	bar	70	75	62	78	86	65	75	92	64	85
				25	26	18	24	24	20	26	25	20	26
Cold impact test	-40 °C	SAE J2260	N	N	N	N	N	N	N	N	N	N	
	-40 °C	DIN 73378	N	N	N	N	N	N	N	N	N	N	
Surface resistivity	SAE J2260	Ω/sq						<10 ⁶	<10 ⁶	<10 ⁶	<10 ⁶	10 ⁶	
Length change after FAM B fuel contact, 60 °C	internal	max. value*	%	3.0	2.4	1.6	2.1	2.0	4.3	2.5	2.0	1.6	<2.2
			after 1000 h	%	1.6	1.0	0.6	1.1	1.0	2.5	1.0	0.9	0.6

N = no break

*Thermal length change of about 0.5–0.6% included