

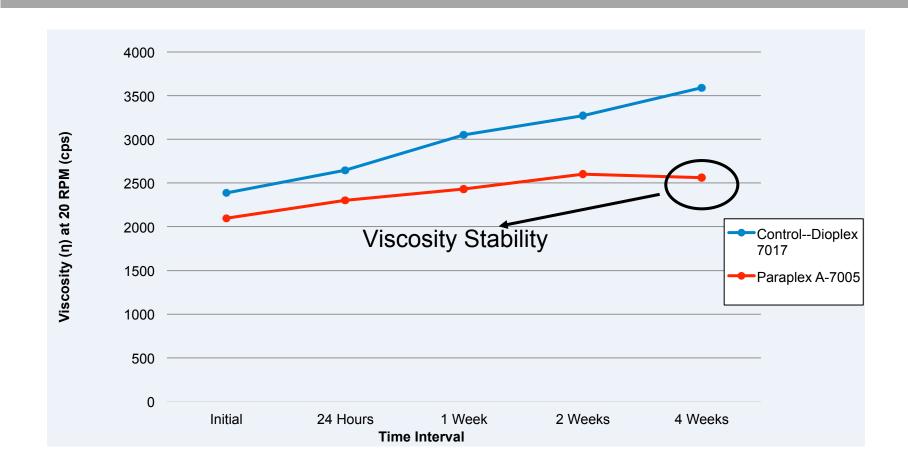
Plasticizer/Viscosity Stabilizer-Depressant

- A new ester for PVC plastisol applications
- Acts as a standard ester plasticizer and provides viscosity reduction and stabilization for PVC plastisols
- Will allow PVC compounders to remove viscosity depressants/stabilizers from their formula
- Performance properties equal or better to a standard plastisol plasticizer

Recipe

Material	Parts (PHR, WT.)		
Material	Control—Dioplex® 7017	Paraplex® A-7005	
Geon 121A PVC resin	100.00	100.00	
Therm-Chek 904 stabilizer	3.00	3.00	
Paraplex® G-62 ESO	10.00	10.00	
Dioplex® 7017	100.00	-	
Paraplex® A-7005		100.00	
Total:	213.00	213.00	

Brookfield Viscosities at 25°C



Original Physical Properties

	Control— Dioplex [®] 7017	Paraplex [®] A-7005
Stress at 100% Elongation, MPa Psi	3.0 435	3.0 435
Stress at 200% Elongation, Mpa	5.2	5.2
Stress at 300% Elongation, Mpa	7.3	7.2
Tensile Ultimate at Break, MPa psi	9.7 1405	8.6 1250
Elongation at Break, %	445	400
Hardness Duro A, pts.	52	51
Specific Gravity g/mL	1.190	1.186
T_g by DSC, C	-50.8	-49.6
Brittle Point, °C	-49	-48
Gel Point, C	121	125

Aging and Immersion Effects

		Control-Dioplex® 7017	Paraplex® A-7005
Air-Oven Aging			
Hardness Duro A (pts.)		60	56
Hardness Change (pts.)		8	5
Weight Change (%)		-10.5	-10.0
High-Humidity Aging			
24 h	Weight Change (%)	-4.8	-5.0
	Dry Out Weight Change (%)	-11.0	-9.7
7 d	Weight Change (%)	-18.6	-23.3
	Dry Out Weight Change (%)	-37.6	-28.0
Hexane Immersion			
Weight Change (%)		0.7	0.3
Dry Out Weight Change (%)		-9.3	-10.3
Cottonseed Oil Immersion			
Weight Change (%)		-9.9	-10.8
Distilled Water Immersion			
Weight Change (%)		2.5	3.0
Dry Out Weight Change (%)		-6.9	-6.7