



## ValAro Aromatic Extract Oils Typical Properties

ValAro Aromatic Extracts are high boiling, aromatic oils suitable for use in a wide variety of process oil applications. ValAro extracts are ASTM Type 101 and 102 rubber process oil with typical total aromatics above 80%. This high level of aromatic content, low aniline point, and high flash point provides the rubber mixer several benefits:

- 1.) Excellent oil take up time
- 2.) Shorter mixing cycles
- 3.) Excellent carbon black dispersion
- 4.) Minimum oil losses in the curing process
- 5.) Increased oil loading without oil bleed out

ValAro extracts are recommended for use with Styrene Butadiene, Neoprene and Cis-Polybutadiene.

METHOD	TEST	ValAro 100	ValAro 130A	ValAro 45
Visual	Appearance	Dark Colored Liquid	Dark Colored Liquid	Dark Colored Liquid
D445	Viscosity @ 100°C, cSt	19.3	26.7	5.2
D445	Viscosity @ 40°C, cSt			44.8
D2161	Viscosity @ 210°F, SUS	98.1	132.0	43.4
D4052	API Gravity	11.9	9.4	12.8
D4052	Specific Gravity @ 15.6°C KG/DM3	0.9869	1.0045	0.9806
D97	Pour Point, °C	26	24	0
D92	Flash, COC, °C	260	260	209
D4294	Sulfur, Wt. %	4.5	5.0	
D611	Aniline Pt., °C	50.4	43.5	28.3
D664	Neutralization Number	0.23	0.15	0.38
D2501	VGC	0.92	0.94	0.94
D1747	Refractive Index at 20°C	1.5565	1.5686	1.5528
D2159	Refractive Intercept	1.066	1.069	1.065
D972	Evaporation Loss, Wt.% 22 Hrs. @ 225 °F	0.05	0.15	1.25
V1414	Extract in Solvent, ppm	<100	<100	<100
D4928	Water Content - Karl Fisher, ppm	<300	<300	<300
D2007	Clay-Gel Analysis			
	Asphaltenes, Wt. %	<0.1	<0.1	<0.1
	Polars, Wt. %	7.8	9.8	3.8
	Aromatics, Wt. %	74.1	77.1	80.5
	Saturates, Wt. %	18.0	13.0	15.7
D2140	Carbon Type			
	Ca	36	40	37
	Cn	25	24	30
	Cp	39	36	33

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### VALERO MARKETING AND SUPPLY CO.

800 Billingsport Road  
Paulsboro, N.J. 08066-1036  
Phone: (866) 825-7271 Fax: (866) 825-7272  
www.valero.com