General Physical Properties of the Aroclor® Chlorinated Compounds

Form	Aroclor 1221 Colorless mobile oil	Aroclor 1232 Practically colorless mobile oil	Aroclor 1242 Practically colorless mobile oil	Aroclor 1248 Colorless to light yellow-green, clear, mobile oil	Aroclor 1254 Light yellow viscous oil	Aroclor 1260 Light yellow soft sticky resin	Aroclor 1262 Light yellow sticky clear resin	Aroclor 1268 White to off-white powder	Aroclor 4465 Light yellow, clear, brittle resin	Aroclor 5442 Yellow trans-parent sticky resin	Aroclor 5460 Clear, yellow-to-amber, brittle resin	Aroclor 5565 Black, opaque, brittle resin
Color	50 Max. (APHA)	50 Max. (APHA)	50 Max. (APHA)	50 Max. (APHA)	50 Max. (APHA)	50 max. (APHA)	50 Max (APHA	3.5 Max NPA-I maximum	2 Max. NPA I maximum	7 Max NPA I maximum	7 Max NPA I maximum	—
Acidity — Maximum (Mgm. KOH per Gm.)	0.014	0.014	0.010	0.010	0.010	0.014	0.014	0.05	0.05	0.05	0.05	1.4
Average Coefficient of Expansion cc. cc. °C	0.00071 (15°-99°C)	0.00073 (25°-100°C)	0.00068 (25°-65°C)	0.00070 (25°-65°C)	0.00066 (25°-65°C)	0.00067 (20°-100°C)	0.00064 (25°-65°C)	0.00067 (20°-100°C)	0.00066 (25°-65°C)	0.00073 (25°-99°C)	0.00073 (25°-124°C)	0.00066 (25°-65°C)
Typical Density Specific Gravity Pounds per gallon — 25°C(77°F)	1.182-1.192 (25°/15.5°C) 9.85	1.270-1.280 (25° 15.5°C) 10.55	1.381-1.392 (25° 15.5°C) 11.50	1.405-1.415 (55° 15.5°C) 12.04	1.495-1.505 (65° 15.5°C) 12.82	1.555-1.566 (90° 15.5°C) 13.56	1.572-1.583 (90° 15.5°C) 13.72	1.804-1.814 (25° 25°C) 15.09	1.670 (25° 25°C) 13.91	1.470 (25° 25°C) 12.24	1.670 (25° 25°C) 13.91	1.734 (25°/25°C) 14.44
[redacted] Range — ASTM D-20 (Mod.) Corr. °C	275°-320°	290°-325°	325°-366°	340°-375°	365°-390°	385°-420°	395°-425°	435°-450°	230°-320° at 4 mm. Hg	215°-300° at 4 mm. Hg	280°-335° at 5 mm. Hg	—
Evaporation Loss — % — ASTM D-6 Mod. 163°C 5 hrs. 100°C 6 hrs.	— 1.0 to 1.5	— 1.0 to 1.5	3.0 to 3.6 0.0 to 0.4	3.0 to 4.0 0.0 to 0.3	1.1 to 1.3 0.0 to 0.2	0.5 to 0.8 0.0 to 0.1	0.5 to 0.6 0.0 to 0.1	0.1 to 0.7 0.0 to 0.06	0.2 to 0.3 0.0 to 0.09	0.2 0.01	0.03 1.5 to 1.7 (at 260° 5 hrs.)	0.2 to 0.3 —
Flash Point — Cleveland Open Cup °C °F	141°-150° 286°-302°	152°-154° 305°-310°	176°-180° 349°-356°	193°-196° 379°-384°	None	None	None	None	None	247° 477°	None	None
Fire Point — Cleveland Open Cup °C °F	176° 349°	238° 460°	None*	None	None	None	None	None	None	> 350° > 662°	None	None
Pour Point — ASTM D-97 °C	Crystals at 1°C	−35.5°	−19°	−7°	10°	31°	35°-39°	—	—	46°	—	—
°F	Crystals at 34°F	−32°	2°	19.4°	50°	88°	99°	—	—	115°	—	—
Softening Point — ASTM E-28 °C	—	—	—	—	—	—	—	150° to 170° (fluid at)	60° to 66°	46° to 52°	98° to 105.5°	66° to 72°
°F	—	—	—	—	—	—	—	302° to 338° (fluid at)	140° to 151°	115° to 125°	208° to 222°	149° to 162°
Refractive Index — D-line — 20°C	1.617-1.618	1.620-1.622	1.627-1.629	1.630-1.631	1.639-1.641	1.647-1.649	1.650-1.6517	—	1.664-1.667	—	1.660-1.665	—
Viscosity — Saybolt Universal 210°F (98.9°C) Sec. (ASTM — D-88)	30-31	31-32	34-35	36-37	44-48	72-78	85-109	—	90-150 (210°F to 100°C)	300-400	—	—
100°F (54.4°C)	35-37	39-41	49-56	73-80	260-340	3200-7500	6200-800 (210°F to 210°C)	—	—	—	—	—
130°F (37.8°C)	38-41	44-51	82-92	185-240	1800-2500	—	—	—	—	—	—	—
[redacted] Oral LD50 — rats (approx.)	3,650*	4,470*	3650*	11,000*	10,000*	10,000*	13,000*	13,000*	10,000*	10,000*	10,200*	6,310**
Skin Absorption — rabbits	> 2000*	> 2000*	> 794*	> 794*	> 1260*	> 1260*	> 1260*	> 2000*	> 2000*	> 2000*	> 1260*	> 2000**
Acute Dermal	< 2150*	< 2150*	< 1260*	< 1260*	< 2000*	< 2000*	< 2000*	< 2150*	< 2150*	< 2150*	—	< 3150**

* Rat, 1 hr. exposure, 1 g/m³ in air / 32% in corn oil

** 24 hr. soln. in corn oil

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