



Audio Ferrofluids

	Description	Applications	Carrier Oil Type	Fluid Number	Saturation Magnetization		Viscosity	
					gauss	mT	cp	mPa s
APG 300 SERIES	300 Series ferrofluids are primarily used for heat transfer. They can be exposed to temperature transients of up to 200°C, but to ensure longer life, operation above 110°C for extended periods should be minimized. APG 300 Series ferrofluids are durable under high humidity and in contact with water.	Tweeters, Midranges, Compression Drivers	Synthetic Hydrocarbon	APG 311	100	10	70	70
				APG 312	150	15	90	90
				APG 313	200	20	125	125
				APG 314	250	25	150	150
APG 800 SERIES	800 Series ferrofluids are primarily used for damping and heat transfer. The fluids can be exposed to temperature transients of up to 200°C, but to ensure longer life, operation above 110°C for extended periods should be minimized. They are durable under high humidity and in contact with water.	Tweeters, Midranges	Synthetic Hydrocarbon	APG 814.7	100	10	700	700
				APG 815	100	10	1000	1000
				APG 817	100	10	2000	2000
				APG 817.3	100	10	3000	3000
				APG 820	100	10	4000	4000
				APG 821	150	15	200	200
				APG 832	200	20	200	200
				APG 833	200	20	500	500
				APG 834	200	20	1000	1000
				APG 836	200	20	2000	2000
				APG 840	200	20	4000	4000
APG 900 SERIES	900 Series ferrofluids are suitable for heat transfer and damping. Although the fluids can withstand temperature transients of up to 200°C, to ensure longer life, operation above 115°C for extended periods should be minimized. They are durable under high humidity and in contact with water.	Tweeters, Midranges, Communication Speakers	Synthetic Hydrocarbon	APG 841	200	20	5000	5000
				APG 915	100	10	1000	1000
				APG 916	100	10	1500	1500
				APG 921	150	15	200	200
				APG 933	200	20	500	500
				APG 934	200	20	1000	1000
				APG 936	200	20	2000	2000
				APG 940	200	20	4000	4000
APG 2100 SERIES	2100 Series ferrofluids are suitable for heat transfer and damping in moderate to high temperature environments. Although the fluids can withstand temperature transients of up to 200°C, to ensure long term reliability, operation above 125°C for extended periods should be minimized. APG 2100 series ferrofluids are durable under high humidity and in contact with water.	Tweeters, Midranges, Compression Drivers	Synthetic Hydrocarbon	APG 941	200	20	5000	5000
				APG 2112	100	10	200	200
				APG 2114	100	10	500	500
				APG 2115	100	10	1000	1000
				APG 2116	100	10	1500	1500
				APG 2117	100	10	2000	2000
				APG 2117.3	100	10	3000	3000
				APG 2120	100	10	4000	4000
				APG 2118.6	100	10	6000	6000
				APG 2133	200	20	500	500
				APG 2134	200	20	1000	1000
				APG 2135	200	20	1500	1500
APG 2136	200	20	2000	2000				
APG 2136.3	200	20	3000	3000				

APG E SERIES	<p>E-Series ferrofluids are based on the same chemistry as the APG 900 series ferrofluids so their properties are similar. However, the E-series fluids have been tailored to meet specific requirements of a loudspeaker by altering their colloid stability or magnetization and viscosity values. These ferrofluids cover a broad range of applications due to their customized nature. An "E" type ferrofluid can be used for heat transfer alone or for heat transfer and damping. The transient temperature capacity of these fluids is 200°C, however, to ensure long term reliability, operation above 115°C for extended periods should be minimized. They are durable under high humidity and in contact with water.</p>	<p>Tweeters, Midranges, Compression Drivers</p>	<p>Synthetic Hydrocarbon</p>	APG 2140	200	20	4000	4000
				APG 2127.6	200	20	6000	6000
				APG E15	250	25	750	750
				APG E18	125	12.5	90	90
				APG E25	200	20	1000	1000
				APG E26	250	25	300	300
APG O SERIES	<p>O-Series ferrofluids can be used either for heat transfer alone or for both heat transfer and damping. The transient temperature capacity of these fluids is 225°C, however, to ensure longer life, operation above 125°C for extended periods should be minimized. APG "O" Series ferrofluids are durable under high humidity. Tolerance to extended contact with water is moderate.</p>	<p>Tweeters, Midrange, Woofers, Full Ranges</p>	<p>Synthetic Ester</p>	APG E32	300	30	1200	1200
				APG O17	300	30	350	350
				APG O27n	325	32.5	175	175
				APG O47n	150	15	65	65
				APG O57	150	15	1500	1500
				APG O67n	375	37.5	350	350
				APG O77n	250	25	115	115
APG S SERIES	<p>S-Series ferrofluids are based on the same chemistry as the "O" Series ferrofluids and thus their properties are similar. When an "O" fluid is tailored to meet specific requirements of a driver by altering its magnetization and viscosity values, it is called an "S" type ferrofluid. The "S" ferrofluids cover a broad range of applications because of their customized nature.</p>	<p>Tweeters, Midranges, Woofers, Compression Drivers, Full Ranges</p>	<p>Synthetic Ester</p>	APG O87	250	25	750	750
				APG S10n	400	40	300	300
				APG S11n	200	20	85	85
				APG S12n	375	37.5	250	250
				APG S14	150	15	200	200
				APG S15n	150	15	75	75
				APG S16n	250	25	400	400
				APG S17n	100	10	55	55
				APG S18	350	35	375	375
				APG S21	200	20	500	500
				APG S32	200	20	250	250
				APG S38n	200	20	135	135
APG L SERIES	<p>L-Series ferrofluids are used for both heat transfer and damping applications in drivers with very high magnetic fields in the air gap. The fluids have exceptionally high colloid stability. The transient temperature capability of the fluid is 175°C, however, to ensure longer life, operation above 100°C for extended periods should be minimized. APG "L" Series ferrofluids are durable under high humidity. Tolerance to extended contact with water is moderate.</p>	<p>Tweeters, Supertweeters</p>	<p>Synthetic Ester</p>	APG S51	350	35	500	500
				APG L11	200	20	200	200
				APG L12	200	20	500	500
				APG L13	200	20	1000	1000
				APG L14	200	20	2000	2000
				APG L17	100	10	60	60
APG J SERIES	<p>J-Series ferrofluids are used for heat transfer and voice coil centering. The transient temperature capacity of these fluids is 175°C, however, to ensure longer life, operation above 80°C for extended durations should be minimized. APG "J" Series ferrofluids are durable under high humidity. Tolerance to extended contact with water is moderate.</p>	<p>Alarm Type and Headset Drivers</p>	<p>Synthetic Ester</p>	APG L19	200	20	1500	1500
				APGJ10	250	25	70	70
				APGJ12	200	20	40	40
				APGJ14	150	15	30	30
				APGJ16	100	10	25	25

Note: All viscosities given at 27°C.

Note: This table contains only our most popular ferrofluids. Many other standard and custom fluids are available. Please call for details.