

Long Chain Chlorianted Alkanes, C<sub>20</sub><sup>+</sup>

Product	Color, Typical Gardner (1933 Std.)	Chlorine Content % by Wt.	Specific Gravity @ 25°C	Viscosity, Poise @ 77°F	Viscosity, SUS @ 210°F	Density, Pounds per Gallon	Volatility % Loss, 24 hrs. @ 100°C	Stability JQD % HCl, 4 hrs. @ 175°C	Flash Point ° F (Cleveland Open Cup)
Chloroflo 42	2	40.0	1.120	6.5	85	9.3	0.5	0.20	>450
Paroil 140	2	43.1	1.980	37.0	150	9.9	0.8	0.15	>450
Paroil 142	2-3	45.5	1.221	85.0	200	10.2	0.8	0.30	>450
Paroil 142 LV	2-3	46.1	1.201	49.0	170	10.0	0.8	0.16	>450
Paroil 145	2-3	47.3	1.235	118.0	230	10.3	0.8	0.20	>450
Paroil 150 LV	1	51.0	1.275	180.0	245	10.6	0.8	0.45	>450
Paroil 150	3	51.0	1.286	375.0	444	10.7	1.0	0.50	>450
Chlorowax 40 <sup>®</sup>	2	43.7	1.175	27.0	136	9.8	0.8	0.20	>450
Chlorowax 41SW	2	42.7	1.173	24.0	125	9.8	0.5	0.30	>450
Chlorowax 50 <sup>®</sup>	3	48.0	1.230	116.0	230	10.2	0.8	0.20	>450

Medium Chain Chlorinated Alkanes, C<sub>14</sub>-C<sub>16</sub>

Paroil 10-NR	<1	40.1	1.102	0.4	37	9.2	0.8	0.2	>350
Paroil 45	1	47.2	1.203	1.9	48	10.0	1.5	0.2	>400
Paroil 152	1	51.9	1.270	15.0	69	10.6	0.9	0.3	>450
Paroil 53-NR	1.8	52.9	1.270	15.0	69	10.6	1.0	0.3	>450
Paroil 58-NR	2	59.0	1.380	300.0	176	11.5	0.5	0.3	>450
Paroil 63-NR	1	63.6	1.439	450.0	314	12.0	0.5	0.2	>450

Product	Vis @ 100°F, SUS	Vis @ 40°C, cS	Vis @ 210°F, SUS	Vis @ 100oC, cS	% Sulfur	% Active	Neut #	Flash Point, °F	Description
<b>Lard Oils and Esters – Non Staining to Copper</b>									
Base 10SE	102	21	42.5	9	10	0	8	400	Sulfurized Methyl Ester
Base 101	1100	230	125	25	10	0	6	350	Sulfurized lard oil
Maysperm 2011LV	1750	370	200	40	10.5	0	9	400	Sulfurized lard/ester
Mayco Base 1351	1775	375	175	35	10.5	0	7	400	Sulfurized lard/olefin
Maysperm 2011	3500	750	300	55	10.5	0	11	425	Sulfurized lard oil
Mayco Base 1210	5500	1150	425	85	10.5	0	12	440	Sulfurized lard oil

<b>Base 10L</b>	6100	1155	425	85	10	0	25	350	Sulfurized fatty cmpd
<b>Doverlube LCS-10</b>	257	50	59	9	10.5	0	13.6	465	Light colored sulfurized ester
<b>Doverlube SP-44</b>	17,000	3700	320	65	4.4	0	2	226	Sulfur/Phosphorus additive
<b>Lard Oils and Esters – Staining to Copper</b>									
<b>Base 12 SE</b>	110	20	40	5	13	3	4	350	Sulfurized methyl ester
<b>Mayco Base 4220</b>	650	135	80	15	18	6	1	410	Sulfurized esters
<b>Base 107</b>	1600	265	160	30	17	6	6	350	Sulfurized lard oil
<b>Base 44</b>	2800	525	175	35	14	2	170	350	Sulfurized oleic acid
<b>Mayco Base 1362</b>	2900	575	245	50	17.5	6	8	400	Sulfurized lard/olefin
<b>Sul-Perm 18</b>	3100	590	260	55	17.5	6	7	350	Sulf. Sperm oil replacement
<b>Base A-92</b>	3200	610	270	60	15.4	5	15	350	Sulfurized lard oil
<b>Mayco Base 1217LV</b>	5000	1050	335	75	17	6	10	400	Sulfurized lard/ester
<b>Base 14L</b>	9000	1700	525	120	13	3	26	350	Sulfurized fatty cmpd
<b>Mayco Base 1214-G</b>	9500	2300	650	140	16.5	6	11	420	Sulfurized lard oil
<b>Olefins – Staining to Copper</b>									
<b>Base 401</b>	300	55	35	8	39	22	5	400	Sulfurized hydrocarbon
<b>Mayco Base 1535</b>	400	90	69	11	31	20	0	360	Sulfurized hydrocarbon
<b>Mayco Base 1540</b>	500	100	70	15	38.5	27	0	360	Sulfurized hydrocarbon

#### Chlorinated Fatty Compounds

Product	Material	Color, Typical Gardner	Chlorine Content % by Wt.	Specific Gravity @ 50°C	Viscosity, SUS @ 100°F	Viscosity, SUS @ 210°F	Viscosity, Poise @ 25°C	JQD % HCl, 4 hrs. @ 175°C	Comments
<b>DA-8506XS</b>	Chlorinated Methyl Ester	1.5	33	1.123	720	65	no data	no data	Extra fortified against staining
<b>Syncheck® 1203</b>	Polymeric Ester	2	12	1.12	820	100	No data	No data	Water soluble chlorinated additive
<b>DA-8527</b>	Chlorinated Fatty Acid	3	29	1.09	1800	110	12	4	Chlorinated fatty acid

#### Phosphate Esters

Product	Vis @ 100° F, SUS	Vis @ 40° C, cS	Vis @ 210° F, SUS	Vis @ 100° C, cS	% Sulfur	% Active	Acid #	% Phos	Comments
<b>EM 706</b>	1550	300	155	30	-	-	155	5.5	PE for all MW fluids
<b>Mayphos 45</b>	100,000	21,500	1900	400	-	-	200	5.5	Excellent for metal forming

### Chlorine Alternatives

Product	Vis @ 100°F, SUS	Vis @ 40°C, cS	Vis @ 210°F, SUS	Vis @ 100°C, cS	% Sulfur	% Active	Acid #	% Phos	Comments
Doverlube NCEP	300	65	-	-	0	N/A	10	0	S&P free Vegetable oil based EP
Mayco Base CF-95	350	75	65	11	4.5	1.5	4	0	Sulfurized sulphonate
Mayco Base CF-74	550	115	95	20	2.5	0	2	0	Sulfurized sulphonate
Doverlube NCL-2	9,300	2000	N/A	N/A	0	0	125	3	Phosphorus Package
Klor Free 100	13,400	2900	1150	240	0	0	5	0	Polymeric Ester
Mayfree 133	44,000	9500	750	160	0	0	155	4	Phosamide

### Amides

Product	Vis @ 100°F, SUS	Vis @ 40°C, cS	Vis @ 210°F, SUS	Vis @ 100°C, cS	Color	Acid #	TBN	pH @ 1%	Comments
Emulamid FO-5DF	2,000	450	70	15	5.5	4	140	9.2	DIPA Fatty Amide
EM-995	1,200	200	70	15	5.5	28	144	9.5	DIPA Tall Oil Amide

### Oil Soluble Boundary Lubricants

Product	Vis @ 100oF, SUS	Vis @ 40oC, cS	Vis @ 210oF, SUS	Vis @ 100oC, cS	Acid #	Color (ASTM)	Comments
Methyl Ester 165	42	5	32	2	1	1	Methyl Esters of Vegetable Oils
Maylube E-190	43	5	32	2	1.5	0.5	Synthetic Ester with excellent wetting properties
Maylube E-101	95	20	35	5	2	0.5	Tridecyl Stearate Ester for aluminum machining
Maylube E-112	105	25	32	5	9	2.5	Neopentyl Glycol Ester for HP aluminum cutting
Prime Burning Lard Oil	195	40	55	8	1	1.5	Best for precision jobs; resistant to oxidation
EWS Lard Oil	195	40	55	8	8	2.5	Multiple uses in neat and soluble oils
No. 1 Lard Oil	195	40	55	8	30	5.5	Excellent for Metal forming
EM-600	310	60	65	5	7	2	Co-Emulsifier for soluble oils and semi-synthetics
EM-9400	400	80	70	15	25	1.5	Air-blown synthetic sperm oil replacement
EM 40	530	100	65	10	5	3	Modified Glycerol Monotallate

### Water Soluble Boundary Lubricants

Product	Vis @ 100oF, SUS	Vis @ 40oC, cS	Vis @ 210oF, SUS	Vis @ 100oC, cS	Acid	Color	% EP	Comments
Maylube S-003	300	65	N/A	N/A	20	5	-	Ester pkg. that brightens surface finish
Maylube S-830	1500	325	N/A	N/A	72	5.5	1.2 (P)	Performance booster for semi-synthetics
Lube Booster II	2300	490	N/A	N/A	65	4	-	Water Soluble Polymer
Inversol 140	7600	1600	600	125	15	3.5	-	Complexed Ester; cloud point at 140F

### Semi-Synthetic Concentrates

Product	Vis @ 100°F, SUS	Vis @ 40°C, cS	pH @ 5%	Acid #	Alkalinity	Comments
Maysol SSD-50	800	170	9.5	25	10	50/50 (product/water); Boron-free; General Purpose
Maysol HOSS	1500	325	9.4	60	12	50/50 (product/water); High Oil Content; EP-fortified

### Synthetic Coolants

Product	PH (neat)	pH @ 5%	Acid #	Alkalinity	Comments
Maysyn S-168	8.7	8.3	50	8	Ready-to-Relabel HD Machining & Grinding on Ferrous and Nonferrous
Maysyn S-122	9.7	9.3	73	17	Cut 60/40 (water/product) for medium duty machining of Ferrous alloys

### Amine Borate Rust Inhibitors

Product	Vis @ 100°F, SUS	pH @ 1%	Boron %	Acid #	TBN	Comments
Synkad 204	4400	9.4	4.1	NR	370	Improved Boramide
Synkad 202	6300	9.6	4.4	NR	420	Cost effective Boramide

### Fatty Acid Based Rust Inhibitors

Product	Vis @ 100°F, SUS	pH @ 1%	Alkalinity	Acid #	TBN	Comments
Mayco Base RP 8708	90	9.3	22	16	240	Excellent rust protection and hard water stability
Mayco Base RP 8765	176	7.8	20	185	236	Provides excellent rust protection plus lubricity
Synkad 828	215	8.7	22	155	250	DEA-free Carboxylic acid condensate

Miscellaneous

Product	Vis @ 100°F, SUS	Vis @ 40°C, cS	Vis @ 210°F, SUS	Vis @ 100°C, cS	Sulfur %	Chlorine %	Comments
<b>Milidin GX-3</b>	-	-	-	-	-	-	pH Buffer, Rec. treat level of 2.0 - 2.5%
<b>Doverflex 100</b>	800	185	21	20	0	0	ESO for stain inhibition with CL additives
<b>Mayco Base 930</b>	3800	825	150	30	9	30	Stainless steel cold heading additive
<b>Keil-Flo 150</b>	5100	1100	560	120	0.1	0	50% active pour point depressant
<b>Keil-Flo 195</b>	>50,000	>10,000	4100	885	0.1	0	95% active pour point depressant