



Pilot[®] Oils
Speciality Base Oils

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Pilot® speciality base oils are a range of high performance, straight-cut, low viscosity base oils used in a wide variety of industrial applications and formulations, ranging from speciality [lubricants](#) and [hydraulic fluids](#) to [silicone sealants](#), [metalworking fluids](#), [surface treatments](#), [textiles](#) and [water treatment](#).

The Pilot® Oil portfolio is formulator-friendly, offering options of hydro-isomerized and de-aromatized oils as well as products with critical solvency properties. Narrow boiling range materials ensure low evaporation and application-specific flash points suitable for safe use in the workplace throughout service life. Other benefits offered by the range include viscosity choice, UV and age stability, low odour and additive compatibility. Compliance with a range of FDA classes is also offered.

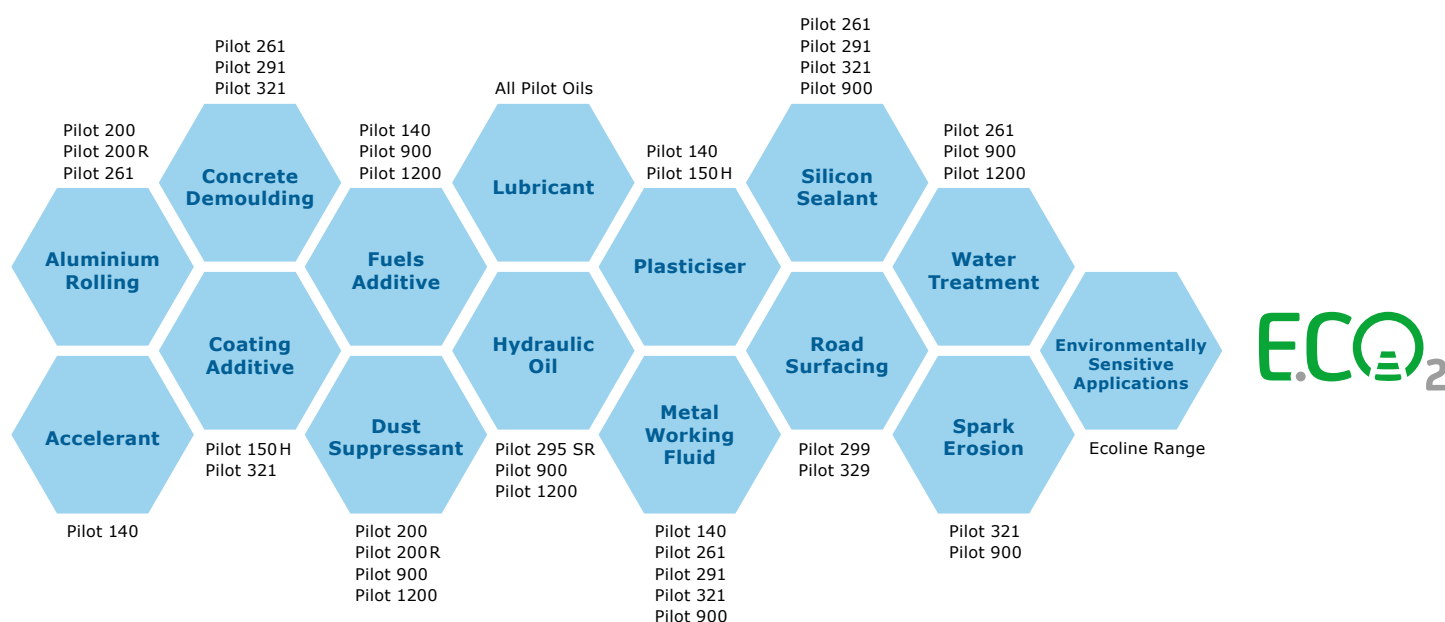
Ecoline bio-based oils have recently been developed to add even more options for formulators.

Typical Properties of Pilot® Oils

Properties	Unit	Pilot 140	Pilot 150H	Pilot 200	Pilot 200R	Pilot 261	Pilot 291	Pilot 295 SR
Viscosity	mm ² s	4.32	4.4	1.9	1.9	2.32	3.7	3.0
Density @ 15°C	g/mL	0.816	0.816	0.815	0.816	0.818	0.819	0.818
Boiling Range	°C	260-330	260-320	210-250	220-243	236-272	256-305	256-296
Flash Point	°C	120	110	80	88	100	115	118
Pour Point	°C	-14	-14	-43	-30	-31	-16	-34
Aromatics Content	% volume	5.4	4.8	0.2	0.1	<0.3	<0.5	9
FDA	178.362	C	C	B	B	C	B	C
% VOC	%	0	0	45	45	0	0	0
Group	1/2/3/4	1	1	1	1	1	1	1

Properties	Unit	Pilot 299	Pilot 321	Pilot 329	Pilot 400	Pilot 600	Pilot 900	Pilot 1200
Viscosity	mm ² s	4.8	3.9	4.3	4.3	6.0	8.5	12.0
Density @ 15°C	g/mL	0.832	0.820	0.834	0.830	0.850	0.860	0.820
Boiling Range	°C	260-293	275-320	280-325	275-320	285-335	314-340	275-465
Flash Point	°C	122	125	138	138	140	160	195
Pour Point	°C	-32	-9	-15	-36	-40	-39	-33
Aromatics Content	% volume	18	0.4	11	<0.4	<0.5	0.1	<0.1
FDA	178.362	C	C	C	B	B	B	B
% VOC	%	0	0	0	0	0	0	0
Group	1/2/3/4	1	1	1	1	1	2	3

Haltermann Carless – the reliable manufacturer and supplier of high performance, low viscosity base oils



Due to the wide range of possible uses and our extensive product range, please contact Haltermann Carless for technical advice on selecting the most appropriate product for your application.

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