

SYNTHETIC ESTERS APPLICATIONS

Market	Application	Attributes	Product	Viscosity – cSt at 40 °C	Benefits (vs. MO, VO & other synthetics)*
Automotive	Crank case oils	High stability in highly oxidative environment, high load bearing at friction points, lower deposits, elastomeric seal compatibility, lower energy consumption	Hatcol® 2938	19	Improved additive solubility and elastomeric compatibility through the modification of polarity of the base oil, improved lubricity and interaction of the base oil with metal surfaces
			Hatcol® 2330	22	
			Hatcol® 2990	31	
			Hatcol® 3169	32	
			Hatcol® 2907	40	
			Hatcol® 2362	72	
			Hatcol® 3391	80	
Automotive	2- stroke engine oils	High temperature stability, lower valve deposits, lower smoking, lower oil and energy consumption	Hatcol® 2999	80	Dramatic reduction in deposits and smoking, cut oil consumption (100:1 gas: oil ratio possible) lower cost of ownership (maintenance and downtime)
			Hatcol® 2949	83	
Industrial	Air compressor oils	High stability in highly oxidative environment, longer drain intervals, lower deposits, lower maintenance and downtime, lower energy consumption	Hatcol® 2938	19	Longer drain intervals, reduced deposits on recip valves, lower maintenance and downtime, reduced energy consumption
			Hatcol® 2901	28	
			Hatcol® 5068	68	
			Hatcol® 2922	85	
Industrial	Oven chain oils	Performance in extreme environments (up to 300 °C), low deposits on chain drives, minimal fumes and odor, lower energy and maintenance costs	Hatcol® 2372	125	Dramatic reduction in deposits, reduction in fumes and odors, cut oil consumption by up to 80 %, reduce energy consumption by up to 50 %, lower maintenance and downtime
			Hatcol® 5150	178	
			Hatcol® 2941	213	
			Hatcol® 3165	390	
Industrial	Gas turbines	Performance in extreme environments (up to 300 °C), no hot spots which cause hard deposits to form, lower energy and maintenance costs	Hatcol® 2954	24	Dramatic reduction in deposits, reduced energy and oil consumption, reduced maintenance and downtime
			Hatcol® 2960	24	
Biorenewable / biodegradable	Esters having specific natural acid content	Use of green raw materials and green end products	Hatcol® 2938	19	75 % Biorenewable / > 60 % biodegradable
Biorenewable / biodegradable	Esters having specific natural acid content	Use of green raw materials and green end products	Hatcol® 5068	68	10 % Biorenewable / < 60 % biodegradable
Biorenewable / biodegradable	Esters having specific natural acid content	Use of green raw materials and green end products	Hatcol® 2377	20	0 % Biorenewable / > 60 % biodegradable

* MO = Mineral Oil, VO = Vegetable Oil