



NYCO
INDUSTRY & AUTOMOTIVE

NYCOBASE[®]

PRODUCT SELECTION GUIDE



NYCOBASE[®] High performance synthetic esters

NYCOBASE® PROPERTIES

PRODUCT REFERENCE	Chemical description*	Main Features and benefits											
		Viscosity at 40°C (mm ² /s)	Viscosity at 100°C (mm ² /s)	Viscosity Index	Density at 20°C (kg/m ³)	Pour Point (°C)	Flash Point (°C)	NOACK Volatility 1h, 250 °C (%) weight)	Lochne number (g l ⁻² /100 g)	Saponification number (mg KOH/g)	Biodegradability (%) - OECD 301B	Renewable Carbon (%) - ASTM D6866	
MONOESTERS													
Nycobase 8110		3.2	1.3	-	862	-80	150	100	<1	209	80	52	Ultra-low temperature, high flash point, friction modification
DIESTERS													
Nycobase ADE	DOA	7.7	2.3	120	925	-81	200	35	0	298			Low temperature, seal swell
Nycobase SEH	DOS	11.6	3.2	153	914	-80	224	11.4	0	262	>60	38	Low temperature, polarity agent, lubricity
Nycobase ADD	DIDA	14	3.6	145	918	-69	225	11.5	0	271			Low temperature, polarity agent
Nycobase ADT	DTDA	26.8	5.3	136	911	-54	234	4.2	0	220			Low temperature, polarity agent
Nycobase 3608	DIMERATE	99	13.6	139	913	-51	300	1.3	91	143		69	High viscosity, low pour point
NEOPOLYOL ESTERS													
Nycobase 8210	NPG	8.3	2.5	145	916	-40	204	31	<1	297	80	77	Low viscosity, excellent anti-wear features, seal swell
* Nycobase 7300	TMP	13.8	3.4	124	959	-66	235	8.5	0	358	85	0/77	Excellent viscosity/volatility ratio, low temperature
Nycobase 5400	MPE	15.9	3.6	115	1019	-63	235	10.7	0	475	>60	0	Outstanding thermo-oxidative stability, detergency
Nycobase 8317	TMP	17.5	4.0	134	948	-60	250	5.0	<1	325	>60	55/80	Low volatility, multi-purpose
Nycobase 8103	TMP	19.6	4.4	136	943	-46	257	2.2	<1	309	79	83	Multi-functional, environmental profile
Nycobase 7450	MPE	20.3	4.4	128	999	-57	248	5.4	0	428			Outstanding thermo-oxidative stability, detergency, polarity
* Nycobase 9300	TMP	21.0	4.6	140	941	-45	260	2.2	0	304	75	0	Multi-functional, environmental profile
Nycobase 7400	MPE	21.4	4.6	134	978	-30	260	1.6	0	310	>60	0/84	Thermo-oxidative stability, low volatility
* Nycobase 8311	TMP	22.6	4.9	148	937	-36	270	2.1	1.4	300	77	83	Multi-functional, friction modification
* Nycobase 5750	MPE	24	5	140	987	-59	260	2.2	0	390	>60	15/62	Wide temperature range, oxidation stability
Nycobase 8410	MPE	29.6	5.9	147	957	-4	287	0.8	<1	329	78	87	Anti-wear performance, high flash point
* Nycobase 8318S	TMP	42.5	7.7	151	926	-36	283	1.4	3	246	67	88	Environmental profile, lubricity, seal compatibility
Nycobase 3118	TMP	47	9.2	184	917	-45	320	0.5	85	180	84	89	Multi-purpose, moderate temperature
* Nycobase 1040X	MPE	94	10.2	88	955	-27	264	2.0	0	328			Outstanding oxidation stability and cleanliness
* Nycobase STM	TMP	96	13.6	143	915	-30	305	0.6	5	181	65	91	Environmental profile, lubricity, seal compatibility
Nycobase 9680X	DPE	221	19.6	101	966	-33	305	0.1	0	311			Outstanding oxidation stability, cleanliness and flash point
Nycobase 1060X	DPE	245	19.6	92	967	-25	296	0.4	0	305			Outstanding oxidation stability and cleanliness
* Nycobase 9600X	DPE	380	25.4	88	964	-17	290	0.3	0	310			Ultra-high temperature, cleanliness

* Selection of NYCO's differentiating products

* NPG = Neopentylglycol, TMP = Trimethylolpropane, MPE = Monopentaerythritol, DPE = Dipentaerythritol

NYCOBASE® PROPERTIES

PRODUCT REFERENCE	Chemical description*	COMPLEX ESTERS											Main features and benefits
		Viscosity at 40°C (mm²/s)	Viscosity at 100°C (mm²/s)	Viscosity Index	Density at 20°C (kg/m³)	Pour Point (°C)	Flash Point (°C)	NOACK Volatility 1h, 250 °C (%)	Iodine value (g I ₂ /100 g)	Saponification number (mg KOH/g)	Biodegradability (%) - OECD 301B	Renewable Carbon (%) - ASTM D8886	

COMPLEX ESTERS

* Nycobase 8306		28	5.7	160	936	-39	268	2.3	6		67	84	Low viscosity, lubricity
Nycobase 8345		45.2	8.2	158	941	-41	271	2.3	12.8	293	81	86	Multi-purpose, lubricity, environmental profile
Nycobase 8812		72.4	12.1	163	942	-38	270	1.8	8		66	84	Multi-purpose, friction modification
Nycobase 3645		125	16.2	148	919	-45	290	1.4	80	166		69	Film thickness, lubricity
* Nycobase 8361		330	34.6	149	1014	-33	281	1.9	<1		75	56	Friction modification, oxidation stability, environmental profile
Nycobase 4045		424	43	153	953	-33	270	1.9	51	273		86	High viscosity, film thickness
Nycobase 8851		515	50	163	950	-33	285	1.8	18	277		86	High viscosity, oxidation stability, film thickness, friction modification
* Nycobase 8397		1015	85	166	1029	-24	275	2.1	<1		70	50	High viscosity, adhesion, environmental profile, friction modification
Nycobase 8898		1200	104	175	951	-24	280	1.4	21			87	High viscosity, film thickness
Nycobase 6001		10000	620	243	956	-6	288	1.2	22.5	225		87	High viscosity, thickener

EUROPEAN ECOLABEL COMPLIANT ESTERS**

* Nycobase 7300 EL	TMP	13.8	3.4	124	959	-66	235	8.5	0	358	85	0	Excellent viscosity/volatility ratio, low temperature
Nycobase 8103 EL	TMP	19.6	4.4	136	943	-46	257	2.2	<1	309	79	83	Multi-functional, environmental profile
* Nycobase 9300 EL	TMP	21.0	4.6	140	941	-45	260	2.2	0	304	75	0	Multi-functional, environmental profile
* Nycobase 8311 EL	TMP	22.6	4.9	148	937	-36	270	2.1	1.4	300	77	83	Multi-functional, friction modification
* Nycobase 8306 EL	COMPLEX	28	5.7	160	936	-39	268	2.3	6		67	84	Low viscosity, lubricity
* Nycobase 8318S EL	TMP	42.5	7.7	151	926	-36	283	1.4	3	246	67	88	Environmental profile, lubricity, seal compatibility
Nycobase 8345 EL	COMPLEX	45.2	8.2	158	941	-41	271	2.3	12.8	293	81	86	Lubricity, environmental profile
Nycobase 3118 EL	TMP	47	9.2	184	917	-45	320	0.5	85	180	84	89	Multi-purpose, moderate temperature
* Nycobase STM EL	TMP	96	13.6	143	915	-30	305	0.6	5	181	65	91	Environmental profile, lubricity, seal compatibility
* Nycobase 618 EL	POLYESTER	138	20.3	170	1109	-3	260	3.4			76	15	Water soluble, lubricity
* Nycobase 8361 EL	COMPLEX	330	34.6	149	1014	-33	281	1.9	<1		75	56	Friction modification, oxidation stability, environmental profile
* Nycobase 8397 EL	COMPLEX	1015	85	166	1029	-24	275	2.1	<1		70	50	High viscosity, adhesion, environmental profile, friction modification

* Selection of NYCO's differentiating products

* NPG = Neopentylglycol, TMP = Trimethylolpropane, MPE = Monopentaerythritol, DPE = Dipentaerythritol

** listed on LuSC list as approved components for straightforward use in European Ecolabel compliant lubricants

NYCOBASE® PROPERTIES

PRODUCT REFERENCE	Chemical description*	Viscosity at 40°C (mm ² /s) Viscosity at 100°C (mm ² /s) Viscosity Index Density at 20°C (kg/m ³) Pour Point (°C) Flash Point (°C) NOACK Volatility 1h, 250 °C (%) Iodine value (g I ₂ /100 g) Saponification number (mg KOH/g) Biodegradability (%) - OECD 301B Renewable Carbon (%) - ASTM D6866											Main features and benefits
		HX-1 CERTIFIED FOOD GRADE ESTERS, Halal & Kosher (Pareve) certified											
Nycobase 20307 FG	DIESTER	11.7	3.3	164	913	-66	224	11.4	<1	264	84	38	Low temperature, polarity
Nycobase 30401 FG	NEOPOLYOL	20	4.5	143	943	-45	255	2.2	<1	308	78	81	Multi-purpose
* Nycobase 30409 FG	NEOPOLYOL	21.2	4.6	141	942	-48	255	2.4	<1	305	85	-	Multi-purpose
Nycobase 30502 FG	NEOPOLYOL	23	5	150	938	-36	267	2.1	2	301	76	81	Enhanced lubricity
Nycobase 40810FG	COMPLEX	45	8.1	157	941	-39	265	2.3	13	290	81	82	Multi-purpose
Nycobase 43203 FG	COMPLEX	325	34	147	1015	-33	276	1.9	<1		66	54	Oxidation stability, friction modification
Nycobase 43608 FG	COMPLEX	320	36.2	160	948	-39	278	1.5	17		56	85	Improved compatibility with hydrocarbon base fluids
* Nycobase 32506 FG	NEOPOLYOL	390	25.3	89	963	-20	295	0.3	<1	308			High temperature, cleanliness
* Nycobase 45004 FG	COMPLEX	503	50.3	163	951	-33	284	1.3	20	278	46	86	High viscosity, film thickness, compatible with hydrocarbon base fluids
Nycobase 46115 FG	COMPLEX	10077	622	243	957	-6	286	1.2	22	220		87	Ultra high viscosity, thickener
SPECIAL ESTERS													
* Nycobase 618 EL	POLYESTER	138	20.3	170	1109	-3	260	3.4			76	15	Water soluble, lubricity
Nycobase 619	POLYESTER	109	18	165	1145	-33	235	8.3	0			0	Water soluble, lubricity
Nycobase LPG 400	POLYESTER	7000	500	228	1160	5	300		0				Hydrocarbon resistant, high viscosity

* Selection of NYCO's differentiating products

* NPG = Neopentylglycol, TMP = Trimethylolpropane, MPE = Monopentaerythritol, DPE = Dipentaerythritol

APPLICATION GUIDELINES

PRODUCT NAME	2-stroke engine oils	4-stroke engine oils	Hydraulic fluids	Industrial gear fluids	Automotive gear oils and transmission fluids	High temperature fluids	Air compressor oils	Metalworking fluids	High temperature chain oils	Greases	Textile	Marine	Ink coating plasticizers
MONOESTERS													
Nycobase 8110		●	●		●			●					●
DIESTERS													
Nycobase ADE			●		●		●	●		●			●
Nycobase SEH	●	●	●	●	●		●	●		●			●
Nycobase ADD			●		●		●	●		●			●
Nycobase ADT	●	●	●	●	●		●	●		●			●
Nycobase 3608	●				●			●		●	●		
NEOPOLYOL ESTERS													
Nycobase 8210		●	●		●			●					
Nycobase 7300		●	●		●		●	●					
Nycobase 5400						●							
Nycobase 8317		●			●	●	●						
Nycobase 8103	●	●	●	●	●	●	●	●		●	●	●	
Nycobase 7450					●	●		●					
Nycobase 9300	●	●	●	●	●	●	●	●	●	●	●	●	
Nycobase 7400		●			●	●	●	●					
Nycobase 8311	●	●	●	●				●		●	●	●	
Nycobase 5750				●		●	●		●	●			
Nycobase 8410				●				●		●	●		
Nycobase 8318S			●	●						●		●	
Nycobase 3118			●					●		●			
Nycobase 1040X						●	●		●	●			
Nycobase STM		●	●	●								●	
Nycobase 9680X						●	●		●	●			
Nycobase 1060X						●	●		●	●			
Nycobase 9600X						●	●		●	●			

APPLICATION GUIDELINES

PRODUCT NAME	2 stroke engine oils	4 stroke engine oils	Hydraulic fluids	Industrial gear fluids	Automotive gear oils and transmission fluids	High temperature fluids	Air compressor oils	Metalworking fluids	High temperature chain oils	Greases	Textile	Marine	Ink coating plasticizers
COMPLEX ESTERS													
Nycobase 8306	●	●	●		●							●	
Nycobase 8345			●									●	
Nycobase 8812	●	●	●	●						●		●	
Nycobase 3645				●				●					
Nycobase 8361				●		●	●		●	●		●	
Nycobase 4045			●	●				●		●			
Nycobase 8851		●	●	●	●			●		●			
Nycobase 8397				●		●			●	●		●	
Nycobase 8898				●						●			
Nycobase 6001	●	●		●				●		●			
EUROPEAN ECOLABEL COMPLIANT ESTERS													
Nycobase 7300 EL		●	●		●		●	●					
Nycobase 8103 EL	●	●	●	●	●	●	●	●		●	●	●	
Nycobase 9300 EL	●	●	●	●	●	●	●	●	●	●	●	●	
Nycobase 8311 EL	●	●	●	●				●		●	●	●	
Nycobase 8306 EL	●	●	●		●							●	
Nycobase 8318S EL			●	●						●		●	
Nycobase 8345 EL			●									●	
Nycobase 3118 EL			●					●		●			
Nycobase STM EL		●	●	●								●	
Nycobase 618 EL								●					
Nycobase 8361 EL				●		●	●		●	●		●	
Nycobase 8397 EL				●		●			●	●		●	

APPLICATION GUIDELINES

PRODUCT NAME	2 stroke engine oils	4 stroke engine oils	Hydraulic fluids	Industrial gear fluids	Automotive gear oils and transmission fluids	High temperature fluids	Air compressor oils	Metalworking fluids	High temperature chain oils	Greases	Textile	Marine	Ink coating plasticizers
FOOD GRADE ESTERS													
Nycobase 20307 FG			●	●						●			
Nycobase 30401 FG			●	●		●	●	●	●	●			
Nycobase 30409 FG			●	●		●	●	●	●	●			
Nycobase 30502 FG			●	●						●			
Nycobase 40810 FG			●	●						●			
Nycobase 43203 FG			●	●		●	●		●	●			
Nycobase 43608 FG			●	●						●			
Nycobase 32506 FG						●	●		●	●			
Nycobase 45004 FG			●	●				●		●			
Nycobase 46115 FG				●				●		●			
SPECIAL ESTERS													
Nycobase 618 EL								●					
Nycobase 619								●					
Nycobase LPG 400										●			



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INDUSTRY & AUTOMOTIVE



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