

Nynas Rubber Oil Compatibility Guide

N0861610ENG

	Nynas Product	SBR	NR	BR	CR	IIR	XIIR	EPDM (S)	EPDM (OOH)	Mixer Lubricant
Hydrotreated Naphthenic Process Oils High compatibility with polar rubber types	Nytex 810	●●	●●	●●	●●	●●	●●	○	○	○
	Nytex 820	●●	●●	●●	●●	●●	●●	●	○	○
	Nytex 8150	●●	●●	●●	●	●●	●	●	○	●●
	Nytex 832	●●	●●	●●	○	●●	●	●	○	●●
	Nytex 840	●●	●●	●●	○	●●	●	●●	●	●●
Naphthenic Black Process Oil (NBO) Low-PAH naphthenic black oil for various rubber applications	Nytex 4700	●●	●●	●●	●●	●●	●●	●	○	●●
3000 Series Process Oils Designed for EPDM	Nytex 3250	●	●	●	○	●	●	●●	●	○
	Nyflex 3185	○	○	○	○	○	○	●●	●●	○
	Nyflex 3120	○	○	○	○	○	○	●●	●●	○

- Highly recommended for the application
- Recommended for the application
- Not recommended for the application



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Nynas range of specialty naphthenic oils for the rubber industry

Characteristics, unit	Test method	NYTEX 810	NYTEX 820	NYTEX 8150	NYTEX 832	NYTEX 840	NYTEX 4700	NYFLEX 3120	NYFLEX 3185	NYTEX 3250
Density 15°C, kg/dm ³	ASTM D 4052	0.901	0.915	0.920	0.919	0.922	0.94	0.876	0.894	0.907
Viscosity 40°C, mm ² /s (cSt)	ASTM D 445	22.4	108	150	224	372	690	120	185	250
Viscosity 100°C, mm ² /s (cSt)	ASTM D 445	3.7	8.8	11.0	14.0	18.0	29.0	12.6	14.6	16.0
Pour point, °C	ASTM D 97	-45	-33	-30	-24	-18	-15	-15	-15	-16
Flash point PM, °C	ASTM D 93A	174	214	222	228	252	222	250	251	250
Flash point COC, °C	ASTM D 92	184	224	233	242	273	243	268	263	267
Sulfur, %	ASTM D 2622	0.04	0.09	0.09	0.09	0.12	0.5	0.02	0.06	0.09
Aniline point, °C	ASTM D 611	75	87	90	94	98	91	123	113	106
VGC	ASTM D 2501	0.859	0.856	0.858	0.851	0.848	0.868	0.803	0.820	0.831
Refractive Index, 20°C	ASTM D 1747	1.493	1.502	1.505	1.505	1.507	1.524*	1.481	1.491	1.498
Colour	ASTM D 1500	< 0.5	< 1.0	< 1.5	2.0	< 2.5	> 8.0	< 1.5	< 1.5	< 2.0
Total Acid number, mg KOH/g	ASTM D 974	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	0.6	< 0.01	< 0.01	< 0.01
Carbon-Type Analysis	IEC 60590 (IR)									
C _A , %		15	15	15	16	16	N/A	2	8	12
Carbon-Type Composition	ASTM D 2140						*			
C _A , %		10	11	13	12	12	24	1	6	10
C _N , %		43	39	37	35	33	23	30	29	30
C _P , %		47	50	50	53	55	53	69	65	60
Appearance	ASTM D 4176	Clear & Bright	Clear & Bright	Clear & Bright	Clear & Bright	Clear & Bright	Dark*	Clear & Bright	Clear & Bright	Clear & Bright
DMSO extractables, %	IP 346	< 3	< 3	< 3	< 3	< 3	N/A	< 3	< 3	< 3
Benzo(a) pyrene, mg/kg	EN 16143	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
∑ 8 PAH (REACH), mg/kg	EN 16143	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10

*Modified methods used for the assessment of the property

Nynas Plasticisers for the Rubber Industry

Nynas is a provider of products and solutions for the non-tyre rubber industry, to address the need of plastification for a wide range of rubber materials. With our differentiated portfolios, we offer plasticisers suitable for a number of different rubber types including EPDM, SBR, NR and CR.

Our focus on process oils as one of our main product lines shows our long-term commitment to the industry, while our flexible product platform helps tailor-make our offering. Through our technical expertise and global presence, we ensure you get the best product to match your application.

Naturally, our rubber process oils offer desirable health, safety and environmental (HSE) properties, such as low levels of polycyclic aromatic hydrocarbons (PAH) as defined by REACH regulation 1907/2006/EC, Annex XVII, Entry 50.

In short, where others may provide you with a product, we care about understanding your needs and offering a solution.