



265 Jefferson Avenue • Cleveland, Ohio 44113-2594
 (216) 771-4300 • Ohio WATS (800) 362-1530
 Fax (216) 771-1845

Product Information

Page 1 of 1

OIL N PROCESS OILS

Product Description Naphthenic process oils, severely hydrotreated, that provide good solvency for a high degree of additive acceptance, exceptionally low pour points, excellent color and resistance to discoloration by heat or ultraviolet light, and low odor levels.

Typical Properties

Test Description	Test Method	N 100	N 150	N 200	N 300	N 500	N 750	N 1200	N 2000
Viscosity, SUS @ 100° F	ASTM D 445	108	158	209	310	530	775	1250	2150
Viscosity, SUS @ 210° F	ASTM D 445	38.2	41.2	44.3	48.8	56.0	65.2	78.2	104.0
Viscosity, cSt @ 40° C	ASTM D 341	20.2	30.2	40.1	59.1	99.6	145.0	231	393
Viscosity, cSt @ 100° C	ASTM D 341	3.5	4.4	5.4	6.7	8.7	11.3	14.6	20.5
API Gravity, 60° F	ASTM D 1250	24.4	24.0	23.7	23.4	23.0	22.6	22.2	21.8
Specific Gravity, 60° F	ASTM D 4052	0.9076	0.9100	0.9117	0.9135	0.9159	0.9180	0.9206	0.9230
Visc-Gravity Constant	ASTM D 2501	0.8698	0.8666	0.8648	0.8615	0.8572	0.8552	0.8518	0.8473
Weight, lbs/gal	ASTM D 1250	7.558	7.578	7.592	7.607	7.627	7.646	7.666	7.686
Molecular Weight	ASTM D 2502	305	330	365	380	395	445	460	565
Flash Point, COC, °F	ASTM D 92	345	355	370	390	445	465	485	530
Color, ASTM	ASTM D 6045	L0.5	L0.5	L1.0	L1.0	L1.0	L2.0	L2.5	L2.5
Pour Point, °F	ASTM D 5949	-55	-50	-45	-35	-25	-20	-15	-5
Acid No., mg KOH/g	ASTM D 664	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Aniline Point, °F	ASTM D 611	164.0	171.5	176.0	183.0	190.0	196.0	202.4	210.0
Sulfur, wt %	ASTM D 4294	0.035	0.049	0.059	0.066	0.078	0.091	0.107	0.123
Refractive Index, 20° C	ASTM D 1218	1.4963	1.4979	1.4986	1.5005	1.5023	1.5040	1.5057	1.5083
UV Absorptivity @ 260 nm	ASTM D 2008	1.45	1.72	1.96	2.20	2.89	3.97	4.25	5.38
Volatility, wt%, 225 F	ASTM D 972	12.80	9.24	7.11	4.16	0.52	0.38	0.23	0.02
FDA Regulation	21 CFR 178.3620(c)	Pass							
Polycyclic Aromatics		<3	<3	<3	<3	<3	<3	<3	<3
Modified Ames Assay	ASTE E 1678	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
Clay-Gel, wt%	ASTM D 2007								
Asphaltenes		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Polar Compounds		0.4	0.5	0.6	0.8	1.0	1.6	2.1	2.9
Aromatics		37.0	37.6	38.1	38.6	39.6	39.8	40.4	40.6
Saturates		62.6	61.9	61.3	60.6	59.4	58.6	57.5	56.5
Carbon Type Analysis, %	ASTM D 2140								
Ca		12	12	11	12	12	12	12	13
Cn		46	44	44	41	38	37	35	31
Cp		42	44	45	47	50	51	53	56

Universal Oil Item #. & MSDS #.: 18-32-03 18-32-04 18-32-05 18-32-06 18-32-20 18-32-20 18-32-07 18-32-08

The statements, technical information and recommendations contained herein are reliable, but given without warranty or guarantee of any kind. We assume no responsibility for loss, damage or expense, direct or consequential, arising out of the use of, or inability to use, our goods.