



PRODUCT DATA SHEET



NO-TOX[®] HD FOOD GRADE OIL

No-Tox HD Food Grade Oil, commonly known as No-Tox HD Oil, is a series of multipurpose white mineral lubricating oils that are NSF H1 registered for use where incidental food contact may occur. **No-Tox HD Food Grade Oil**, available in 12 grades from ISO VG 15 to 1000, is designed to give exceptional anti-wear, rust and corrosion protection in a wide range of applications including hydraulic systems, gear cases, chains, compressors, bearings and circulating systems and other applications found in the “clean” industries such as food, beverage, pharmaceutical and personal care products.

Applications

- ◆ Suitable for multi-service applications
- ◆ Hydraulic pumps, motors, actuators
- ◆ Compressors and vacuum pumps
- ◆ Enclosed gears including spur, bevel and worm gears
- ◆ Circulating systems, chains, bearings, spindles, joints and others

Features and Benefits

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|----------------------------------|---|
| ◆ NSF H1 registered | Use where incidental food contact may occur. |
| ◆ Compliances | Kosher and Pareve approved. Halal certified. |
| ◆ Bacteriological protection | Effectively inhibits the growth of certain bacteria, yeast and mold in the lubricant. |
| ◆ Excellent anti-wear properties | Excellent equipment protection. |
| ◆ High demulsibility | Excellent water separability. |
| ◆ Rust and oxidation protection | Long, trouble-free service life. |

General Description

No-Tox HD Food Grade Oil is a series water-white, odorless and tasteless mineral base lubricating oils for a wide range of “clean” industries applications. **No-Tox HD Food Grade Oil** is filtered through a 2-micron filter system to achieve the highest cleanliness standards. **No-Tox HD Food Grade Oil**, formulated with the highest quality USP white mineral oils and food grade additives, meets NSF H1 and FDA requirements for materials that may have incidental contact with food as defined under Title 21 CFR, 178.3570. It is Kosher and Pareve approved, as well as Halal certified.

Product No. 301060, 301002, 301061, 301240, 300931, 301578, 301579, 301241, 300920, 301242, 301580, 301581

NO-TOX[®] HD FOOD GRADE OIL

TYPICAL PROPERTIES

<u>Product No.</u>	<u>301060</u>	<u>301002</u>	<u>301061</u>	<u>301240</u>
<u>Old Product No.</u>	<u>62680</u>	<u>62681</u>	<u>62682</u>	<u>62683</u>
ISO Viscosity Grade	15	22	32	46
Viscosity, ASTM D445				
@ 40°C, cSt	14.6	21.3	32.4	45.9
@ 100°C, cSt	3.33	4.21	5.42	6.81
Viscosity, ASTM D2161				
@ 100°F, SUS	80.6	112	167	237
@ 210°F, SUS	37.5	40.4	44.4	49.1
Viscosity Index, ASTM D2270	96	100	101	102
Pour Point, ASTM D97				
°C (°F)	-18 (0)	-18 (0)	-18 (0)	-18 (0)
Copper Strip Corrosion, ASTM D130				
3 hrs @ 100°C, rating	1a	1a	1a	1a
Rust Test, ASTM D665, Procedure A & B	Pass	Pass	Pass	Pass
Foam Test, ASTM D892				
Sequence I, II, III, ml/ml	Nil	Nil	Nil	Nil
Falex EP Test, ASTM D3233 Method B				
Non-seizure Load, lbf	1500	1500	1500	1500
4-Ball Wear Test, ASTM D4172				
@ 1200 rpm, 40 kg, 1 hr, 75°C				
Scar Diameter, mm	0.40	0.40	0.40	0.40
Vickers Vane Pump Test, ASTM D7043				
Total Mass Loss, mg	<15	<15	<15	<15
FZG Visual Test, ASTM D5182				
Failure Load Stage	--	--	--	--
Specific Gravity, ASTM D1298, 60/60°F	0.851	0.860	0.862	0.866
Color	Water-white	Water-white	Water-white	Water-White

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TYPICAL PROPERTIES

<u>Product No.</u>	<u>300931</u>	<u>301578</u>	<u>301579</u>	<u>301241</u>
<u>Old Product No.</u>	<u>62684</u>	<u>62685</u>	<u>62686</u>	<u>62687</u>
ISO Viscosity Grade	68	100	150	220
Viscosity, ASTM D445				
@ 40°C, cSt	67.1	104	151	228
@ 100°C, cSt	8.74	11.7	15.5	20.5
Viscosity, ASTM D2161				
@ 100°F, SUS	348	542	791	1201
@ 210°F, SUS	55.7	66.6	81.8	103
Viscosity Index, ASTM D2270	102	100	105	105
Pour Point, ASTM D97				
°C (°F)	-18 (0)	-15 (5)	-15 (5)	-15 (5)
Copper Strip Corrosion, ASTM D130				
3 hrs @ 100°C, rating	1a	1a	1a	1a
Rust Test, ASTM D665, Procedure A & B	Pass	Pass	Pass	Pass
Foam Test, ASTM D892				
Sequence I, II, III, ml/ml	Nil	Nil	Nil	Nil
Falex EP Test, ASTM D3233 Method B				
Non-seizure Load, lbf	1500	1500	1750	1750
4-Ball Wear Test, ASTM D4172				
@ 1200 rpm, 40 kg, 1 hr, 75°C				
Scar Diameter, mm	0.40	0.40	0.40	0.40
Vickers Vane Pump Test, ASTM D7043				
Total Mass Loss, mg	<15	--	--	--
FZG Visual Test, ASTM D5182				
Failure Load Stage	--	12+	12+	12+
Specific Gravity, ASTM D1298, 60/60°F	0.872	0.874	0.879	0.882
Color	Water-white	Water-white	Water-white	Water-white

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TYPICAL PROPERTIES

<u>Product No.</u>	<u>300920</u>	<u>301242</u>	<u>301580</u>	<u>301581</u>
<u>Old Product No.</u>	<u>62688</u>	<u>62689</u>	<u>62690</u>	<u>62691</u>
ISO Viscosity Grade	320	460	680	1000
Viscosity, ASTM D445				
@ 40°C, cSt	318	452	667	983
@ 100°C, cSt	26.6	35.8	50.2	66.8
Viscosity, ASTM D2161				
@ 100°F, SUS	1681	2392	3535	5234
@ 210°F, SUS	131	174	243	323
Viscosity Index, ASTM D2270	110	119	130	133
Pour Point, ASTM D97				
°C (°F)	-14 (7)	-14 (7)	-13 (9)	-13 (9)
Copper Strip Corrosion, ASTM D130				
3 hrs @ 100°C, rating	1a	1a	1a	1a
Rust Test, ASTM D665, Procedure A & B	Pass	Pass	Pass	Pass
Foam Test, ASTM D892				
Sequence I, II, III, ml/ml	Nil	Nil	Nil	Nil
Falex EP Test, ASTM D3233 Method B				
Non-seizure Load, lbf	1750	1750	1750	1250
4-Ball Wear Test, ASTM D4172				
@ 1200 rpm, 40 kg, 1 hr, 75°C				
Scar Diameter, mm	0.40	0.40	0.40	0.40
Vickers Vane Pump Test, ASTM D7043				
Total Mass Loss, mg	--	--	--	--
FZG Visual Test, ASTM D5182				
Failure Load Stage	12+	12+	12+	12+
Specific Gravity, ASTM D1298, 60/60°F	0.880	0.888	0.888	0.888
Color	Water-white	Water-white	Water-white	Water-white