

ULTRA-KLEEN™ XPL HIGH VISCOSITY FOOD GRADE LUBRICANT

 Lubricants for a Healthier Planet™

Ultra-Kleen™ XPL High Viscosity Food Grade Lubricant provides outstanding wear protection for heavily loaded gears, bearings, and food processing machinery. It excels in gear applications with high slide-to-roll ratios, and its low friction properties lower operating temperatures and reduce power consumption.

All ingredients in **Ultra-Kleen XPL High Viscosity Food Grade Lubricant** are listed substances generally recognized as safe (GRAS) or substances used in accordance with the provisions of a prior sanction or approval permitted under the rules of the U.S. Food and Drug Administration 21 CFR 178.3570 for lubricants with incidental food contact.

NSF Nonfood Compounds H1 Registered: See Product Attribute Table

ISO 21469 Certification: See Product Attribute Table

Kosher and Pareve Certified



TYPICAL APPLICATIONS INCLUDE:

Food Processing Equipment	High and Low Speed Gear Boxes	Heavily Loaded Oiled Bearings
Rotary Lobe Blowers	Worm Gears	Chain and Rollers
Vacuum Pumps	Open and Closed Gear Systems	Air Compressors

Ultra-Kleen XPL High Viscosity Food Grade Lubricant meets or exceeds the following standards:

Gear	AGMA 9005-F16 AS Danfoss 520L0463	DIN 51517-3 CLP Fives Cincinnati P-77/74/59/35/34	ISO 12925-1 CKT JIS K 2219 Class 2
Compressor	DIN 51506 VBL		

PRODUCT ATTRIBUTES	TEST METHOD	TYPICAL PROPERTIES				
ISO Grade	ASTM D2422	150	220	320	460	680
AGMA No.		4	5	6	7	8
NSF NFC Registration Number		159929	159930	159931	159932	159933
ISO 21469 Certified		✓	✓	✓	✓	✓
Density, g/ml @ 15.5°C	ASTM D1298	0.8681	0.8686	0.8735	0.8772	0.8811
Density, lb/gal @ 60°F	ASTM D1298	7.24	7.25	7.29	7.32	7.35
Kinematic Viscosity, cSt @ 40°C	ASTM D445	150	220	320	460	680
Kinematic Viscosity, cSt @ 100°C	ASTM D445	20.6	27.5	36.2	47.2	62.3
Viscosity Index	ASTM D2270	160	161	160	161	161
Brookfield Viscosity, cPs @ -20°C	ASTM D2983	13300	20500	32500	56850	89850
Pour Point, °F (°C)	ASTM D97	-22 (-30)	-22 (-30)	-33 (-36)	-33 (-36)	-33 (-36)
Flash Point, °F (°C)	ASTM D92	453 (234)	462 (239)	446 (230)	460 (238)	457 (236)
Fire Point, °F (°C)	ASTM D92	556 (291)	556 (291)	558 (292)	558 (292)	559 (293)

PRODUCT ATTRIBUTES	TEST METHOD	TYPICAL PROPERTIES				
ISO Grade	ASTM D2422	150	220	320	460	680
4-Ball Wear, scar diameter, mm	ASTM D2266	0.39	0.36	0.35	0.35	0.35
4-Ball EP, Weld Point, kgf	ASTM D2596	200				
FZG Scuffing, A/8.3/90, Fail Stage	ASTM D5182	14	14 or better			
FE8 Roller Bearing Wear, mg	DIN 51819-3	15	<15			
TOST Oxidation Stability, hrs	ASTM D943	8000+				
RPVOT Oxidation Stability, min	ASTM D2272	500+				
PDSC Oxidation Induction Time	ASTM D5483	120+ min @ 180°C				
Copper Corrosion, 24 hr @ 100°C	ASTM D130	1B				
Rust Test, Distilled Water	ASTM D665A	Pass				
Rust Test, Syn. Sea Water	ASTM D665B	Pass				
Foam, Blow/Settle ml/ml, Seq. I, II, III	ASTM D892	0/0, 0/0, 0/0			5/0, 5/0, 5/0	
Water Separability, min @ 82°C	ASTM D1401	20	25	30	30	35
Fluid Cleanliness	ISO 4406	17/15/12 or cleaner				
Color	ASTM D1500	0.5				

Ultra-Kleen XPL High Viscosity Food Grade Lubricant does NOT contain any ingredient with the following allergenic, sensitizing components or allergenic proteins or substances listed below:

Animal Products including Enzymes, Fats or Proteins	Genetically Modified Organisms (GMO)
Eggs	Fish
Peanuts	Soybeans and Products Thereof
Sulfites	Dairy/derivatives
Wheat	Tree Nuts
Gluten (wheat, rye, barley, oats, spelt, kamut)	Shellfish/Crustaceans/Mollusks
Sesame and Products Thereof	Lupine
Mustard and Products Thereof	Celery
Carmine/Cochineal	BHA, butylated hydroxyanisole
MSG, monosodium glutamate	BHT, butylated hydroxytoluene
TBHQ, tertiary butylhydroquinone	Hydrolyzed Vegetable Protein (HVP)
Autolyzed Yeast	Artificial Flavors
FD&C Color	Saccharin

WARRANTY:

When properly stored and used in accordance with instructions, any material not satisfactory will be replaced with any product in our line on a dollar for dollar basis provided the account is paid in full when due and Hydrotex is notified in writing within 12 months of the date of the order by the customer.

Hydrotex® is a manufacturer and distributor of high performance lubricant and fuel improver solutions. As an employee owned company, we help our customers develop sustainable solutions designed to improve system reliability, save energy, limit pollution, extend fixed asset life, reduce maintenance costs and improve fuel efficiency. Our products and services leverage over 80 years of innovation resulting in superior lubrication solutions and high touch customer service.