

BDS International
Head Office
Purity Lube
Technical Data Sheet

Purity Lube 4T Max 20W-50 Semi-Synthetic is a high-performance mineral engine oil formulated with modern additives for use in small four stroke engines. It gives complete protection against wear & corrosion at extremely high temperatures. It provides high performance reliability to help protect and clean your engine and help prolong engine life.

Meets the Requirement:	
API SN	JASO MA2

Typical Characteristics

Properties	Purity Lube 4T Max 20W-50	Method
SAE Viscosity Grade	20W-50	SAE J300
Kinematic Viscosity @ 40°C, mm ² /s	170,4	ASTM D445
@ 100°C, mm ² /s	18,4	
Viscosity Index	120	ASTM D2270
Flash Point (COC), °C	242	ASTM D92
Pour Point, °C	-31	ASTM D97
Density @ 20°C, kg/m ³	888	ASTM D4052
Total Base Number, mg KOH/g	6,0	ASTM D2896

Health Safety & Environment

Information is provided for products in the relevant Safety Data Sheet (SDS). This provides guidance on potential hazards, precautions and first-aid measures, together with environmental effects and disposal of used products. SDS's are available upon request through your sales contract office. This product should not be used for purposes other than its intended use.

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Purity Lube 4T Max 20W-40 Semi-Synthetic is a high-performance mineral engine oil formulated with modern additives for use in small four stroke engines. It gives complete protection against wear & corrosion at extremely high temperatures. It provides high performance reliability to help protect and clean your engine and help prolong engine life.

Meets the Requirement:		
API SN		JASO MA2

Typical Characteristics

Properties	Purity Lube 4T Max 20W-40	Method
SAE Viscosity Grade	20W-40	SAE J300
Kinematic Viscosity @ 40°C, mm ² /s	122	ASTM D445
@100°C, mm ² /s	15	
Viscosity Index	114	ASTM D2270
Flash Point (COC), °C	240	ASTM D92
Pour Point, °C	-24	ASTM D97
Density @ 15°C, kg/m ³	885	ASTM D4052
Total Base Number, mg KOH/g	6,0	ASTM D2896

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Purity Lube 4T Max 10W-40 Full Synthetic is a high-performance mineral engine oil formulated with modern additives for use in small four stroke engines. It gives complete protection against wear & corrosion at extremely high temperatures. It provides high performance reliability to help protect and clean your engine and help prolong engine life.

Meets the Requirement:		
API SN		JASO MA2

Typical Characteristics

Properties	Purity Lube 4T Max 10W-40	Method
SAE Viscosity Grade	10W-40	SAE J300
Kinematic Viscosity @ 40°C, mm ² /s	95,6	ASTM D445
@100°C, mm ² /s	14,3	
Viscosity Index	154	ASTM D2270
Flash Point (COC), °C	235	ASTM D92
Pour Point, °C	-40	ASTM D97
Density @ 15°C, kg/m ³	860	ASTM D4052
Total Base Number, mg KOH/g	7,0	ASTM D2896

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Purity Lube 4T Max 10W-30 Full Synthetic is a high-performance mineral engine oil formulated with modern additives for use in small four stroke engines. It gives complete protection against wear & corrosion at extremely high temperatures. It provides high performance reliability to help protect and clean your engine and help prolong engine life.

Meets the Requirement:		
API SN		JASO MA2

Typical Characteristics

Properties	Purity Lube 4T Max 10W-30	Method
SAE Viscosity Grade	10W-30	SAE J300
Kinematic Viscosity @ 40°C, mm ² /s	78,1	ASTM D445
@100°C, mm ² /s	11,5	
Viscosity Index	139	ASTM D2270
Flash Point (COC), °C	223	ASTM D92
Pour Point, °C	-36	ASTM D97
Density @ 15°C, kg/m ³	876	ASTM D4052
Total Base Number, mg KOH/g	6,0	ASTM D2896

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Purity Lube CNG 20W-50 with Clean Guard Engine Protection Technology is a superior quality multigrade engine oil for all year round use in dedicated CNG engines and dual fuel engines under all driving conditions. It provides high levels of protection against wear, corrosion, deposit formation and keeps the engine cool at the same time. It's viscosity index improver ensures full multigrade performance between services.

Purity Lube CNG 20W50 is suitable for use in automotive CNG and dual fuel engines where the manufacturer recommends an API SG or earlier specification 20W-50 lubricants.

Advantages:

- Proven engine protection.
- Keep your engine cool.
- Helps prolong engine life.

Typical Characteristics

Properties	Method	Units	Purity Lube CNG 20W-50
Density @ 15°C, Relative	ASTM D4052	g/ml	0.887
Viscosity, Kinematic 100°C	ASTM D445	mm ² /s	17.5
Viscosity, CCS -15°C (20W)	ASTM D5293	mPa.s (cP)	8600
Viscosity, Kinematic 40°C	ASTM D445	mm ² /s	156
Viscosity Index	ASTM D2270	None	123
Pour Point	ASTM D97	°C	-24
Flash Point, PMCC	ASTM D93	°C	211
Ash, Sulphated	ASTM D874	%wt	0.74

Available Size: 2L

Product Performance Claims: API SG/CD

Storage: All packages should be stored under cover. Where outside storage is unavoidable, drums should be laid horizontally to avoid the possible ingress of water and damage to drum markings. Products shouldn't be stored above 60°C, exposed to hot sun or freezing conditions.

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Purity Lube 20W-50
Passenger Vehicle Engine Oils



Engine Oil



Mineral



Multigrade



Gasoline And Diesel
 Engines



Normal System
 Operating
 Pressure

Purity Lube 20W-50 oils are high quality mineral engine lubricants providing reliable protection under a wide variety of operating conditions. They contain an effective balance of detergents and dispersants to minimize the formation of sludge and deposits, retain alkalinity and reduce wear.

Applications



- Gasoline and diesel engines without diesel particulate filters (DPF) requiring oil with APISF/CC standards
- Older engine technologies
- Passenger cars, light trucks, farm equipment

Meets the Requirement:
 API SL/CF

Features	Advantages and Potential Benefits
Multi-purpose application	Suitable for a wide range of vehicles
Wear protection	Proven anti-wear additives protect throughout the range of operating conditions for prolonged engine life
Thermal and oxidation stability	Resists oil thickening during whole drain interval
Detergent and dispersant properties	Control of high temperature deposits formation to prevent sludge and keep engine cleaner

Available Size: 4L

Typical Characteristics

Properties	Purity Lube 20W-50	Method
SAE Viscosity Grade	20W-50	SAE J300
Kinematic Viscosity @ 40°C, mm ² /s	172.6	ASTM D445
@100°C, mm ² /s	18.00	
Viscosity Index	120	ASTM D2270
Flash Point (COC), °C	232	ASTM D92
Pour Point, °C	-25	ASTM D97
Density @ 15°C, kg/m ³	0.881	ASTM D4052
Total Base Number, mg KOH/g	7.3	ISO 6619
Dynamic Viscosity, CCS, ASTM D5293		
cP @-15°C	6700	

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Purity Lube 10W-30
Passenger Vehicle Engine Oils



Engine Oil



Mineral



Multigrade



Gasoline and Diesel Engines



Normal System Operating Pressure

Purity Lube 10W-30 oils are high quality mineral engine lubricants providing reliable protection under a wide variety of operating conditions. They contain an effective balance of detergents and dispersants to minimize the formation of sludge and deposits, retain alkalinity and reduce wear.

Applications



- Gasoline and diesel engines without diesel particulate filters (DPF) requiring oil with APISF/CC standards
- Older engine technologies
- Passenger cars, light trucks, farm equipment

Meets the Requirement:
 API SM/CF

Features	Advantages and Potential Benefits
Multi-purpose application	Suitable for a wide range of vehicles
Wear protection	Proven anti-wear additives protect throughout the range of operating conditions for prolonged engine life
Thermal and oxidation stability	Resists oil thickening during whole drain interval
Detergent and dispersant properties	Control of high temperature deposits formation to prevent sludge and keep engine cleaner

Available Size: 4L

Typical Characteristics

Properties	Purity Lube 10W-30	Method
SAE Viscosity Grade	10W-30	SAE J300
Kinematic Viscosity @ 40°C, mm ² /s	66	ASTM D445
@100°C, mm ² /s	10.4	
Flash Point (COC), °C	232	ASTM D92
Pour Point, °C	-42	ASTM D97
Density @ 15.6C, g/ml	0.859	ASTM D4052

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Purity Lube 10W-40
Passenger Vehicle Engine Oils



Engine oil



Mineral



Multigrade



Gasoline and diesel engines



Normal system operating pressure

Purity Lube 10W-40 oils are high quality mineral engine lubricants providing reliable protection under a wide variety of operating conditions. They contain an effective balance of detergents and dispersants to minimize the formation of sludge and deposits, retain alkalinity and reduce wear.

Applications



- Gasoline and diesel engines without diesel particulate filters (DPF) requiring oil with APISF/CC standards
- Older engine technologies
- Passenger cars, light trucks, farm equipment

Meets the Requirement:
 APISM/CF

Features	Advantages and Potential Benefits
Multi-purpose application	Suitable for a wide range of vehicles
Wear protection	Proven anti-wear additives protect throughout the range of operating conditions for prolonged engine life
Thermal and oxidation stability	Resists oil thickening during whole drain interval
Detergent and dispersant properties	Control of high temperature deposits formation to prevent sludge and keep engine cleaner

Available Size: 4L

Typical Characteristics

Properties	Purity Lube 10W-40	Method
SAE Viscosity Grade	10W-40	SAE J300
Kinematic Viscosity @ 40°C, mm ² /s @100°C, mm ² /s	91,1 13,7	ASTM D445
Viscosity Index	153	ASTM D2270
Flash Point (COC), °C	230	ASTM D92
Pour Point, °C	-37	ASTM D97
Density @ 15°C, kg/m ³	880	ASTM D4052
Total Base Number, mg KOH/g	6,0	ISO 6619
Sulfated Ash, wt%	0,8	ASTM D874

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Purity Lube 5W-40

Passenger Vehicle Engine Oils



Engine Oil



Mineral



Multigrade



Gasoline and Diesel Engines



Normal System Operating Pressure

Purity Lube 5W-40 oils are high quality mineral engine lubricants providing reliable protection under a wide variety of operating conditions. They contain an effective balance of detergents and dispersants to minimize the formation of sludge and deposits, retain alkalinity and reduce wear.

Applications



- Gasoline and diesel engines without diesel particulate filters (DPF) requiring oil with APISF/CC standards
- Older engine technologies
- Passenger cars, light trucks, farm equipment

Meets the Requirement:
 APISN/CF

Features	Advantages and Potential Benefits
Multi-purpose application	Suitable for a wide range of vehicles
Wear protection	Proven anti-wear additives protect throughout the range of operating conditions for prolonged engine life
Thermal and oxidation stability	Resists oil thickening during whole drain interval
Detergent and dispersant properties	Control of high temperature deposits formation to prevent sludge and keep engine cleaner

Available Size: 4L

Typical Characteristics

Properties	Purity Lube 5W-40
SAE grade	5W-40
cSt @ 100°C	14.33
Dynamic viscosity, CCS, ASTM D 5293	
cP @ -30°C	6600
Mini-rotary viscometer (MRV), ASTM D 4684	
cP @ -35°C	48000
Total base number, mg KOH/g, ASTM D 2896	8.32
Sulfated ash, wt%, ASTM D 874	0.85
Pour point, °C, ASTM D 97	-35
Flash point (COC), °C, ASTM D 92	223
Density @ 15°C, kg/l, ASTM D 4052	0.844

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Purity Lube 5W-30
Passenger Vehicle Engine Oils



Engine oil



Mineral



Multigrade



Gasoline and diesel engines



Normal system operating pressure

Purity Lube 5W-30 oils are high quality mineral engine lubricants providing reliable protection under a wide variety of operating conditions. They contain an effective balance of detergents and dispersants to minimize the formation of sludge and deposits, retain alkalinity and reduce wear.

Applications



- Gasoline and diesel engines without diesel particulate filters (DPF) requiring oil with APISF/CC standards
- Older engine technologies
- Passenger cars, light trucks, farm equipment

Meets the Requirement:
 APISN/CF

Features	Advantages and Potential Benefits
Multi-purpose application	Suitable for a wide range of vehicles
Wear protection	Proven anti-wear additives protect throughout the range of operating conditions for prolonged engine life
Thermal and oxidation stability	Resists oil thickening during whole drain interval
Detergent and dispersant properties	Control of high temperature deposits formation to prevent sludge and keep engine cleaner

Available Size: 4L

Typical Characteristics

Properties	Purity Lube 5W-30	Method
SAE Viscosity Grade	5W-30	SAE J300
Kinematic Viscosity cSt @ 40°C cSt @100°C	59.72 10.36	ASTM D445
High-temperature, high-shear viscosity (HTHS), cP @ -30°C	3.05	ASTM D 4683
Viscosity Index	163	ASTM D2270
Dynamic Viscosity, CCS,cP @ - 30°C	5050	ASTM D5293
Total base number, mg KOH/g	7.82	ASTM D 2896
Flash Point, (COC), °C	233	ASTM D 92
Pour Point, °C	-42	ASTM D 97
Density @ 15°C, kg/l	0.853	ASTM D 4052

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Purity Lube 0W-20
Passenger Vehicle Engine Oils



Engine oil



Mineral



Multigrade



Gasoline and diesel engines



Normal system operating pressure

Purity Lube 0W-20 oils are high quality mineral engine lubricants providing reliable protection under a wide variety of operating conditions. They contain an effective balance of detergents and dispersants to minimize the formation of sludge and deposits, retain alkalinity and reduce wear.

Applications



- Gasoline and diesel engines without diesel particulate filters (DPF) requiring oil with APISF/CC standards
- Older engine technologies
- Passenger cars, light trucks, farm equipment

Meets the Requirement:
 APISN/GF-5

Features	Advantages and Potential Benefits
Multi-purpose application	Suitable for a wide range of vehicles
Wear protection	Proven anti-wear additives protect throughout the range of operating conditions for prolonged engine life
Thermal and oxidation stability	Resists oil thickening during whole drain interval
Detergent and dispersant properties	Control of high temperature deposits formation to prevent sludge and keep engine cleaner

Available Size: 4L

Typical Characteristics

Properties	Purity Lube 0W-20
SAE grade	0W-20
cSt @ 100°C	8..34
Dynamic viscosity,CCS,ASTM D 5293	
cP @ -35°C	6200
Mini-rotary viscometer(MRV),ASTM D 4684	
cP @ -40°C	48000
Total base number, mg KOH/g, ASTM D 2896	8.33
Sulfated ash, wt%, ASTM D 874	0.86
Pour point, °C, ASTM D 97	-40
Flash point (COC), °C, ASTM D 92	220
Density @ 15°C, kg/l, ASTM D 4052	0.846

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Purity Lube Dynamic Plus 20W-50 is an extra high performance **diesel engine oil** that provides excellent lubrications and promotes long engine life. It provides outstanding performance in both modern, demanding low-emission diesel engines and older diesel engines operating on low or high Sulphur fuel. This product combines a blend of high-performance base stocks with a balanced additive system to provide excellent control of oil thickening due to soot build-up and high temperatures as well as outstanding resistance to oxidation, corrosion and high temperature deposits.

Features and Benefits

High output, low emission engines significantly increase demands on engine lubricants. Tighter engine design, use of inter-coolers, and turbochargers increase thermal stresses on the lubricant. Low emission engine technologies such as higher fuel injection pressure and retarded timing require improved oil performance in areas such as oxidation stability, soot dispersions, and volatility. **Purity Lube Dynamic Plus 20W-50** is formulated from high performance base oils and a balanced additive system to contribute to optimum engine performance in modern diesel and gasoline engines as well as older models. The key potential benefits include:

Features	Advantages and Potential Benefits
High thermal and oxidation stability	
TBN reserves	Deposit control and acid neutralization
Stay-in-grade shear stability	Wear protection and viscosity control
Advanced detergency/dispersion	Cleaner engines and longer component life
Improved soot handling	Improved viscosity control and used oil pumpability
Excellent low temperature properties	Start-up wear protection
Component compatibility	Longer gasket and seal life
Meets demanding specifications of key OEMs	One engine oil for mixed fleet operations

Available Size: 1L, 5L, 10L, 18L, 20L, 200L, 205L

Typical Characteristics

Properties	Purity Lube Dynamic Plus 20W-50 Diesel Engine Oil
SAE Grade	20W50
Kinematic viscosity, ASTM D 445 cSt@100°C	19.11
Dynamic viscosity, CCS, ASTM D 5293	

Properties	Purity Lube Dynamic Plus 20W-50 Diesel Engine Oil
cP @-15°C	8860
cP @-20°C	-
cP @-25°C	-
cP @-30°C	-
Pour Point, °C, ASTM D 97	-26
Flash Point (COC), °C, ASTM D 92	240
Density @ 15°C, kg/l, ASTM D 4052	0.885
Sulfated ash, wt%, ASTM D 874	1.55
Total base number, mg KOH/g, ASTM D 2896	10.8

These data are given as an indication of typical values, not exact specifications.

Industry and OEM Specifications

- API service Classification
- Diesel CI-4/SL

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Purity Lube Dynamic Plus 15W-40 is an extra high performance **diesel engine oil** that provides excellent lubrications and promotes long engine life. It provides outstanding performance in both modern, demanding low-emission diesel engines and older diesel engines operating on low or high Sulphur fuel. This product combines a blend of high-performance base stocks with a balanced additive system to provide excellent control of oil thickening due to soot build-up and high temperatures as well as outstanding resistance to oxidation, corrosion and high temperature deposits.

Features and Benefits

High output, low emission engines significantly increase demands on engine lubricants. Tighter engine design, use of inter-coolers, and turbochargers increase thermal stresses on the lubricant. Low emission engine technologies such as higher fuel injection pressure and retarded timing require improved oil performance in areas such as oxidation stability, soot dispersions, and volatility. **Purity Lube Dynamic Plus 15W-40** is formulated from high performance base oils and a balanced additive system to contribute to optimum engine performance in modern diesel and gasoline engines as well as older models. The key potential benefits include:

Features	Advantages and Potential Benefits
High thermal and oxidation stability	
TBN reserves	Deposit control and acid neutralization
Stay-in-grade shear stability	Wear protection and viscosity control
Advanced detergency/dispersion	Cleaner engines and longer component life
Improved soot handling	Improved viscosity control and used oil pumpability
Excellent low temperature properties	Start-up wear protection
Component compatibility	Longer gasket and seal life
Meets demanding specifications of key OEMs	One engine oil for mixed fleet operations

Available Size: 5L, 10L, 18L, 20L,200L, 205L

Typical Characteristics

Properties	Purity Lube Dynamic Plus 15W-40 Diesel Engine Oil
SAE Grade	15W40

Properties	Purity Lube Dynamic Plus 15W-40 Diesel Engine Oil
Kinematic viscosity, ASTM D 445 cSt@100°C	14.34
Dynamic viscosity, CCS, ASTM D 5293	
cP @-15°C	-
cP @-20°C	6460
cP @-25°C	-
cP @-30°C	-
Pour Point, °C, ASTM D 97	-31
Flash Point (COC), °C, ASTM D 92	229
Density @ 15°C, kg/l, ASTM D 4052	0.874
Sulfated ash, wt%, ASTM D 874	1.33
Total base number, mg KOH/g, ASTM D 2896	10.9

These data are given as an indication of typical values, not exact specifications.

Industry and OEM Specifications

- API service Classification
- Diesel CI-4/SL

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Purity Lube Automatic Gear Oil 85W140 is extra high-performance commercial gear lubricants formulated from select base oils and an advanced additive system. These lubricants are engineered for performance in heavy-duty commercial transmissions, axles and final drives where extreme pressure and shock loading are expected. They provide excellent chemical and thermal stability at elevated bulk oil temperatures, good performance at low temperature and have demonstrated good rust protection resulting from water contamination and wet conditions.

Today's heavy equipment applications place higher performance demands on drive train lubricants. Higher speeds, higher torque and heavy loads require improved formulations to maximize equipment life and optimize operating costs. Longer service intervals place additional demands on the gear lubricant. **Purity Lube Automatic Gear Oil 85W140** is engineered to meet these challenges. The key benefits include:

Features	Advantages and Potential Benefits
High thermal and oxidation stability	Extended gear and bearing life due to minimal deposits and longer seal life
Good protection against low speed/high torque wear and against high-speed scoring	Increased load carrying capability and reduced operating costs
Excellent rust, staining and corrosion protection	Reduced wear and longer component life
Effective low temperature lubrication	Reduced wear and ease of start-up
Wide multipurpose capability	Reduced number of gear lubricants to simplify and minimize misapplication
Good resistance to foaming	Maintains film strength for effective lubrication
Compatible with typical automotive seals and gaskets	Minimum leakage and reduced contamination

Approvals

- API-GL-5

Available Size: 4L

Typical Characteristics

Properties	Method	Purity Lube Automatic Gear Oil 85W140
Grade		85W-140

Properties	Method	Purity Lube Automatic Gear Oil 85W140
Flash Point COC	ASTM D92	230
Viscosity, Kinematic 100°C, mm ² /s	ASTM D445	25.4
Viscosity, Kinematic 40°C, mm ² /s	ASTM D445	333
Pour Point	ASTM D97	-18
Viscosity Index	ASTM D2270	99

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Purity Lube Automatic Gear Oil 140 is extra high-performance commercial gear lubricants formulated from select base oils and an advanced additive system. These lubricants are engineered for performance in heavy-duty commercial transmissions, axles and final drives where extreme pressure and shock loading are expected. They provide excellent chemical and thermal stability at elevated bulk oil temperatures, good performance at low temperature and have demonstrated good rust protection resulting from water contamination and wet conditions.

Today’s heavy equipment applications place higher performance demands on drive train lubricants. Higher speeds, higher torque and heavy loads require improved formulations to maximize equipment life and optimize operating costs. Longer service intervals place additional demands on the gear lubricant. **Purity Lube Automatic Gear Oil 140** is engineered to meet these challenges. The key benefits include:

Features	Advantages and Potential Benefits
High thermal and oxidation stability	Extended gear and bearing life due to minimal deposits and longer seal life
Good protection against low speed/high torque wear and against high-speed scoring	Increased load carrying capability and reduced operating costs
Excellent rust, staining and corrosion protection	Reduced wear and longer component life
Effective low temperature lubrication	Reduced wear and ease of start-up
Wide multipurpose capability	Reduced number of gear lubricants to simplify and minimize misapplication
Good resistance to foaming	Maintains film strength for effective lubrication
Compatible with typical automotive seals and gaskets	Minimum leakage and reduced contamination

Approvals

- API-GL-4

Available Size: 4L

Typical Characteristics

Properties	Method	Purity Lube Automatic Gear Oil 140
Grade		140

Properties	Method	Purity Lube Automatic Gear Oil 140
Flash Point COC	ASTM D92	240
Viscosity, Kinematic 100°C, mm ² /s	ASTM D445	26.85
Viscosity, Kinematic 40°C, mm ² /s	ASTM D445	325.1
Pour Point	ASTM D97	-16
Viscosity Index	ASTM D2270	110

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Purity Lube ATF Power Dexron III Oil is designed for use in GM automatic transmissions pre 2005 and in Ford automatic transmission built between 1983 and 1996 where Dexron® (II or III) or Mercon performance is required. Also suitable as Power Steering Fluid.

Should not be used where Dexron® VI, Mercon® V or Mercon® SP are required.

Advantages:

- Enhanced friction durability prolongs transmission life and promotes smooth shifting.

Product Performance Claims:

- API-C-A
- Meets Dexron III-H, IID and II.
- Suitable as Power steering fluid.

Typical Characteristics

Properties	Method	Units	Purity Lube ATF Power Dexron III Oil
Density @ 15°C, Relative	ASTM D4052	g/ml	0.861
Color	ASTM D1500	-	Red
Appearance	Visual	-	Clear & Bright
Viscosity, kinematic 100°C	ASTM D445	mm ² /s	7.9
Viscosity, kinematic 400°C	ASTM D445	mm ² /s	32
Pour Point	ASTM D97	°C	-42.5
Viscosity, Brookfield @-40°C	ASTM 2983	mPa.s (cP)	17.600
Viscosity Index	ASTM D2270	None	186

Available Size: 4L

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Purity Lube
Technical Data Sheet

Purity Lube Universal Tractor Transmission Oil (U.T.T.O.) 10W-30 is suitable for use in gearboxes, differential conic assemblies, power take-offs, hydraulic systems, wet brakes (synthesized or compound), clutches and other ancillary devices fitted in tractors and off-road equipment's. Excellent shear stability enhances the protection of all the lubricated parts ensuring the right viscosity along its use reducing unexpected shutdowns improving the reliability and efficiency.

Properties

- Excellent anti-wear protection and loading capacity, even in extreme working conditions.
- Good rust resistance and compatibility with joint materials.
- Its friction features are carefully formulated to eliminate screeching in wet brakes optimizing the performance.
- Its versatility makes it suitable for use with a wide variety of agricultural machinery
- Viscosity 10W-30 as hydraulic oil, not for use as a motor oil.

Product Performance Claims: API GL-4

Available Size: 18L

Typical Characteristics

Properties	Unit	Method	Value
SAE Viscosity Grade		SAE J 300	10W-30
Viscosity @ 100°C Viscosity @ 40°C	cSt	ASTM D445	10,8 65
Density at 15°C	g/cm ³	ASTM D4052	0.882
Pour Point	°C	ASTM D97	-36
Viscosity Index		ASTM D2270	140
TBN	mm KOH/g	ASTM D2896	9,5
Flash Point	°C	ASTM D92	220

Health and Safety

Based on available information, this product is not expected to produce adverse effects on health when used for the intended application and the recommendations provided in the Material Safety Data Sheet (MSDS) are followed. MSDS's are available upon request through your sales contract office, or via the Internet. This product should not be used for purposes other than its intended use. If disposing of used product, take care to protect the environment.

BDS International

Head Office

Purity Lube

Technical Data Sheet

Purity Lube Grease is a premium, extreme pressure, lithium complex grease with a high melting point. It is a high temperature grease designed to meet the demands of the most hostile grease applications and conditions. It includes components that provide extreme pressure (EP) and anti-wear (AW) protection, tackiness and adhesiveness agents that allow the grease to stay-put under high water pressure conditions. In addition to their EP, AW and exceptional water resistance properties **Purity Lube Grease** also provides a high level of oxidation, rust and corrosion protection.

Purity Lube Grease is a truly remarkable with advanced component technology that will provide outstanding service in the most demanding applications particularly for expensive and key equipment.

The state-of-the-art equipment and procedures employed to manufacture **Purity Lube Grease** provide the grease with a high degree of mechanical and storage stability. They will not breakdown under high mechanical stress. In storage, they will not alter consistency nor release oil.

Performance Standards

- NLGI-3
- MP-3

Benefits

- Reduced wear under high or shock loads
- Superior protection against rust and corrosion
- Excellent mechanical stability
- High temperature capability
- Lead, chlorine and nitrite free
- Excellent resistance to water spray and washout
- Outstanding storage stability

Typical Applications

Purity Lube Grease is recommended for use in most types of automotive and industrial applications including heavy duty service where high temperatures, high loads and water spray or ingress are encountered. It is suitable for loaded slide, ball and roller-bearings, wheel-bearings, universal joints, chassis and various shock-loaded or vibrating applications in transport, agriculture and off-road vehicles. requiring a NLGI 3 grade EP grease, resistant to elevated temperatures. Due to its outstanding corrosion and water-resistant properties, it is particularly suitable where water is present such as in steel mills, underground tunneling or mining and ore-crushing plants. The recommended operating temperature range is from -30°C to 180°C. **Purity Lube Grease** can even endure higher temperatures for short periods or if the lubrication frequency is increased. It is the normal recommendation where ambient temperatures are moderate and/or good pumpability is required.

Available Size: 0.4L, 15L

Typical Characteristics

Properties	Method	Value
NLGI		3
Soap/Thickener Type		Lithium Complex
Color		Blue
Dropping point, °C	ASTM D2265	320
Worked Penetration, 0.1mm	ASTM D217	227
Copper Corrosion, 100°C 24 hrs	ASTM D4048	1b
Oil Separation, 100°C 24 hrs (%mass)	ASTM D6184	0.38
4-Ball EP Test (10s, 1770 rpm), kgf	ASTM D2596	315

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Purity Lube Hydro-plus are based upon mineral oil enhanced with a stabilized zinc additive system. It is primarily for use in hydraulic equipment, but is suitable for other duties in which lubricants with good oxidation stability and lubrication performance are required.

Product Performance Claims: API VG-68

Advantages:

- Good anti-wear performance.
- Prevents wear of internal components reducing downtime.
- Resistance to oxidation.
- Extends service life.
- Good water separation.
- Reduces downtime and prolongs lubricant life.

Available Size: 20L, 205L

Typical Characteristics

Name	Method	Units	Hydraulic Oil 46	Hydraulic Oil 68
ISO Viscosity Grade	-	-	46	68
Density @ 15C	ISO 12185 / ASTM D4052	g/ml	0.88	0.88
Kinematic Viscosity @ 40°C	ISO 3104 / ASTM D445	mm ² /s	46	68
Kinematic Viscosity @ 100°C	ISO 3104 / ASTM D445	mm ² /s	6.8	8.77
Viscosity Index	ISO 2909 / ASTM D2270	-	>95	>95
Pour Point	ISO 3016 / ASTM D97	°C	-27	-27
Flash Point - open cup method	ISO 2592 / ASTM D92	°C	229	229

Name	Method	Units	Hydraulic Oil 46	Hydraulic Oil68
Foam Sequence I - tendency /stability	ISO 6247 / ASTM D892	ml/ml	10/0	10/0
Water Separation @ 54°C (40/37/3)	ISO 6614 / ASTM D1401	minutes	15	15
Air Release @ 50°C	ISO 9120 / ASTM D3427	minutes	8	8
Rust test - synthetic seawater (24hrs)	ISO 7120 /ASTM D665B	Rating	Pass	Pass
FZG Gear Scuffing test - A/ 8.3/90	ISO 14635-1	Failure Load Stage	12	12

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Purity Lube Maximus HD 40/50 are high-performance heavy-duty engine oils primarily intended for use in gasoline automotive engines of passenger cars, commercial vehicles and farm equipment. They may also be used in diesel engines of commercial vehicles and contractor equipment. They are formulated from high quality mineral base oils and an advanced additive system to provide the excellent performance required for modern combustion engines. They contain an effective balance of detergents and dispersants to minimize the formation of sludge and deposits, retain alkalinity (TBN) and reduce wear.

Features and Benefits

- Great engine cleanliness.
- Good protection against wear and corrosion.
- Extended intervals between oil drain.
- Low oil consumption.
- Reduced inventory costs for mixed fleet operations.

Applications

Purity Lube Maximus HD 40/50 Series can be used as lubrication in many types of gasoline engines for passenger cars, commercial vehicles and farm equipment as well as diesel engines for commercial vehicles and contractor equipment. They can also be used in gear and hydraulic applications if the builder approves the use of engine oils.

Typical Characteristics

Purity Lube HD Properties		
SAE Grade	40	50
Viscosity @ 100°C, cSt, ASTM D445	14.8	18.8
Total Base Number, mg KOH/g, ASTM 2896	6.5	6.5
Sulfated Ash, wt%, ASTM D874	0.7	0.7
Flash Point, °C, ASTM D92	220	220
Pour Point, °C, ASTM D97	-6	-6

Available Size: 20L, 205L

Product Performance Claims: API SG/CD

Health and Safety Based on available information, this product is not expected to produce adverse effects on health when used for the intended application and the recommendations provided in the Material Safety Data Sheet (MSDS) are followed.