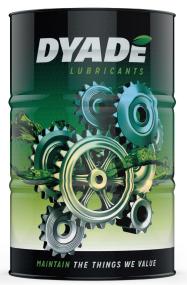
## FOOD-PLUS GREASE CALSUL 2 L

FOODGRADE GREASES



## FOOD GRADE HIGH PERFORMANCE GREASE WITH HIGH RESISTANCE TO HIGH TEMPERATURES AND SPEEDS BASED ON A PAO

323701301

This product is part of a family of highly advanced greases created through the complexing of modified overbased calcium sulphonates. This technology offers remarkable mechanical stability, high dropping point, excellent load carrying capacity, reduced wear, and superior resistance to water, steam, and corrosion. In fact, it matches or surpasses other top-tier hightemperature greases like lithium complex, aluminum complex, and polyurea in numerous ways. This grease product is a synthetic H-1 approved, with high viscosity, suitable for incidental food contact. Its purpose is to deliver outstanding performance in food processing applications, particularly under conditions of infrequent lubrication and elevated temperatures. It is most suitable for low to medium speed bearings operating in harsh conditions, including exposure to salt water, steam, temperature changes, and foreign materials such as process fluids commonly found in sugar beet processing. Additionally, pellet presses are another

application with increasingly stringent requirements for lubricants. This product has demonstrated excellent results in enhancing the lifetime of bearings and rollers while reducing wear and downtime.

AppearanceVisualSmoothColourVisualTanBase oil viscosity @ 40 °C, mm'/s400Base oil viscosity @ 100 °C, mm'/s37.5NLG consistencyASTM D2172ConsistencyConsistency (60 strokes, mm/10ASTM D2174.5Domping point, °CMechanical stability, 10.000 strokes % changeASTM D2174.5ASTM D2265Dropping point, °CASTM D25092.7.24-ball wear test - Wilk kgASTM D25094-ball wear test - Weld load, kgASTM D25964-ball wear test - Weld load, kgASTM D25964-ball wear test - Weid load, kgASTM D17434-ball wear test - Weid load, kgASTM D17434-ball wear test - Weid load, kgASTM D25965.3Old personsionBase of op / 1000 hoursASTM D35275.0SoloWater washout @ 80 °C, % lostASTM D17420.1Low temperature torque, 10000 g-cm @ start - @ -40 °CLow temperature torque, 10000 g-cm @ start - @ -39 °C0.1Low temperature torque, 10000 g-cm @ start - @ -39 °C0.2Mater washout @ 800 °C, % lost0.3ASTM D1780.4Condo1.4Astm D1780.5Oli separation, % loss0.6ASTM D1780.7ASTM D14780.8Condo	PROPERTY	METHOD	VALUE
Base oil viscosity @ 40 °C, mm²/s400Base oil viscosity @ 100 °C, mm²/s37.5NLGI consistencyASTM D2172Consistency, 60 strokes, mm/10ASTM D217280Mechanical stability, 10.000 strokes % changeASTM D2174.5Dropping point, °CASTM D2265318Roll stability, 50% water, %ASTM D250927.24-ball wear test - LWI, kgASTM D2596414-ball wear test - Weld load, kgASTM D2596414-ball wear test - Weld load, kgASTM D25960.41Rust TestASTM D1743PassSalt fog corrosion, 1 mil d.f.t., hoursASTM D1743PassSalt fog corrosion, 1 mil d.f.t., hoursASTM D42903.5Bearing lieakage, gramsASTM D1742260Bomb oxidation, psi drop / 1000 hoursASTM D15275.0Water washout @ 80 °C, % lostASTM D17420.1Low temperature torque, 10000 g-cm @ start - @ -40 °CASTM D1786000Low temperature torque, 10000 g-cm @ start - @ -40 °CASTM D178800Low temperature torque, 10000 g-cm @ 60 min - @ -40 °CASTM D178800Low temperature torque, 10000 g-cm @ 60 min - @ -29 °CASTM D178800Low temperature torque, 10000 g-cm @ 60 min - @ -29 °CASTM D178800Low temperature torque, 10000 g-cm @ 60 min - @ -18 °CASTM D178800Low temperature torque, 10000 g-cm @ 60 min - @ -18 °CASTM D178800Low temperature torque, 10000 g-cm @ 60 min - @ -18 °CASTM D1478800	Appearance	Visual	Smooth
Base oil viscosity @ 100 °C, mm²/s37.5NLGI consistencyA STM D2172Consistency, 60 strokes, mm/10A STM D217280Mechanical stability, 10.000 strokes % changeA STM D2174.5Dropping point, °CA STM D2265318Roll stability, 50% water, %A STM D250927.24-ball wear test - LWI, kgA STM D2596414-ball wear test - Weld load, kgA STM D2596414-ball wear test - Weld load, kgA STM D25960.41Rust TestA STM D25960.41Rust TestA STM D1743PassSalt fog corrosion, 1 mil d.f.t., hoursA STM D1743PassSalt fog corrosionA STM D448IbWheel bearing leakage, gramsA STM D3527260Bomb oxidation, psi drop / 1000 hoursA STM D35275.0Water washout @ 80 °C, % lostA STM D17420.1Low temperature torque, 10000 g-cm @ start - @ -40 °CA STM D14786000Low temperature torque, 10000 g-cm @ start - @ -29 °CA STM D14786000Low temperature torque, 10000 g-cm @ 60 min - @ -18 °CA STM D1478800Low temperature torque, 10000 g-cm @ 60 min - @ -29 °CA STM D1478800Low temperature torque, 10000 g-cm @ 60 min - @ -29 °CA STM D1478800Low temperature torque, 10000 g-cm @ 60 min - @ -18 °CA STM D1478800Low temperature torque, 10000 g-cm @ 60 min - @ -29 °CA STM D1478800Low temperature torque, 10000 g-cm @ 60 min - @ -29 °CA STM D1478800 <td>Colour</td> <td>Visual</td> <td>Tan</td>	Colour	Visual	Tan
ALGI consistencyASTM D2172Consistency, 60 strokes, mm/10ASTM D217280Mechanical stability, 10.000 strokes % changeASTM D2174.5Dropping point, °CASTM D2265318Roll stability, 50% water, %ASTM D2596318Roll stability, 50% water, %ASTM D259927.24-ball wear test - LWI, kgASTM D2596414-ball wear test - Weld load, kgASTM D259644904-ball wear test - Weld load, kgASTM D25960.41Rust TestWast M D1743PassSalt fog corrosion, 1 mil d.f.t., hoursASTM D1743PassSalt fog corrosionASTM D4048IbWheel bearing leakage, gramsASTM D3527260Bomb oxidation, psi drop / 1000 hoursASTM D35275.0Water washout @ 80 °C, % lostASTM D17420.1Low temperature torque, 10000 g-cm @ start - @ -40 °CASTM D14786000Low temperature torque, 10000 g-cm @ 60 min - @ -29 °CASTM D14786000Low temperature torque, 10000 g-cm @ 60 min - @ -29 °CASTM D1478800Low temperature torque, 10000 g-cm @ 60 min - @ -29 °CASTM D1478800Low temperature torque, 10000 g-cm @ 60 min - @ -29 °CASTM D1478800Low temperature torque, 10000 g-cm @ 60 min - @ -29 °CASTM D1478800Low temperature torque, 10000 g-cm @ 60 min - @ -29 °CASTM D1478800Low temperature torque, 10000 g-cm @ 60 min - @ -29 °CASTM D1478800Low temperature torque, 10000 g-cm @ 60 min - @ -29 °C<	Base oil viscosity @ 40 °C, mm²/s		400
AstrictAstrictAstrictConsistency, 60 strokes, mm/I0Astri D217280Mechanical stability, 10.000 strokes % changeAstri D2174.5Dropping point, °CAstri D2265318Roll stability, 50% water, %Astri D250927.24-ball wear test - LWI, kgAstri D2596414-ball wear test - Weld load, kgAstri D25964414-ball wear test - Weld load, kgAstri D25960.41Rust TestAstri D25960.41Rust TestAstri D1743PassSalt fog corrosion, 1 mil d.f.t., hoursAstri D4048IbWheel bearing leakage, gramsAstri D42903.5Bearing life performance, hoursAstri D3527260Bomb oxidation, psi drop / 1000 hoursAstri D17420.1Low temperature orque, 10000 g-cm @ start - @ -40 °CAstri D17486000Low temperature torque, 10000 g-cm @ start - @ -18 °CAstri D1748800Low temperature torque, 10000 g-cm @ 60 min - @ -40 °CAstri D178800Low temperature torque, 10000 g-cm @ 60 min - @ -29 °CAstri D1478800Low temperature torque, 10000 g-cm @ 60 min - @ -40 °CAstri D1478800Low temperature torque, 10000 g-cm @ 60 min - @ -40 °CAstri D1478800Low temperature torque, 10000 g-cm @ 60 min - @ -29 °CAstri D1478800Low temperature torque, 10000 g-cm @ 60 min - @ -29 °CAstri D1478800Low temperature torque, 10000 g-cm @ 60 min - @ -40 °CAstri D1478800Low temperature torque, 10	Base oil viscosity @ 100 °C, mm²/s		37.5
Mechanical stability, 10.000 strokes % changeASTM D2174.5Dropping point, °CASTM D2265318Roll stability, 50% water, %ASTM D18312.5Timken OK load, kgASTM D250927.24-ball wear test - LWI, kgASTM D2596414-ball wear test - Weld load, kgASTM D2596.4904-ball wear test - Wear scar, mmASTM D25960.41Rust TestASTM D1743PassSalt fog corrosion, 1 mil d.f.t., hoursASTM D1743PassSalt fog corrosionASTM D4048IbWheel bearing leakage, gramsASTM D2577260Bomb oxidation, psi drop / 1000 hoursASTM D35275.0Water washout @ 80 °C, % lostASTM D17420.1Low temperature torque, 10000 g-cm @ start - @ -40 °CASTM D1786000Low temperature torque, 10000 g-cm @ start - @ -29 °CASTM D1478800Low temperature torque, 10000 g-cm @ 60 min - @ -40 °CASTM D1478800Low temperature torque, 10000 g-cm @ 60 min - @ -40 °CASTM D1478800Low temperature torque, 10000 g-cm @ 60 min - @ -40 °CASTM D1478800Low temperature torque, 10000 g-cm @ 60 min - @ -40 °CASTM D1478800Low temperature torque, 10000 g-cm @ 60 min - @ -40 °CASTM D1478800Low temperature torque, 10000 g-cm @ 60 min - @ -29 °CASTM D1478800Low temperature torque, 10000 g-cm @ 60 min - @ -40 °CASTM D1478800Low temperature torque, 10000 g-cm @ 60 min - @ -40 °CASTM D1478800Low	NLGI consistency	ASTM D217	2
Dropping point, °CASTM D2265318Roll stability, 50% water, %ASTM D18312.5Timken OK load, kgASTM D250927.24-ball wear test - LWI, kgASTM D2596414-ball wear test - Weld load, kgASTM D2596414-ball wear test - Wear scar, mmASTM D25960.41Rust TestASTM D1743PassSalt fog corrosion, 1 mil d.f.t., hoursASTM D1743PassSalt fog corrosion, 1 mil d.f.t., hoursASTM D4048IbWheel bearing leakage, gramsASTM D42903.5Bearing life performance, hoursASTM D3527260Bomb oxidation, psi drop / 1000 hoursASTM D35275.0Water washout @ 80 °C, % lostASTM D17420.1Low temperature torque, 10000 g-cm @ start - @ -40 °CASTM D14786000Low temperature torque, 10000 g-cm @ start - @ -18 °CASTM D14786000Low temperature torque, 10000 g-cm @ 60 min - @ -40 °CASTM D1478800Low temperature torque, 10000 g-cm @ 60 min - @ -40 °CASTM D1478800Low temperature torque, 10000 g-cm @ 60 min - @ -40 °CASTM D1478800Low temperature torque, 10000 g-cm @ 60 min - @ -29 °CASTM D1478800Low temperature torque, 10000 g-cm @ 60 min - @ -18 °CASTM D1478800Low temperature torque, 10000 g-cm @ 60 min - @ -18 °CASTM D1478800Low temperature torque, 10000 g-cm @ 60 min - @ -18 °CASTM D1478800Low temperature, °C-40 - 240-40 - 240Peak temperature, °C<	Consistency, 60 strokes, mm/10	ASTM D217	280
Roll stability, 50% water, %ASTM D18312.5Timken OK load, kgASTM D250927.24-ball wear test - LWI, kgASTM D2596414-ball wear test - Weld load, kgASTM D2596414-ball wear test - Weld load, kgASTM D25960.41Rust TestASTM D1743PassSalt fog corrosion, 1 mil d.f.t., hoursASTM D1743PassSalt fog corrosionASTM D40481bWheel bearing leakage, gramsASTM D40481bWheel bearing leakage, gramsASTM D3527260Bomb oxidation, psi drop / 1000 hoursASTM D155275.0Water washout @ 80 °C, % lostASTM D17420.1Low temperature torque, 10000 g-cm @ start - @ -40 °CASTM D14786000Low temperature torque, 10000 g-cm @ 60 min - @ -40 °CASTM D14786000Low temperature torque, 10000 g-cm @ 60 min - @ -40 °CASTM D1478800Low temperature torque, 10000 g-cm @ 60 min - @ -40 °CASTM D1478800Low temperature torque, 10000 g-cm @ 60 min - @ -40 °CASTM D1478800Low temperature torque, 10000 g-cm @ 60 min - @ -18 °CASTM D1478800Low temperature torque, 10000 g-cm @ 60 min - @ -18 °CASTM D1478800Low temperature torque, 10000 g-cm @ 60 min - @ -18 °CASTM D1478800Low temperature torque, 10000 g-cm @ 60 min - @ -18 °CASTM D1478800Low temperature torque, 10000 g-cm @ 60 min - @ -18 °CASTM D1478800Low temperature torque, 10000 g-cm @ 60 min - @ -18 °CASTM D1478800<	Mechanical stability, 10.000 strokes % change	ASTM D217	4.5
InitiationASTM D250927.24-ball wear test - LWI, kgASTM D2509414-ball wear test - Weid load, kgASTM D25964904-ball wear test - Wear scar, mmASTM D25960.41Rust TestASTM D1743PassSalt fog corrosion, 1 mil d.f.t., hoursASTM D1743PassCopper corrosionASTM D4048IbWheel bearing leakage, gramsASTM D4048IbWheel bearing leakage, gramsASTM D3527260Bomb oxidation, psi drop / 1000 hoursASTM D12640.5Oil separation, % lossASTM D17420.1Low temperature torque, 10000 g-cm @ start - @ -40 °CASTM D14786000Low temperature torque, 10000 g-cm @ 60 min - @ -40 °CASTM D1478800Low temperature torque, 10000 g-cm @ 60 min - @ -40 °CASTM D1478800Low temperature torque, 10000 g-cm @ 60 min - @ -18 °CASTM D1478800Low temperature torque, 10000 g-cm @ 60 min - @ -18 °CASTM D1478800Low temperature torque, 10000 g-cm @ 60 min - @ -18 °CASTM D1478800Low temperature torque, 10000 g-cm @ 60 min - @ -18 °CASTM D1478800Low temperature torque, 10000 g-cm @ 60 min - @ -18 °CASTM D1478800Low temperature torque, 10000 g-cm @ 60 min - @ -18 °CASTM D1478800Low temperature torque, 10000 g-cm @ 60 min - @ -18 °CASTM D1478800Low temperature, °C-40 - 240-40 - 240Peak temperature, °C260NSF registration141133	Dropping point, °C	ASTM D2265	318
A-ball wear test - LWI, kgASTM D2596414-ball wear test - Weld load, kgASTM D25960.41Rust TestASTM D25960.41Rust TestASTM D1743PassSalt fog corrosion, 1 mil d.f.t., hoursASTM D1743PassCopper corrosionASTM D40481bWheel bearing leakage, gramsASTM D42903.5Bearing life performance, hoursASTM D3527260Bomb oxidation, psi drop / 1000 hoursASTM D17420.1Cov temperature torque, 10000 g-cm @ start - @ -40 °CASTM D17420.1Low temperature torque, 10000 g-cm @ start - @ -40 °CASTM D14786000Low temperature torque, 10000 g-cm @ 60 min - @ -40 °CASTM D14786000Low temperature torque, 10000 g-cm @ 60 min - @ -40 °CASTM D1478800Low temperature torque, 10000 g-cm @ 60 min - @ -40 °CASTM D1478800Low temperature torque, 10000 g-cm @ 60 min - @ -40 °CASTM D1478800Low temperature torque, 10000 g-cm @ 60 min - @ -40 °CASTM D1478800Low temperature torque, 10000 g-cm @ 60 min - @ -40 °CASTM D1478800Low temperature torque, 10000 g-cm @ 60 min - @ -29 °CASTM D1478800Low temperature torque, 10000 g-cm @ 60 min - @ -29 °CASTM D1478800Low temperature torque, 10000 g-cm @ 60 min - @ -29 °CASTM D1478800Low temperature torque, 10000 g-cm @ 60 min - @ -40 °CASTM D1478800Low temperature torque, 10000 g-cm @ 60 min - @ -29 °CASTM D1478800Low temperature torqu	Roll stability, 50% water, %	ASTM D1831	2.5
4-ball wear test - Weld load, kgASTM D2596>4904-ball wear test - Wear scar, mmASTM D25960.41Rust TestASTM D1743PassSalt fog corrosion, 1 mil d.f.t., hoursASTM D1743PassCopper corrosionASTM D4048IbWheel bearing leakage, gramsASTM D42903.5Bearing life performance, hoursASTM D3527260Bomb oxidation, psi drop / 1000 hoursASTM D35275.0Water washout @ 80 °C, % lostASTM D17420.1Low temperature torque, 10000 g-cm @ start - @ -40 °CASTM D14786000Low temperature torque, 10000 g-cm @ start - @ -18 °CASTM D14786000Low temperature torque, 10000 g-cm @ 60 min - @ -40 °CASTM D1478800Low temperature torque, 10000 g-cm @ 60 min - @ -40 °CASTM D1478800Low temperature torque, 10000 g-cm @ 60 min - @ -29 °CASTM D1478800Low temperature torque, 10000 g-cm @ 60 min - @ -29 °CASTM D1478800Low temperature torque, 10000 g-cm @ 60 min - @ -29 °CASTM D1478800Low temperature torque, 10000 g-cm @ 60 min - @ -40 °CASTM D1478800Low temperature torque, 10000 g-cm @ 60 min - @ -40 °CASTM D1478800Low temperature torque, 10000 g-cm @ 60 min - @ -29 °CASTM D1478800Low temperature torque, 10000 g-cm @ 60 min - @ -29 °CASTM D1478800Low temperature torque, 10000 g-cm @ 60 min - @ -29 °CASTM D1478800Low temperature torque, 10000 g-cm @ 60 min - @ -29 °CASTM D1478800 <t< td=""><td>Timken OK load, kg</td><td>ASTM D2509</td><td>27.2</td></t<>	Timken OK load, kg	ASTM D2509	27.2
A-ball wear test - Wear scar, mmASTM D25960.41Rust TestASTM D1743PassSalt fog corrosion, 1 mil d.f.t., hoursASTM D1743PassCopper corrosionASTM D4048IbWheel bearing leakage, gramsASTM D42903.5Bearing life performance, hoursASTM D3527260Bomb oxidation, psi drop / 1000 hoursASTM D35275.0Water washout @ 80 °C, % lostASTM D12640.5Oil separation, % lossASTM D17420.1Low temperature torque, 10000 g-cm @ start - @ -40 °CASTM D14786000Low temperature torque, 10000 g-cm @ start - @ -18 °CASTM D14786000Low temperature torque, 10000 g-cm @ 60 min - @ -40 °CASTM D1478800Low temperature torque, 10000 g-cm @ 60 min - @ -29 °CASTM D1478800Low temperature torque, 10000 g-cm @ 60 min - @ -29 °CASTM D1478800Low temperature torque, 10000 g-cm @ 60 min - @ -29 °CASTM D1478800Low temperature torque, 10000 g-cm @ 60 min - @ -29 °CASTM D1478800Low temperature torque, 10000 g-cm @ 60 min - @ -29 °CASTM D1478800Low temperature torque, 10000 g-cm @ 60 min - @ -29 °CASTM D1478800Low temperature torque, 10000 g-cm @ 60 min - @ -29 °CASTM D1478800Low temperature torque, 10000 g-cm @ 60 min - @ -29 °CASTM D1478800Low temperature torque, 10000 g-cm @ 60 min - @ -29 °CASTM D1478800Low temperature torque, 10000 g-cm @ 60 min - @ -29 °CASTM D1478800Speed	4-ball wear test - LWI, kg	ASTM D2596	41
Rust TestASTM D1743PassSalt fog corrosion, 1 mil d.f.t., hoursASTM B117>300Copper corrosionASTM D4048IbWheel bearing leakage, gramsASTM D42903.5Bearing life performance, hoursASTM D3527260Bomb oxidation, psi drop / 1000 hoursASTM D35275.0Water washout @ 80 °C, % lostASTM D12640.5Oil separation, % lossASTM D17420.1Low temperature torque, 10000 g-cm @ start - @ -40 °CASTM D14786000Low temperature torque, 10000 g-cm @ start - @ -18 °CASTM D14786000Low temperature torque, 10000 g-cm @ 60 min - @ -40 °CASTM D1478800Low temperature torque, 10000 g-cm @ 60 min - @ -40 °CASTM D1478800Low temperature torque, 10000 g-cm @ 60 min - @ -29 °CASTM D1478800Low temperature torque, 10000 g-cm @ 60 min - @ -18 °CASTM D1478800Low temperature torque, 10000 g-cm @ 60 min - @ -29 °CASTM D1478800Low temperature torque, 10000 g-cm @ 60 min - @ -40 °CASTM D1478800Low temperature torque, 10000 g-cm @ 60 min - @ -40 °CASTM D1478800Low temperature torque, 10000 g-cm @ 60 min - @ -29 °CASTM D1478800Low temperature torque, 10000 g-cm @ 60 min - @ -29 °CASTM D1478800Low temperature torque, 10000 g-cm @ 60 min - @ -29 °CASTM D1478800Low temperature torque, 10000 g-cm @ 60 min - @ -29 °CASTM D1478800Low temperature torque, 10000 g-cm @ 60 min - @ -29 °CASTM D1478800 <td>4-ball wear test - Weld load, kg</td> <td>ASTM D2596</td> <td>&gt;490</td>	4-ball wear test - Weld load, kg	ASTM D2596	>490
Salt fog corrosion, 1 mil d.f.t., hoursASTM BII7>300Copper corrosionASTM D4048IbWheel bearing leakage, gramsASTM D42903.5Bearing life performance, hoursASTM D3527260Bomb oxidation, psi drop / 1000 hoursASTM D35275.0Water washout @ 80 °C, % lostASTM D12640.5Oil separation, % lossASTM D17420.1Low temperature torque, 10000 g-cm @ start - @ -40 °CASTM D14786000Low temperature torque, 10000 g-cm @ start - @ -18 °CASTM D14786000Low temperature torque, 10000 g-cm @ 60 min - @ -40 °CASTM D1478800Low temperature torque, 10000 g-cm @ 60 min - @ -40 °CASTM D1478800Low temperature torque, 10000 g-cm @ 60 min - @ -29 °CASTM D1478800Low temperature torque, 10000 g-cm @ 60 min - @ -18 °CASTM D1478800Low temperature torque, 10000 g-cm @ 60 min - @ -29 °CASTM D1478800Low temperature torque, 10000 g-cm @ 60 min - @ -18 °CASTM D1478800Low temperature torque, 10000 g-cm @ 60 min - @ -18 °CASTM D1478800Low temperature torque, 10000 g-cm @ 60 min - @ -29 °CASTM D1478800Low temperature torque, 10000 g-cm @ 60 min - @ -29 °CASTM D1478800Low temperature torque, 10000 g-cm @ 60 min - @ -29 °CASTM D1478800Low temperature, *C-40 - 240-40 - 240Peak temperature, *C260141133	4-ball wear test - Wear scar, mm	ASTM D2596	0.41
Copper corrosionASTM D4048IbWheel bearing leakage, gramsASTM D42903.5Bearing life performance, hoursASTM D3527260Bomb oxidation, psi drop / 1000 hoursASTM D35275.0Water washout @ 80 °C, % lostASTM D12640.5Oil separation, % lossASTM D17420.1Low temperature torque, 10000 g-cm @ start - @ -40 °CASTM D14786000Low temperature torque, 10000 g-cm @ start - @ -18 °CASTM D14786000Low temperature torque, 10000 g-cm @ 60 min - @ -40 °CASTM D14786000Low temperature torque, 10000 g-cm @ 60 min - @ -40 °CASTM D1478800Low temperature torque, 10000 g-cm @ 60 min - @ -40 °CASTM D1478800Low temperature torque, 10000 g-cm @ 60 min - @ -29 °CASTM D1478800Low temperature torque, 10000 g-cm @ 60 min - @ -29 °CASTM D1478800Low temperature torque, 10000 g-cm @ 60 min - @ -18 °CASTM D1478800Low temperature torque, 10000 g-cm @ 60 min - @ -18 °CASTM D1478800Low temperature torque, 10000 g-cm @ 60 min - @ -29 °CASTM D1478800Low temperature torque, 10000 g-cm @ 60 min - @ -29 °CASTM D1478800Low temperature torque, 10000 g-cm @ 60 min - @ -29 °CASTM D1478800Low temperature torque, 10000 g-cm @ 60 min - @ -29 °CASTM D1478800Speed Factor*400.000400.000400.000Operating service temperatures, °C-40 - 240260NSF registration141133141133	Rust Test	ASTM D1743	Pass
Wheel bearing leakage, gramsASTM D42903.5Bearing life performance, hoursASTM D3527260Bomb oxidation, psi drop / 1000 hoursASTM D35275.0Water washout @ 80 °C, % lostASTM D12640.5Oil separation, % lossASTM D17420.1Low temperature torque, 10000 g-cm @ start - @ -40 °CASTM D14786000Low temperature torque, 10000 g-cm @ start - @ -29 °CASTM D14786000Low temperature torque, 10000 g-cm @ start - @ -18 °CASTM D14786000Low temperature torque, 10000 g-cm @ 60 min - @ -40 °CASTM D1478800Low temperature torque, 10000 g-cm @ 60 min - @ -29 °CASTM D1478800Low temperature torque, 10000 g-cm @ 60 min - @ -29 °CASTM D1478800Low temperature torque, 10000 g-cm @ 60 min - @ -29 °CASTM D1478800Low temperature torque, 10000 g-cm @ 60 min - @ -18 °CASTM D1478800Low temperature torque, 10000 g-cm @ 60 min - @ -18 °CASTM D1478800Low temperature torque, 10000 g-cm @ 60 min - @ -29 °CASTM D1478800Low temperature torque, 10000 g-cm @ 60 min - @ -29 °CASTM D1478800Low temperature torque, 10000 g-cm @ 60 min - @ -29 °CASTM D1478800Low temperature torque, 10000 g-cm @ 60 min - @ -29 °CASTM D1478800Speed Factor*400.00020260NSF registration141133141133	Salt fog corrosion, 1 mil d.f.t., hours	ASTM B117	>300
Bearing life performance, hoursASTM D3527260Bomb oxidation, psi drop / 1000 hoursASTM D35275.0Water washout @ 80 °C, % lostASTM D12640.5Oil separation, % lossASTM D17420.1Low temperature torque, 10000 g-cm @ start - @ -40 °CASTM D14786000Low temperature torque, 10000 g-cm @ start - @ -29 °CASTM D14786000Low temperature torque, 10000 g-cm @ start - @ -18 °CASTM D14786000Low temperature torque, 10000 g-cm @ 60 min - @ -40 °CASTM D1478800Low temperature torque, 10000 g-cm @ 60 min - @ -40 °CASTM D1478800Low temperature torque, 10000 g-cm @ 60 min - @ -29 °CASTM D1478800Low temperature torque, 10000 g-cm @ 60 min - @ -29 °CASTM D1478800Low temperature torque, 10000 g-cm @ 60 min - @ -18 °CASTM D1478800Low temperature torque, 10000 g-cm @ 60 min - @ -18 °CASTM D1478800Low temperature torque, 10000 g-cm @ 60 min - @ -29 °CASTM D1478800Low temperature torque, 10000 g-cm @ 60 min - @ -29 °CASTM D1478800Speed Factor*400.000400.000Operating service temperatures, °C-40 - 240Peak temperature, °C260NSF registration141133	Copper corrosion	ASTM D4048	1b
Bomb oxidation, psi drop / 1000 hoursASTM D35275.0Water washout @ 80 °C, % lostASTM D12640.5Oil separation, % lossASTM D17420.1Low temperature torque, 10000 g-cm @ start - @ -40 °CASTM D14786000Low temperature torque, 10000 g-cm @ start - @ -29 °CASTM D14786000Low temperature torque, 10000 g-cm @ start - @ -18 °CASTM D14786000Low temperature torque, 10000 g-cm @ 60 min - @ -40 °CASTM D1478800Low temperature torque, 10000 g-cm @ 60 min - @ -29 °CASTM D1478800Low temperature torque, 10000 g-cm @ 60 min - @ -29 °CASTM D1478800Low temperature torque, 10000 g-cm @ 60 min - @ -18 °CASTM D1478800Low temperature torque, 10000 g-cm @ 60 min - @ -18 °CASTM D1478800Low temperature torque, 10000 g-cm @ 60 min - @ -18 °CASTM D1478800Deat temperature, 10000 g-cm @ 60 min - @ -18 °CASTM D1478800Speed Factor*400.000400.000400.000Operating service temperatures, °C-40 - 240260NSF registration141133141133	Wheel bearing leakage, grams	ASTM D4290	3.5
Water washout @ 80 °C, % lostASTM D12640.5Oil separation, % lossASTM D17420.1Low temperature torque, 10000 g-cm @ start - @ -40 °CASTM D14786000Low temperature torque, 10000 g-cm @ start - @ -18 °CASTM D14786000Low temperature torque, 10000 g-cm @ start - @ -18 °CASTM D14786000Low temperature torque, 10000 g-cm @ 60 min - @ -40 °CASTM D1478800Low temperature torque, 10000 g-cm @ 60 min - @ -40 °CASTM D1478800Low temperature torque, 10000 g-cm @ 60 min - @ -92 °CASTM D1478800Low temperature torque, 10000 g-cm @ 60 min - @ -18 °CASTM D1478800Low temperature torque, 10000 g-cm @ 60 min - @ -18 °CASTM D1478800Dev temperature torque, 10000 g-cm @ 60 min - @ -18 °CASTM D1478800Low temperature torque, 10000 g-cm @ 60 min - @ -18 °CASTM D1478800Dev temperature torque, 10000 g-cm @ 60 min - @ -18 °CASTM D1478800Speed Factor*400.000-40 - 240Peak temperature, °C260141133	Bearing life performance, hours	ASTM D3527	260
Oil separation, % loss ASTM DI742 0.1   Low temperature torque, 10000 g-cm @ start - @ -40 °C ASTM DI478 6000   Low temperature torque, 10000 g-cm @ start - @ -29 °C ASTM DI478 6000   Low temperature torque, 10000 g-cm @ start - @ -18 °C ASTM DI478 6000   Low temperature torque, 10000 g-cm @ start - @ -18 °C ASTM DI478 6000   Low temperature torque, 10000 g-cm @ 60 min - @ -40 °C ASTM DI478 800   Low temperature torque, 10000 g-cm @ 60 min - @ -29 °C ASTM DI478 800   Low temperature torque, 10000 g-cm @ 60 min - @ -18 °C ASTM DI478 800   Low temperature torque, 10000 g-cm @ 60 min - @ -18 °C ASTM DI478 800   Speed Factor* 400.000 400.000 400.000 400.000 400.240 400.240 400.240 400.240 400.240 400.240 400.240 400.240 400.240 400.240 400.260 400.240 400.240 400.260 400.240 400.260 400.260 400.260 400.260 400.260 400.260 400.260 400.260 400.260 400.260 400.260 400.260	Bomb oxidation, psi drop / 1000 hours	ASTM D3527	5.0
Low temperature torque, 10000 g-cm @ start - @ -40 °C ASTM D1478 6000   Low temperature torque, 10000 g-cm @ start - @ -29 °C ASTM D1478 6000   Low temperature torque, 10000 g-cm @ start - @ -18 °C ASTM D1478 6000   Low temperature torque, 10000 g-cm @ start - @ -18 °C ASTM D1478 6000   Low temperature torque, 10000 g-cm @ 60 min - @ -40 °C ASTM D1478 800   Low temperature torque, 10000 g-cm @ 60 min - @ -29 °C ASTM D1478 800   Low temperature torque, 10000 g-cm @ 60 min - @ -18 °C ASTM D1478 800   Low temperature torque, 10000 g-cm @ 60 min - @ -18 °C ASTM D1478 800   Low temperature torque, 10000 g-cm @ 60 min - @ -18 °C ASTM D1478 800   Low temperature torque, 10000 g-cm @ 60 min - @ -18 °C ASTM D1478 800   Speed Factor* 400.000 400.000 400.000 400.000 400 - 240 400 - 240 400 400 400 400 400 400 400 41133 41133 441133 441133 441133 441133 441133 44113 44113 44113 44113 44113 44113	Water washout @ 80 °C, % lost	ASTM D1264	0.5
Low temperature torque, 10000 g-cm @ start - @ -29 °C ASTM D1478 6000   Low temperature torque, 10000 g-cm @ start - @ -18 °C ASTM D1478 6000   Low temperature torque, 10000 g-cm @ start - @ -18 °C ASTM D1478 6000   Low temperature torque, 10000 g-cm @ 60 min - @ -40 °C ASTM D1478 800   Low temperature torque, 10000 g-cm @ 60 min - @ -29 °C ASTM D1478 800   Low temperature torque, 10000 g-cm @ 60 min - @ -18 °C ASTM D1478 800   Low temperature torque, 10000 g-cm @ 60 min - @ -18 °C ASTM D1478 800   Qperating service temperatures, °C -40 - 240 -40 - 240   Peak temperature, °C 260 141133	Oil separation, % loss	ASTM D1742	0.1
Low temperature torque, 10000 g-cm @ start - @ -18 °C ASTM D1478 6000   Low temperature torque, 10000 g-cm @ 60 min - @ -40 °C ASTM D1478 800   Low temperature torque, 10000 g-cm @ 60 min - @ -29 °C ASTM D1478 800   Low temperature torque, 10000 g-cm @ 60 min - @ -29 °C ASTM D1478 800   Low temperature torque, 10000 g-cm @ 60 min - @ -18 °C ASTM D1478 800   Low temperature torque, 10000 g-cm @ 60 min - @ -18 °C ASTM D1478 800   Speed Factor* 400.000 400.000 400.000   Operating service temperatures, °C -40 - 240 260   NSF registration 141133 141133	Low temperature torque, 10000 g-cm @ start - @ -40 °C	ASTM D1478	6000
Low temperature torque, 10000 g-cm @ 60 min - @ -40 °C ASTM D1478 800   Low temperature torque, 10000 g-cm @ 60 min - @ -29 °C ASTM D1478 800   Low temperature torque, 10000 g-cm @ 60 min - @ -29 °C ASTM D1478 800   Low temperature torque, 10000 g-cm @ 60 min - @ -18 °C ASTM D1478 800   Speed Factor* 400.000 400.000   Operating service temperatures, °C -40 - 240   Peak temperature, °C 260   NSF registration 141133	Low temperature torque, 10000 g-cm @ start - @ -29 °C	ASTM D1478	6000
Low temperature torque, 10000 g-cm @ 60 min - @ -29 °C ASTM D1478 800   Low temperature torque, 10000 g-cm @ 60 min - @ -18 °C ASTM D1478 800   Speed Factor* 400.000 400.000   Operating service temperatures, °C -40 - 240 -40 - 240   Peak temperature, °C 260 NSF registration 141133	Low temperature torque, 10000 g-cm @ start - @ -18 °C	ASTM D1478	6000
Low temperature torque, 10000 g-cm @ 60 min - @ -18 °C ASTM D1478 800   Speed Factor* 400.000   Operating service temperatures, °C -40 - 240   Peak temperature, °C 260   NSF registration 141133	Low temperature torque, 10000 g-cm @ 60 min - @ -40 °C	ASTM D1478	800
Speed Factor*400.000Operating service temperatures, °C-40 - 240Peak temperature, °C260NSF registration141133	Low temperature torque, 10000 g-cm @ 60 min - @ -29 °C	ASTM D1478	800
Operating service temperatures, °C-40 - 240Peak temperature, °C260NSF registration141133	Low temperature torque, 10000 g-cm @ 60 min - @ -18 °C	ASTM D1478	800
Peak temperature, °C260NSF registration141133	Speed Factor*		400.000
NSF registration 141133	Operating service temperatures, °C		-40 - 240
5	Peak temperature, °C		260
Keeber entroved	NSF registration		141133
	Kosher approved		Yes
Halal approved Yes	Halal approved		Yes

DYADE LUBRICANTS

## CATEGORY

Greases

## BENEFITS

- Superior mechanical stability versus other thickeners, particularly in the presence of heat and water
- Resistant against cold & hot water and alkalibased cleaners
- Adheres to metal surfaces
- High dropping point, Typically more than 300 °C
- Excellent EP and AW properties inherent in the
- thickener
- Does not require the use of additional additives
- Excellent mobility and torque at temperatures down to -40 °C
- Contains no colorant (Titanium Dioxide TiO2)
- Formulated for enhanced resistance to hot, cold, and salt water
- Sulphonates are known and used for their excellent rust prevention properties
- The use of premium antioxidant and a high viscosity PAO ensures excellent thermal and oxidation stability. Life performance is typically increased by up to four times that of a regular mineral oil-based grease
- Suitable for centralized lubrication systems

All data on this technical data sheet is indicative only

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