

Product Description

D-A **Titan Blue**™ is a technologically advanced grease specifically tailored for extreme lubrication conditions and challenging environments. When under extreme pressure and load, its unique **Micro Technology**™ system provides a controlled release of microencapsulated particles delivering a protective barrier preventing metal to metal (boundary) contact, particularly in various types of harsh ambient environments where high shock loads are expected. It also maintains unparalleled film thickness throughout its service and affords excellent high temperature stability / oxidation control at elevated temperatures. In addition, the D-A **Titan Blue**™ lithium sulfonate complex thickening system provides metal with inherent corrosion protection in the most challenging environmental conditions, including very corrosive salt-water ingress. D-A **Titan Blue**™ not only affords unparalleled protection and lubrication, but promotes extended grease service, reducing maintenance downtime and lubrication overall costs. It is blue in color and available in NLGI #0(Bulk), #1, and #2 grades.

Product Features and Benefits

Unique **Micro Technology**™ system, imparting superior extreme pressure (EP) protection. Exceptional friction reducer and heat dissipater will easily handle heat in extreme environments.

Superior oxidation protection for extended service life.

Remarkable wear protection against the most extreme loads.

Maintains pumpability and film strength at the same time.

Lithium Sulfonate Complex thickener system that provides unsurpassed protection (less wear, lower friction) and equipment service life.

All the pumpability and compatibility advantages of a Lithium and the extreme corrosion protection of a Sulfonate in one grease.

Compatible with all Lithium thickeners.

Typical Applications

Mining
 Quarry
 Construction
 Automotive
 Marine
 Trailer Wheel Bearings

Trucking
 Refuse
 Ready Mix Fleets
 Industrial
 Agriculture
 Meets NLGI GC/LB Requirements

Typical Properties

NLGI Grade	ASTM D217	#0	#1	#2
Thickener Type	ASTM D128	Lithium Sulfonate Complex	Lithium Sulfonate Complex	Lithium Sulfonate Complex
Color	Visual	Blue	Blue	Blue
Usable Operating Temperature Range, °F (°C)		-22 to 400 (-30 to 205)		
Worked Penetration @ 77°F	ASTM D217	355-385	310 - 340	265 - 295
Base Oil Viscosity @ 40°C	ASTM D445	220	220	220
Dropping Point, °F (°C)	ASTM D2265	N/A	500 (260)	500 (260)
Four Ball EP, Weld Load kgf	ASTM D2596	620	>800	>800
Four Ball Wear, Scar Dia., mm	ASTM D2266	0.60 max	0.60 max	0.60 max
Load Wear Index	ASTM D2596	120 min	150 min	150 min
Timken OK Load	ASTM D2509	60 lbs. min	>70 lbs. min	>70 lbs. min
Water Wash-Out, % Loss	ASTM D1264	N/A	10 max	5 max
Water Spray-Off, % Loss	ASTM D4049	N/A	45	25
Elastomers (2X)	ASTM D4289	GC-LB Limits	GC-LB Limits	GC-LB Limits
Copper Corrosion Test	ASTM D4048	1b	1b	1b
Bearing Rust Test	ASTM D1743	Pass	Pass	Pass
Rust Prevention, 100% Sea Water	ASTM D5969	Pass	Pass	Pass
U.S. Steel Mobility, gm/min, 60°F	USS LT-37	400	250	150
Molybdenum Disulfide, wt. %	ASTM D128	Nil	Nil	Nil
Ring-on-Block (Low speed / High Load) 1-hour test, non-replenished sump	ASTM D2509 Modified			
PSI Rating, psi.		Pass/ >8,000 psi	Pass/ >9,000 psi	Pass/ >9,000 psi
Max Temperature, °F (°C)		284 (140)	284 (140)	284 (140)
Average Coefficient of Friction After 30-minute break in		<0.03	<0.03	<0.03

D-A Part Number:

Bulk	12291	12241	12261
Drum – 400 lb	N/A	12242	12262
Qtr Drum – 120 lb	12296	12246	12266
Pail (Metal) – 35 lb	N/A	12249	12269
Cartridges – 43 lb	N/A	12247T	12267T