# JAX BIO-GUARD™ GREASES

E.P. WATER-RESISTANT GREASES EAL LUBRICANT, VGP-COMPLIANT



**INDUSTRIAL** 

### PRODUCT DESCRIPTION

JAX Bio-Guard Greases are EAL, biodegradable lubricants for heavy-duty applications where water resistance and load-carrying properties are primary concerns. JAX Bio-Guard Greases have undergone extensive research and development resulting in performance levels typically found in conventional heavy-duty E.P. greases. This results in greases that will not sacrifice water resistance, wear protection or mobility while giving the environmental protections of an EAL, biodegradable lubricant.

#### PRODUCT BENEFITS

- Conforms to Major Environmental Standards JAX Bio-Guard Greases are
  formulated with high performance, Group V ester base fluids. This results in highquality greases that meet EAL standards. This includes European Eco-label which
  satisfies US EPA requirements for EAL lubricants meeting Vessel General Permit for
  Discharges incidental to the Normal Operation of Vessels (VGP). These standards
  ensure compliance in terms of biodegradability, toxicity and bioaccumulation
  potential.
- Excellent Resistance to Water The purpose of grease lubrication is to be functional
  in areas that cannot contain fluid lubricants. JAX Bio-Guard Greases are formulated
  to resist water washout at unprecendented levels for EAL greases and match heavyduty industrial standards of performance. Carefully selected thickeners, polymers
  and additives make this accomplishment impressive given the typical hydroscopic
  attributes of EAL ester base fluids.
- Exceptional E.P. and Antiwear Performance If a grease meets environmental standards, has the unique ability to adhere in high water contamination areas yet does not protect bearings and components from wear, it will be of little use for the long-term protection of expensive machinery. JAX Bio-Guard Greases yield impressive results in all areas of wear and extreme-pressure protection, beyond any other EAL greases on the market today.

#### **APPLICATIONS**

- All grease applications on seaborne transit vessels and mobile dredging equipment where there is preferred or mandated use of EAL classified lubricants
- All grease applications where water or ground contamination is a concern

#### **COMPATIBILITY**

JAX Bio-Guard Greases exhibit excellent compatibility with most EAL and industrial greases. However, thickener chemistries may be incompatible at different levels.

Please consult with your JAX Sales Representative regarding question about specific applications.



## JAX BIO-GUARD™ GREASES

TYPICAL PROPERTIES	BIO-GUARD GREASE 1	BIO-GUARD GREASE 2	METHOD
NLGI Grade	1	2	
Penetration, Unworked	324	276	ASTM D 217
Penetration, Worked 60 Strokes	331	269	ASTM D 217
Dropping Point, °F (°C)	363 (184)	367 (186)	ASTM D 2265
Base Fluid Viscosity @ 40°C, cSt	255	681	ASTM D 445
Base Fluid Viscosity @ 100°C, cSt	34	77	ASTM D 445
Base Fluid Viscosity Index	178	194	ASTM D 2270
Four Ball Weld, Kg	400	400	
Four Ball Wear, mm	0.50	0.47	ASTM D 2266
Copper Corrosion	1b	1b	ASTM D 4048
Water Spray Off, 100°F (% Loss)	9.0	6.0	ASTM D 4049
Mobility			
Mobility @ 77°F (g/min)	438.6	237.3	3NAQCT410022
Mobility @ 60°F (g/min)	246.4	132.0	3NAQCT410022
Mobility @ 40°F (g/min)	113.7	52.9	3NAQCT410022
Mobility @ 20°F (g/min)	41.8	17.2	3NAQCT410022
Mobility @ 0°F (g/min)	9.3	4.8	3NAQCT410022
Water Washout, 79°C (% loss)	4.5	1.2	ASTM D 1264
Roll Stability	Pending	Pending	ASTM D 1831
Roll Stability, Wet	Pending	Pending	ASTM D 1831 Mod.

JAX products undergo continual improvement in formulation and manufacture. The values indicated in this PDS are typical production values at the time of this writing. JAX reserves the right to alter and update product data and typical values at any time without notice. It is the responsibility of the installer and/or purchaser to determine if these specifications are adequate and proper for the intended application. SDS information may be found at www.jax.com or by contacting JAX INC.

CONTAINER SIZE	BIO-GUARD GREASE 1	BIO-GUARD GREASE 2
2000 Pound Tote - 276	BGGR1-276	BGGR2-276
400 Pound Drum - 400	BGGR1-400	BGGR2-400
120 Pound Keg - 120	BGGR1-120	BGGR2-120
35 Pound Pail - 035	BGGR1-035	BGGR2-035
50 Cartridge Case - 050	BGGR1-050	BGGR2-050
10 Cartridge Pack - 052	BGGR1-052	BGGR2-052



