



Formerly Known As: Whitmore® Caliber® 3M

# Shell Gadus (Caliber 3-M)

- Extreme Pressure
- Water Resistant
- Multipurpose

## Extreme-Service Grease with 3% Moly

Shell Gadus (Caliber 3-M) is a series of extreme pressure lithium complex greases that contain molybdenum. The series is designed primarily for use in draglines, shovels, drills, earthmoving equipment and other heavy-duty rolling stock applications.

### DESIGNED TO MEET CHALLENGES

#### Performance, Features & Benefits

##### Features

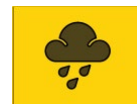
Shell Gadus (Caliber 3-M) contains 3% molybdenum disulfide has the extreme pressure capability to prevent wear in very heavily loaded bushings and bearings.

The NLGI 0, 1, and 2 grades are available with 5% MoS<sub>2</sub>.

##### Benefits

- WATER-RESISTANT - excellent resistance to washing out of bearings.
- EXTREME PRESSURE - protects against shock loads and scuffing of metal surfaces. Reduces parts replacement and downtime.
- SEALS OUT DIRT AND CONTAMINANTS - forms a protective barrier to reduce wear and extend lubricant life.
- VERSATILE FORMULATION - ideal for a wide range of equipment, including process machinery and industrial applications.

#### Main Applications



Shell Gadus (Caliber 3-M) is designed to lubricate the components of mining machines, earthmoving equipment and rolling stock. It is recommended for wheel bearings, slewing bearings, vehicle chassis points and U-joints, as well as pivot points and bucket pins on earthmoving equipment.

#### Specifications, Approvals & Recommendations

For a full listing of equipment approvals and recommendations, please consult your local Shell & Whitmore Reliability Solutions Helpdesk.

## Typical Physical Characteristics

Properties			Method	Shell Gadus (Caliber 3-M)			
NLGI Grade				Arctic	0	1	2
Worked Penetration - 60 strokes @25°C			ASTM D217	355-385	355-385	310-340	265-295
Dropping Point		°F (°C)	ASTM D2265	400 (204)	450 (232)	450 (232)	450 (232)
Viscosity, Base Oil	@40°C	cSt	ASTM D445	49 – 56	34 – 42	133 – 147	158 – 173
	@100°C	cSt		6 – 8	8 – 10	12 – 14	13.5 – 15.
Viscosity, Base Oil with Polymer	@40°C	cSt	ASTM D445	68 – 76	--	266 – 294	245 – 275
	@100°C	cSt		9 – 11	--	23.5 – 26	20 – 24
Density	@60°F (15.5 °C)	lb/gal	Gardner Method	7.640	7.700	7.400	7.62
Specific Gravity		g/cc		0.915	0.918	0.888	0.913
Four Ball Weld EP, Weld Point		kg	ASTM D2596	500	800	800	800
Four Ball Wear, Scar Width		mm	ASTM D2266	0.66	0.5	--	0.60
Water Washout		% Loss	ASTM D1264	--	--	--	15
Copper Strip Corrosion @212°F (100°C)			ASTM D4048 (Modified)	1A	1B	1B	1B
Ambient Temperature Range		°F (°C)		-30 (-34) to 30 (-1)	-20 (-29) to 50 (10)	-5 (-21) to 80 (-27)	10 (-12) to 200 (93)
Thickener				Lithium	Lithium	Lithium	Lithium

These characteristics are typical of current production. Whilst future production will conform to Shell & Whitmore Reliability Solutions specification, variations in these characteristics may occur.

## Health, Safety & Environment

### Health and Safety

Shell Gadus (Caliber 3-M) is unlikely to present any significant health or safety hazard when properly used in the recommended application and good standards of personal hygiene are maintained.

Avoid contact with skin. Use impervious gloves with used oil. After skin contact, wash immediately with soap and water.

Guidance on Health and Safety is available on the appropriate Safety Data Sheet, which can be obtained from <http://www.epc.shell.com/>

### Protect the Environment

Take used oil to an authorized collection point. Do not discharge into drains, soil or water.

## Additional Information

### Advice

Advice on applications not covered here may be obtained from your Shell & Whitmore Reliability Solutions representative.