



## Product Data Sheet

# MOLUB-ALLOY<sup>®</sup> 777

Greases

### DESCRIPTION

MOLUB-ALLOY<sup>®</sup> 777 greases were designed for very heavy-duty service under severe ambient conditions. They are blended and compounded to withstand shock loads as well as heavy loads, conditions commonly found in the steel and construction industries, in mining and forestry.

- MOLUB-ALLOY<sup>®</sup> 777 greases are made with a blend of high-viscosity mineral oils and polymers which produce a tough lubricating film capable of withstanding shock loads and vibrations.
- The shear-stable thickener provides an excellent sealing effect against contamination from the atmosphere, even if mechanical seals are damaged or missing (grease collar in the bearing).
- The lubricating greases contain solid lubricants whose structure is best suited for the rugged conditions in heavy industry. The solids are treated to increase their natural affinity to metal surfaces.
- Corrosion and oxidation inhibitors maximize the corrosion protection and aging stability of the base oil.

### APPLICATIONS

- Typical applications are in all types of rolling and sliding bearings, spindles, joint couplings (except for high-speed precision couplings), running gears, cams and general grease lubricating points, especially where heavy loads and low speeds prevail.
- MOLUB-ALLOY<sup>®</sup> 777 greases are especially suited for the lubrication of heavy machines e.g. forging presses or hauling machines. Due to the extremely stable lubricating film, supported by the solid lubricant combination in the mixed friction area as well as the excellent sealing effect, a quantity reduction and an improved lubricating condition can be ensured.

### ADVANTAGES

- Due to their good adhesion these greases provide an optimum sealing effect.
- The MOLUB-ALLOY<sup>®</sup> solid lubricants achieve reduced friction in the boundary and mixed friction areas. This is most evident during frequent start-ups, low speeds and/or high loads as well as shock loads.
- Overall savings are derived from the above which in turn result in less repair work and downtime, longer service life of components and extended lubrication intervals.

### NOTES FOR USE

- MOLUB-ALLOY<sup>®</sup> 777 greases should not be mixed with lubricating greases which have a different thickener base.
- Lubrication intervals should be increased gradually to ensure complete removal of the previous lubricant and to guarantee the deposit of the solid lubricant layer at the lubricating points.
- The greases may be applied with a manual grease gun or via automatic dispensing systems which are suited for the given worked penetration.



# MOLUB-ALLOY<sup>®</sup> 777

## Technical data

	Unit	Value		Test method
		777-1	777-2	
<b>MOLUB-ALLOY<sup>®</sup> 777</b>	-	<b>777-1</b>	<b>777-2</b>	-
Article no.	-	3360	3370	-
DIN classification	-	KPF 1 K-30	KPF 2 K-20	DIN 51502
NLGI grade	-	1	2	DIN 51818
Thickener (soap base)	-	lithium		-
Worked penetration	0.1 mm	310 – 340	265 - 295	DIN ISO 2137
Penetration drop after 100,000 strokes	-	max. 25	max. 25	-
Roll stability, penetration drop	-	18	14	ASTM D 1831
Dropping point	°C	> 180		DIN ISO 2176
Base oil properties:				
Viscosity at + 40°C	mm <sup>2</sup> /s	860		DIN 51366
at + 100°C		62		
Flash point	°C	> 230		DIN ISO 2592
Oxidation stability				
Pressure drop after 100 h at 99°C	hPa	250		DIN 51808
Pressure drop after 300 h at 99°C		900		
Water washout (loss at 79°C)	%	7.5	6.5	ASTM D 1264
Behavior in the presence of water at 90°C	-	0		DIN 51807/1
Rust prevention properties	rating *	1		ASTM D 1743
Emcor test	rating *	0 / 0		ISO 11007
Oil separation	%	1.7	0.8	ASTM D 1742
Timken EP test, OK load	N	245		DIN 51434-03
Four ball EP test				
Weld load	N	3800/4000		DIN 51350-04-A
Four ball wear test				
Wear scar diameter	mm	< 1.8		DIN 51350-05-E
FAG FE 9 test, A/1500/6000/120°C	-	passed		DIN 51821-02
Flow pressure at – 20°C	hPa	< 650	< 850	DIN 51805
Operating temperature	°C	- 30 / + 120	- 20 / + 120	-

1 mm<sup>2</sup>/s  $\hat{=}$  1cSt

\* = passed

These technical data are based on average test results. Minor deviations may occur from case to case. For further product information please contact the Technical Service of Castrol Industrie GmbH.

Above data are based on extensive tests and practical experience. Considering the wide range of application requirements, they cannot, however, guarantee success in every single case. We therefore recommend practical trials. We reserve the right to change the product composition with a view to further improvement.

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