



## Product Data Sheet

# MOLUB-ALLOY<sup>®</sup> 860

Greases

### DESCRIPTION

MOLUB-ALLOY<sup>®</sup> 860 greases are designed to extend the service life of rolling and sliding bearings subjected to heavy loads and to elevated temperatures.

MOLUB-ALLOY<sup>®</sup> 860 greases are intended to provide a stable oil film for applications at lower speeds, higher loads, and/or higher temperatures sustained for longer periods of time.

- MOLUB-ALLOY<sup>®</sup> 860 greases feature a lithium-complex soap as thickener and a mineral paraffin-base oil.
- Corrosion inhibitors and anti-oxidant agents have been added to the base oil.
- EP additives and solid lubricants evenly distributed in the grease increase the load carrying capacity and wear protection.

### APPLICATIONS

- MOLUB-ALLOY<sup>®</sup> 860 greases are recommended for rolling and sliding bearings at high loads and normal to elevated temperatures.
- They could be used at permanent temperatures up to + 140 °C
- Peak temperatures up to + 150 °C are possible. Lubrication intervals should be tuned carefully at high temperatures.
- MOLUB-ALLOY<sup>®</sup> 860 greases are available in the NLGI grades 1 and 2 as well as with base oil viscosities of ISO VG 220 and 460.

### ADVANTAGES

- The lithium-complex soap guarantees an excellent worked penetration as well as a high dropping point.
- Reduced friction, due to the MOLUB-ALLOY<sup>®</sup> solid lubricants, is most evident under boundary and mixed friction conditions. This benefit is most pronounced where frequent start-up, slow speeds, or high and unexpected loads are encountered.
- Overall savings are derived from the above and result from less labor and downtime, smoother, more efficient operation with longer parts life, and extended lubrication intervals.

### NOTES FOR USE

- MOLUB-ALLOY<sup>®</sup> 860 greases are not compatible with greases of a different soap base.
- Lubrication intervals should be increased gradually to ensure complete removal of previous lubricant and the deposit of the a surface layer of MOLUB-ALLOY<sup>®</sup> solids.
- At elevated temperatures (over +100 °C to +150 °C) lubrication intervals should be tuned carefully.

# MOLUB-ALLOY<sup>®</sup> 860

## Technical data

	Unit	Value				Test method
<b>MOLUB-ALLOY<sup>®</sup> 860 greases</b>	-	<b>860/220-1</b>	<b>860/220-2</b>	<b>860/460-1</b>	<b>860/460-2</b>	-
Article no.	-	3555	3561	3556	3563	-
DIN classification	-	KPF 1N-30	KPF 2N-20	KPF 1N-30	KPF 2N-20	DIN 51502
NLGI grade	-	1	2	1	2	DIN 51818
Thickener (soap base)	-	lithium-complex				-
Worked penetration	0.1 mm	310 – 340	265 – 295	310 – 340	265 – 295	ISO 2137
Dropping point	°C	> 260				ISO 2176
Viscosity at + 40°C + 100°C	mm <sup>2</sup> /s	220 19	220 19	460 28.5	460 28.5	DIN 51366
Flash point	°C	232				ISO 2592
Fire point	°C	260				ISO 2592
Behavior in the presence of water (90°C)	(rating)	1				DIN 51807/1
Copper corrosion (100°C, after 24 h)	-	< 2				DIN 51811
Oxidation stability (pressure drop after 100 h at 100°C)	hPa	280	280	350	350	DIN 51808
Rust prevention properties	(rating)*	1				ASTM D 1743
Emcor test	(rating)*	0/0				DIN 51802 / IP 220/67
Roll stability	%	10	11	12	12	ASTM D 1831
Timken EP test (ok load)	N	220				DIN 51434-3
Four ball EP test (weld load)	N	4400/4600				DIN 51350, 04-A
Four ball wear test (wear scar diameter)	mm	0.70				DIN 51350, 05-E
FAG-FE 9 test (1500/6000-140)	-	pass				DIN 51821-02-A
Flow pressure at – 20°C	hPa	620	1200	620	1200	DIN 51805

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

\* = pass

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.

**State: 04/02**