



MOL LUBRICATING GREASES

Application Guide



KEY REFERENCES

FIELDS OF APPLICATION

Industries:



Metal industry



Chemical industry



Cement industry



Machine industry



Mining



Food industry



Transportation



Agriculture

Typical applications:



Sliding bearing



Rolling bearing



Gear drives



Bolts and joints



Wire ropes



Cotton picker machine

OUTSTANDING PROPERTIES



EP properties



Dynamic water resistance



Central lubricating systems



Adhesive properties

















Vibration resistance

| PRODUCT | DIN 51502 / ISO 6743-9 | FIELDS OF APPLICATION | | | CHARACTERISTICS | | MAIN FEATURES | | |
|---------------------|-----------------------------|--|------------|--------------------------|-------------------|------------|--------------------------------|---|------------------|
| | | Application description | Industries | Recommended applications | Temperature range | Properties | NLGI grade – Type of thickener | Base oil type and viscosity at 40 °C mm ² /s | Solid additives |
| MOL Alubia 00EP | GP 00N-25 L-X-BDHB-00 | Lubricating grease primarily for transmission systems and commercial vehicle central lubricating systems. | | | -25 °C / +140 °C | | 00 – AIX | Mineral oil – 460 | |
| MOL Alubia AK 00EP | GP 00N-20 L-X-BDHB-00 | High performance lubricating grease with enhanced adhesive properties for transmission systems. | | | -20 °C / +140 °C | | 00 – AIX | Mineral oil – 400 | |
| MOL Alubia AK 1EP | KP 1N-25 L-X-BDHB-1 | Lubricating grease for applications with high water and thermal load primarily in steel industry. Suitable for central lubricating systems. | | | -25 °C / +140 °C | | 1 – AIX | Mineral oil – 200 | |
| MOL Alubia AK 2EP | KP 2N-25 L-X-BDHB-2 | Its use is primarily recommended in the steel industry. Lubricating grease for applications with high water and thermal load. Excellent for individual and central lubricating systems as well. Also suitable for lubrication in military equipment. | | | -25 °C / +140 °C | | 2 – AIX | Mineral oil – 200 | |
| MOL Alubia 1 HT | KP 1P-30 L-X-CEHB-1 | Lubricating grease for wide temperature range applications, primarily for central lubricating systems. It ensures reliable lubrication also in case of vibration. | | | -30 °C / +160 °C | | 1 – AIX | Semi-synthetic – 380 | |
| MOL Alubia AK 2 | K 1/2N-30 L-X-CCHA-1/2 | Water-resistant lubricating grease for low and moderate load applications primarily in agriculture. | | | -30 °C / +140 °C | | 1/2 – AIX | Mineral oil – 100 | |
| MOL Alubia AK 2G | KF 2N-25 L-X-BDHB-2 | Multi-purpose, water-resistant, electrically conductive lubricating grease, that provides excellent protection against seizing. | | | -25 °C / +140 °C | | 2 – AIX | Mineral oil – 100 | Graphite |
| MOL Alubia AK 2M | KF 2N-25 L-X-BDHB-2 | Lubricating grease specially developed for equipment exposed to high risk of seizure. Also applicable in metal processing. | | | -25 °C / +140 °C | | 2 – AIX | Mineral oil – 100 | MoS ₂ |
| MOL Alugear LKP 000 | GPF 000N-25 L-X-BDEB-000 | Its application is recommended for transmission systems, primarily for closed gears in locomotives. | | | -25 °C / +140 °C | | 000 – AIX | Mineral oil – 240 | Graphite |
| MOL Alugear 0EPG | OGPF 0N-20 L-X-BDEB-0 | High performance lubricating grease primarily for transmission systems. Also suitable for spray application. | | | -20 °C / +140 °C | | 0 – AIX | Mineral oil – 500 | Special graphite |
| MOL Alugear 1EPM | GPF 1N-30 L-X-CDEB-1 | Lubricating grease for wide temperature range applications specially designed for high performance transmission systems and for closed gears in locomotives. | | | -30 °C / +140 °C | | 1 – AIX | Semi-synthetic – 200 | MoS ₂ |

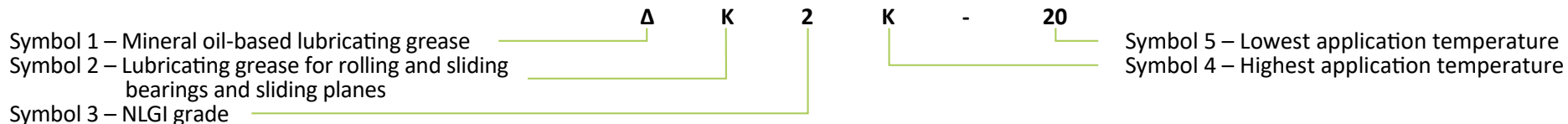
| PRODUCT | DIN 51502 / ISO 6743-9 | FIELDS OF APPLICATION | | | CHARACTERISTICS | | MAIN FEATURES | | |
|------------------------|------------------------|---|------------|--------------------------|-------------------|------------|--------------------------------|---|---------------------------|
| | | Application description | Industries | Recommended applications | Temperature range | Properties | NLGI grade – Type of thickener | Base oil type and viscosity at 40 °C mm ² /s | Solid additives |
| MOL Aluroll 1EP | KP 1N-20 L-X-BDHB-1 | Lubricating grease for bearings used in the steel industry exposed to dynamic water and shock load. Suitable for central lubricating systems. | | | -20 °C / +140 °C | | 1 – AIX | Mineral oil – 400 | |
| MOL Aluroll 2EP | KP 2P-20 L-X-BEHB-2 | Lubricating grease for bearings used in the steel industry exposed to dynamic water load and shock load. Primarily for individual lubrication. | | | -20 °C / +160 °C | | 2 – AIX | Mineral oil – 400 | |
| MOL Aluroll Resist 2EP | KP 2R-20 L-X-BFHB-2 | Lubricating grease for bearings used in the steel industry exposed to high temperature, dynamic loads and water. | | | -20 °C / +180 °C | | 2 – AIX | Mineral oil – 200 | |
| MOL Aluroll 2EPG | KPF 2P-20 L-X-BEHB-2 | Lubricating grease for bearings used in the steel industry exposed to dynamic water load and shock load. Provides protection from seizure. | | | -20 °C / +160 °C | | 2 – AIX | Mineral oil – 400 | Graphite |
| MOL Calton C 1 | K 1C-30 L-X-CAHA-1 | All-purpose water resistant lubricating grease, suitable for use as an auxiliary product in automotive industry. | | | -30 °C / +60 °C | | 1 – Ca | Mineral oil – 100 | |
| MOL Calton C 3 | K 3C-20 L-X-BAHA-3 | All-purpose water-resistant lubricating grease. Due to its thickness it provides good sealing against dust contamination. | | | -20 °C / +60 °C | | 3 – Ca | Mineral oil – 100 | |
| MOL Calton G 3 | KF 3C-30 L-X-CAHB-3 | All-purpose, water-resistant, electrically conductive lubricating grease, that provides protection against seizing. | | | -30 °C / +70 °C | | 3 – Ca | Mineral oil – 100 | Graphite |
| MOL Chemresist 2 | KHC 2R-40 L-X-DFFA-2 | Chemical-resistant lubricating grease for equipment operating in severe conditions. Resistant to acids, alkalis, solvents. | | | -40 °C / +180 °C | | 2 – AIX | Synthetic – 700 | |
| MOL Cotton Picker | KP0G-30 L-XCBEB 0 | Suitable for lubrication of high-speed spindles, drive shaft of cotton picker machines. It ensures reliable lubrication even at low temperatures. | | | -30 °C / +100 °C | | 0/00 – Li | Mineral oil – 30 | |
| MOL Farm Grease 2MG | KPF2N-25 L-XBDEB 2 | Lubricating grease primarily for agricultural equipment operating in severe conditions and subjected to high risk of seizure. | | | -25 °C / +140 °C | | 2 – Li | Mineral oil – 200 | Graphite MoS ₂ |
| MOL Favorit 2 | KP 2N-30 L-X-CDEB-2 | High performance multi-purpose lubricating grease with excellent adhesive properties and long life. | | | -30 °C / +140 °C | | 2 – LiX | Mineral oil – 200 | |

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|--------------------|---|--|------------|--------------------------|-------------------|------------|-----------------------------------|--|------------------|
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| MOL Favorit 2 Blue | KP 2N-30 L-X-CDEB-2 | High performance multi-purpose, blue coloured lubricating grease with excellent adhesive properties and long life. | | | -30 °C / +140 °C | | 2 – LiX | Mineral oil – 200 | |
| MOL Food Grease 00 | GHC 00N-30 L-X-CDHA-00 NSF H1 (142055) | Lubricating grease for low and moderate load closed gears and drive chains used in food industry. | | | -30 °C / +140 °C | | 00 – AIX | Synthetic – 400 | |
| MOL Food Grease 1 | KHC 1N-30 L-X-CDHA-1 NSF H1 (142056) | Recommended for lubricating parts of food production equipment, packaging and transportation systems. | | | -30 °C / +140 °C | | 1 – AIX | Synthetic – 400 | |
| MOL Food Grease 2 | KHC 2N-30 L-X-CDHA-2 NSF H1 (142057) | Recommended for lubricating low and high performance food production equipment in the food industry. | | | -30 °C / +150 °C | | 2 – AIX | Synthetic – 400 | |
| MOL Grafit LT 2EP | KPF2K-20 L-X-BCEB-2 | Lubricating grease for equipment operating in severe conditions. Its solid additive content ensures a moderate electrical conductivity to the product. | | | -20 °C / +130 °C | | 2 – Li | Mineral oil – 200 | Graphite |
| MOL Helios 2 | KP 2S-20 L-X-BGEB-2 | Lubricating grease developed for equipment operating at high temperatures. | | | -20 °C / +200 °C | | 2 – Betonit | Semi-synthetic – 280 | |
| MOL Helios 2M | KPF 2S-20 L-X-BGEB-2 | Lubricating grease recommended for low speed equipment operating at high temperatures, where the risk of seizure is high. | | | -20 °C / +200 °C | | 2 – Betonit | Semi-synthetic – 280 | MoS ₂ |
| MOL Liton 00 | KHCP 00K-40 L-X-DCEB-00 | Lubricating grease for commercial vehicle central lubrication systems with WILLY VOGEL approval. | | | -40 °C / +120 °C | | 00 – Li/Ca | Synthetic – 40 | |
| MOL Liton 00EP | L-XCCEB 00 GP00K-30 | Lubricating grease for open and closed gears and commercial vehicle central lubrication systems. Suitable for ordinary thrust bearings as well. | | | -30 °C / +120 °C | | 00 – Li | Mineral oil – 400 | |
| MOL Liton 00EPT | L-XCCEB 00 GP00K-30 | Lubricating grease for open and closed gears, gear-clutches and other transmissions. | | | -30 °C / +120 °C | | 00 – Li | Mineral oil – 400 | |
| MOL Liton 0EP | KP 0K-30 L-X-CCEB-0 | High performance lubricating grease, also suitable for smaller gear-drives. | | | -30 °C / +120 °C | | 0 – Li | Mineral oil – 200 | |
| MOL Liton 1EP | KP 1K-30 L-X-CCEB-1 | High performance multi-purpose lubricating grease fulfilling all types of general requirement. | | | -30 °C / +120 °C | | 1 – Li | Mineral oil – 200 | |

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| MOL Liton 2EP | KP 2K-25 L-X-BCEB-2 | High performance lubricating grease for railway wheel bearing lubrication. |  |  | -25 °C / +120 °C |     | 2 – Li | Mineral oil – 200 | |
| MOL Liton LT 2EP | KP 2K-30 L-X-CCEB-2 | High performance multi-purpose lubricating grease fulfilling all types of general requirements. |    |   | -30 °C / +120 °C |      | 2 – Li | Mineral oil – 200 | |
| MOL Liton LT 2 | K 2K-30 L-X-CCEA-2 | All-purpose lubricating grease for moderate load equipments. |  |   | -30 °C / +110 °C |  | 2 – Li | Mineral oil – 100 | |
| MOL Liton LT 2/3 | K 2/3K-30 L-X-CCEA-2/3 | All-purpose lubricating grease for moderate load equipments. |  |   | -30 °C / +120 °C |    | 2/3 – Li | Mineral oil – 100 | |
| MOL Liton LTA 3EP | KP 3K-30 L-X-CCEB-3 | High performance lubricating grease. Also suitable for railway wheel bearing lubrication. |    |   | -30 °C / +120 °C |     | 3 – Li | Mineral oil – 100 | |
| MOL Liton 2M | KPF 2N-30 L-X-CDEB-2 | Lubricating grease for equipment operating in severe conditions and subject to high risk of seizure. |    |   | -30 °C / +140 °C |    | 2 – Li | Mineral oil – 200 | MoS ₂ |
| MOL Liton 2MG | KPF 2N-25 L-X-BDEB-2 | Lubricating grease for equipment operating in severe conditions and subject to high risk of seizure. |    |   | -25 °C / +140 °C |    | 2 – Li | Mineral oil – 200 | Graphite MoS ₂ |
| MOL Neoma GT 2EP | MPF 1/2R-20 L-X-BFHB-1/2 | Water-resistant lubricating grease for threads and drill heads operating in severe conditions and subjected to high risk of seizure. |     |   | -20 °C / +180 °C |    | 1/2 – CaX | Mineral oil – 100 | Graphite PTFE |
| MOL Neoma K 3 S | K 2/3K-30 L-X-CCHB-2/3 | Water-resistant lubricating grease for bearings operating at high loads, sliding parts of elevators, primarily for individual lubricating systems. |    |   | -30 °C / +120 °C |    | 2/3 – CaX | Mineral oil – 100 | |
| MOL Neoma NH 2 | KP 2N-30 L-X-CDHB-2 | High performance, water-resistant lubricating grease for military equipment. |     |  | -30 °C / +140 °C |      | 2 – CaX | Mineral oil – 100 | |
| MOL Sulphogrease 1/2 HD | KP1/2P-25 L-X-BEHB 1/2 | Lubricating grease with excellent water resistance and corrosion protection for equipments operating at high temperature under heavy load. |    |   | -25 °C / +160 °C |      | 1/2 – CaS | Mineral oil – 430 | |
| MOL Sulphogrease 2 HD | KP2P-25 L-X-BEHB 2 | Lubricating grease with excellent water resistance and corrosion protection for equipment operating at high temperatures under heavy loads. |       |   | -25 °C / +160 °C |      | 2 – CaS | Mineral oil – 430 | |

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| MOL Sulphogrease 2 WRT | KP2P-25 L-X-BEIB 2 | Corrosion protection grease for overhead land, coastal and marine cables. |  |  | -25 °C / +160 °C |  | 2 – CaS | Mineral oil – 430 | |
| MOL Sulphogrease 2GT HDX | KPF2P-25 L-X-BEHB 2 | Lubricating grease for heavy duty clutches, cardans, open gears and threads, high load bearings and sliding plates. |  |  | -25 °C / +180 °C |  | 2 – CaS | Mineral oil – 430 | Graphite |
| MOL OLP Medium | | Protecting grease for the corrosion protection of overhead cables. |  |  | |  | 2/3 – AlX | Mineral oil – 100 | |
| RC-Grease K2K | K2K-25 L-X-BCEA 2 | General lubricating grease made from a mixture of high refining grade base oil and high-purity re-cycled lube oil and used on bearings with medium heavy-duty and RPM, cocks/pegs, joints/knuckles and ropes. |  |  | -25 °C / +110 °C |  | 2 – Li | Mineral oil – 100 | |

LUBRICATING GREASE CLASSIFICATION BY LETTERS AND SYMBOLS ACCORDING TO DIN 51502



Symbol 1 and 2

| SYMBOL 1 | SYMBOL 2: TYPES OF GREASE | LETTER* |
|---|--|---------|
| Mineral oil-based lubricating greases | Lubricating grease for rolling and sliding bearings and sliding planes | K |
| | Lubricating grease for closed gears | G |
| | Lubricating grease for open gears | OG |
| | Lubricating grease for friction bearings and seals | M |
| Synthetic oil-based lubricating greases | Ester-based grease | E |
| | Liquid perfluor-based grease | FK |
| | Synthetic hydrocarbon-based grease | HC |
| | Phosphate-ester-based grease | PH |
| | Poliglykol based-grease | PG |
| | Silicon oil-based grease | SI |
| | Other | X |

* Additional letters: P: contains EP additive, F: contains solid additive (graphite, MoS₂, etc.)

Symbol 3: NLGI consistency grade

see. ISO 6743-9 NLGI class

Symbol 4

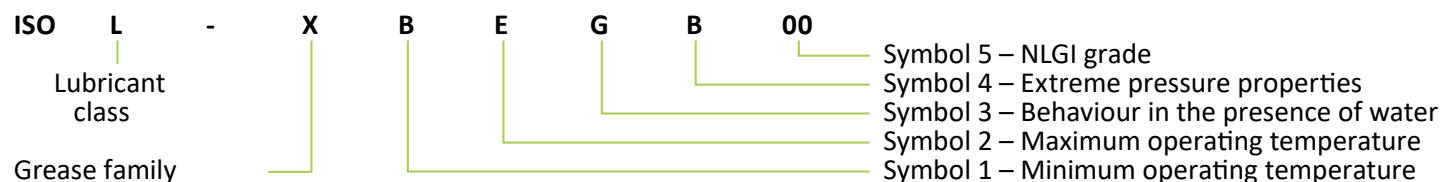
| LETTER | HIGHEST APPLICATION TEMPERATURE | BEHAVIOUR IN THE PRESENCE OF WATER ACCORDING TO DIN 51807, ** |
|--------|---------------------------------|---|
| C | + 60 °C | 0/40 °C or 1/40 °C |
| D | + 60 °C | 2/40 °C or 3/40 °C |
| E | + 80 °C | 0/40 °C or 1/40 °C |
| F | + 80 °C | 2/40 °C or 3/40 °C |
| G | + 100 °C | 0/90 °C or 1/90 °C |
| H | + 100 °C | 2/90 °C or 3/90 °C |
| K | + 120 °C | 0/90 °C or 1/90 °C |
| M | + 120 °C | 2/90 °C or 3/90 °C |
| N | + 140 °C | by agreement |
| P | + 160 °C | |
| R | + 180 °C | |
| S | + 200 °C | |
| T | + 220 °C | |
| U | above + 220 °C | |

** "0" classification means no change
 "1" classification means slight change
 "2" classification means moderate change
 "3" classification means big change

Symbol 5

| ADDITIONAL SYMBOL | LOWEST APPLICATION TEMPERATURE |
|-------------------|--------------------------------|
| -10 | -10 °C |
| -20 | -20 °C |
| -30 | -30 °C |
| -40 | -40 °C |
| -50 | -50 °C |
| -60 | -60 °C |

LUBRICATING GREASE CLASSIFICATION BY LETTERS AND SYMBOLS ACCORDING TO ISO 6743-9



Symbol 1:
Minimum operating temperature

| SYMBOL | A | B | C | D | E |
|-----------------------------------|---|-----|-----|-----|-------|
| Minimum operating temperature, °C | 0 | -20 | -30 | -40 | < -40 |

Symbol 2:
Maximum operating temperature

| SYMBOL | A | B | C | D | E | F | G |
|-----------------------------------|----|----|-----|-----|-----|-----|-------|
| Maximum operating temperature, °C | 60 | 90 | 120 | 140 | 160 | 180 | > 180 |

Symbol 3:
Behaviour in the presence of water

| SYMBOL | A | B | C | D | E | F | G | H | I |
|-------------|---|---|---|---|---|---|---|---|---|
| Environment | L | L | L | M | M | M | H | H | H |
| Protection | L | M | H | L | M | H | L | M | H |

Environment:
 L – dry
 M – static humidity
 H – dynamic humidity

Protection:
 L – zero protection
 M – protection with distilled water
 H – protection with salt water

Symbol 4:
Extreme pressure properties

Symbol A: Application requires non-EP grease
 Symbol B: Application requires EP grease

Symbol 5:
NLGI grade

| CONSISTENCY GRADE ACCORDING TO NLGI | PENETRATION AFTER 60 STROKES, AT 25 °C, 0.1 MM | CONSISTENCY OF GREASES |
|-------------------------------------|--|------------------------|
| 000 | 445-475 | fluid |
| 00 | 400-430 | fluid |
| 0 | 355-385 | very soft |
| 1 | 310-340 | soft |
| 2 | 265-295 | moderately soft |
| 3 | 220-250 | semi-fluid |
| 4 | 175-205 | semi-thick |
| 5 | 130-160 | hard |
| 6 | 85-115 | very hard |

OUR SERVICES

MOL LUBTECH LUBRICATION TECHNOLOGY CONSULTING

With years of experience, our expert team is ready to help you with any lubrication-related issue whether it is selecting the right lubricant or grease, solution of a technical problem or other issues related to lubricants and greases in general. We also check the selected product in the framework of an application technology onsite test upon request.



MOL LUBSUIT CUSTOMISED LUBRICANT DEVELOPMENT

Do you need special quality lubricating grease or lubricants for your equipment? Our development team and our state-of-the-art manufacturing system meeting the ISO 9001:2015 standard requirements guarantee that we will supply the product best suited for your machines.



MOL LUBSHARE TRAINING

The expertise and practical experience of our specialists are also available for you. To facilitate the implementation of an efficient lubrication maintenance practice, you can become familiar with the latest lubrication management techniques from a practical perspective by attending the MOL Lubrication Management training courses. Upon request, we also deliver on-site training tailored to your needs.





MOL

**Lubricating
grease**

8kg e

MOL

MOL

MOL **Liton LT 2EP**
Lithium-base lubricating grease
Outstanding wear protection
Date of production / Gyártási idő: _____
Date of expiry / Száraz állomány: _____
Date of production / Gyártási idő: _____
Date of expiry / Száraz állomány: _____
Batch number: _____
250 g e
5 995221 293216

MOL **Food Grease 2**
Food-grade lubricating grease
0,36kg e
NSF

MOL **Liton LT 2EP**
Lithium-base lubricating grease
0,36kg e
NSF
Outstanding wear protection



MOL LUBCHECK
OIL AND MACHINE DIAGNOSTICS



MOL LUBTECH
LUBRICATION TECHNOLOGY CONSULTING



MOL LUBONSITE
ON-SITE LUBRICANT MANAGEMENT




MOL LUBSUIT
TAILOR MADE LUBRICANT DEVELOPMENT



MOL LUBSHARE
TRAINING

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