

BONDERITE L-GP M 724 ACHESON

Known as Molydag 724
December 2015

PRODUCT DESCRIPTION

BONDERITE L-GP M 724 ACHESON provides the following product characteristics:

Technology	Lubricant
Product Type	MoS ₂ dispersion in mineral oil
Application	Additive

BONDERITE L-GP M 724 ACHESON is a special lubricant additive, with molybdenum disulphide of exceptionally finely divided colloidal dimensions blended with chemical additives in mineral oil.

The unique Henkel stabilising process keeps the MoS₂ in suspension, even at very high dilution ratios, minimising all risks of blocking lubricating systems and even the finest orifices.

BONDERITE L-GP M 724 ACHESON can be added to all types of mineral oils, including H.D., Premium, Hypoid gear and other doped oils.

On friction surfaces the MoS₂ forms a lubricating film which remains intact under stringent wear conditions.

The film supports very high loads and increases load carrying capacity.

Not only can shock loads be taken without causing damage, but the MoS₂ film provides emergency lubrication if the supply of lubricating oil fails.

MoS₂ has a very low coefficient of friction reducing wear in service.

Application Areas

Heavily loaded bearings and gears:

Molybdenum disulphide has excellent extreme pressure properties and is therefore of great value as an additive to lubricants used in heavily loaded bearings and gears. In general the addition of 2 to 5 % BONDERITE L-GP M 724 ACHESON to the mineral oil normally used is recommended.

Metal cutting:

BONDERITE L-GP M 724 ACHESON added to straight cutting oils gives longer tool life coupled with improved surface finish. Alternatively, a deeper cut may be taken or the cutting speed increased. Molybdenum disulphide adheres firmly to the metal surface under boundary conditions of lubrication, prevents metal-to-metal contact and reduces friction and heat, thereby minimising the possibility of chip welding. The addition of 0.5 to 2 % BONDERITE L-GP M 724 ACHESON to cutting oil is normally recommended. For particularly difficult cutting operations it may be necessary to use a higher proportion of the dispersion.

Metal working processes:

In metal working applications where extremely heavy loads occur and metal-to-metal contact is experienced, e.g. deep drawing, impact extrusion and cold forging, the addition of 2 to 10 % of BONDERITE L-GP M 724 ACHESON to the oil normally used shows marked advantages.

The dispersion can also be used concentrated if required.

TECHNICAL DATA

(as supplied)

Lubricant	molybdenum disulphide
Carrier	mineral oil
MoS ₂ content, %	~8.8
Viscosity, mPa.s (Brookfield 20°C, 20rpm)	~600
Particle size (majority), µm	1
Particle size (maximum), µm	3
Density, kg/m ³	940
Flash Point, °C	>200
Diluents	mineral oils, white spirit, petrol, chlorinated hydrocarbons, etc

DIRECTION OF USE

Preliminary Statement

Prior to use it is necessary to read the **Material Safety Data Sheet** for information about precautionary measures and safety recommendations. Also, for chemical products exempt from compulsory labeling, the relevant precautions should always be observed. Please also refer to the local safety instructions and contact Henkel for analytical support.

Mixing

BONDERITE L-GP M 724 ACHESON should first be diluted by adding one or two parts of mineral oil with continuous stirring. This mixture should then be added slowly to the main batch of oil, care being taken to ensure even distribution of molybdenum disulphide, throughout the bulk.

Classification

Please refer to the corresponding **Material Safety Data Sheets** for details on:

Hazards identification
Transport information
Regulatory information

Storage

Recommended Storage Temperature, °C	5 to 40
Shelf-life, months (in unopened original packaging)	24

ADDITIONAL INFORMATION

Disclaimer

Note:

The information provided in this Technical Data Sheet (TDS) including the recommendations for use and application of the product are based on our knowledge and experience of the product as at the date of this TDS. The product can have a variety of different applications as well as differing application and working conditions in your environment that are beyond our control. Henkel is, therefore, not liable for the suitability of our product for the production processes and conditions in respect of which you use them, as well as the intended applications and results. We strongly recommend that you carry out your own prior trials to confirm such suitability of our product.

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