

BONDERITE L-GP 2404 ACHESON

Known as Dag 2404
July 2017

PRODUCT DESCRIPTION

BONDERITE L-GP 2404 ACHESON provides the following product characteristics:

Technology	Lubricant
Product Type	Graphite dispersion in solvent
Application	Dry film lubricant

BONDERITE L-GP 2404 ACHESON forms a tenacious dry graphite film on all surfaces.

This reduces friction, provides parting, and prevents wear.

It has remarkable powers of penetration into closely woven fabrics, fine pore cellular material, sintered metal, porous polymers, or composite bearing materials.

BONDERITE L-GP 2404 ACHESON has a white spirit carrier which evaporates to leave an adherent film with outstanding lubricating properties to 400 °C in air, or above 1,200 °C in reducing or inert atmospheres.

There is no low temperature limit to the capabilities of the dry film, and the dispersion itself can be used as a fluid film lubricant at least down to the pour point of 40 °C.

BONDERITE L-GP 2404 ACHESON can be diluted with a wide variety of non-polar compounds and is thus ideally suited for blending graphite with penetrating fluids, lubricating formulations, and liquified gases.

It will accommodate additions of resins and fluids compatible with white spirit and is ideal as the basis of surface coatings which require dry lubricating properties.

Special features

- Excellent high and low temperature dry film lubrication and parting.
- Finely divided graphite particles permit lubrication of fine clearances.
- Rapid and deep penetration of porous materials.
- Dry film: no dirt or fluff attraction; no "wicking" by paper, cotton, flour or other absorbent material.
- Totally opaque coating; can be burnished or calendered to a bright appearance.
- Residue-free: complete volatilization of graphite and its bonding agent at high temperatures after oxidation.
- Dispersion can be used for blending graphite into other fluids.
- Low viscosity; easy blending and mixing; easy to apply.

Application Areas:

- Gasket anti-stick coating
- Treatment of asbestos replacement materials
- Mineral or glass textile dressings
- Formulation of penetrating fluids

- Conveyor chain lubricant for hot and dusty conditions
- Kiln car bearing lubrication
- Low temperature lubrication
- Opaque and black body applications

TECHNICAL DATA

(as supplied)

Pigment	graphite
Solids content, %	~10
Carrier	white spirit
Diluent	white spirits; hydrocarbons such as chlorinated and fluorinated solvents; kerosene; mineral oil
Density, kg/m ³	850
Theoretical coverage, m ² /kg/ 10µm	~23
Viscosity, mPa.s (Brookfield, 25°C)	5 to 50
Flash Point (Open), °C	45
Flash Point (Pensky Martin 42 Closed), °C	
Particle size	mostly 1 µm or below, but some particles up to 4 µm or occasionally greater
Drying time	1 hour approx. at normal ambient temperature
Sensitive substrates	compatible with Nitrile and Neoprene; unsuitable for natural, butyl or EP rubber seals

DIRECTION OF USE

Preliminary Statement:

Prior to application 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.

Handling:

After storage BONDERITE L-GP 2404 ACHESON may require homogenizing. This can be by agitation or stirring, or the container can be rolled.

Application:

BONDERITE L-GP 2404 ACHESON can be applied by brush, dip, spray or roller coat.

The product is normally diluted before use.

Because the applications are so diverse no single dilution rate can be recommended.

The following can be used as the starting points for evaluation:

Journal bearings	1 part product to 10 parts kerosene
Plain bearing conveyors	1 part product to 5 parts kerosene
Penetrating fluids	1 part product to 7 parts penetrating carrier
Ceramic textile dressing	1 part product to 1 part resin/solvent mix

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 25
Shelf life, months (in unopened original packaging)	12

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.

Any liability in respect of the information in the Technical Data Sheet or any other written or oral recommendation(s) regarding the concerned product is excluded, except if otherwise explicitly agreed and except in relation to death or personal injury caused by our negligence and any liability under any applicable mandatory product liability law.

In case products are delivered by Henkel Belgium NV, Henkel Electronic Materials NV, Henkel Nederland BV, Henkel Technologies France SAS and Henkel France SA please additionally note the following:

In case Henkel would be nevertheless held liable, on whatever legal ground, Henkel's liability will in no event exceed the amount of the concerned delivery.

In case products are delivered by Henkel Colombiana, S.A.S. the following disclaimer is applicable:

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. 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.

Any liability in respect of the information in the Technical Data Sheet or any other written or oral recommendation(s) regarding the concerned product is excluded, except if otherwise explicitly agreed and except in relation to death or personal injury caused by our negligence and any liability under any applicable mandatory product liability law.

In case products are delivered by Henkel Corporation, Resin Technology Group, Inc., or Henkel Canada Corporation, the following disclaimer is applicable:

The data contained herein are furnished for information only and are believed to be reliable. We cannot assume responsibility for the results obtained by others over whose methods we have no control. It is the user's responsibility to determine suitability for the user's purpose of any production methods mentioned herein and to adopt such precautions as may be advisable for the protection of property and of persons against any hazards that may be involved in the handling and use thereof. In light of the foregoing, **Henkel Corporation specifically disclaims all warranties expressed or implied, including warranties of merchantability or fitness for a particular purpose, arising from sale or use of Henkel Corporation's products. Henkel Corporation specifically disclaims any liability for consequential or incidental damages of any kind, including lost profits.** The discussion herein of various processes or compositions is not to be interpreted as representation that they are free from domination of patents owned by others or as a license under any Henkel Corporation patents that may cover such processes or compositions. We recommend that each prospective user test his proposed application before repetitive use, using this data as a guide. This product may be covered by one or more United States or foreign patents or patent applications.

Trademark usage: [Except as otherwise noted] All trademarks in this document are trademarks and/or registered trademarks of Henkel and its affiliates in the U.S. and elsewhere.

Reference 0.2