

BONDERITE L-GP 154 ACHESON

Known as Dag 154
February 2016

PRODUCT DESCRIPTION

BONDERITE L-GP 154 ACHESON provides the following product characteristics:

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

BONDERITE L-GP 154 ACHESON, a specially processed colloidal graphite dry film lubricant, air dries rapidly at room temperature and adheres tenaciously to most substrates with minimum surface preparation.

The thinness of the coating, coupled with high lubricity, provides clean, long wearing lubrication without redesign of component dimensions.

Coatings are easily applied during manufacture or assembly by standard spray, brush, or dip techniques.

BONDERITE L-GP 154 ACHESON is also an easy-to-apply resistance coating designed to provide conductivity, and excellent release properties to many nonconductive substrates, including most plastics. BONDERITE L-GP 154 ACHESON has been specified throughout the electronics industry in a multitude of roles. It can easily be blended with BONDERITE L-GP M 210 ACHESON (molybdenum disulfide insulating coating) to attain cost-effective sheet resistance variations.

Special features

- Ultra-thin opaque film forming properties.
- Excellent adhesion to most substrates.
- Fast air-cure times.
- Ability to vary conductivity.
- High lubricity for tight tolerances of mating parts.
- Allows for a variety of parts to be processed with the same coating, saving on costs.
- Allows for a variety of parts to be processed with the same coating, saving on costs.
- Multi-purpose application for conductive effect on the part.

Application

- Automotive and industrial gaskets.
- Low noise communication cables.
- Anti-seize thread lubricant.
- High resistance coating on plastics.
- Aerosol lubricant additive.
- Impregnation of fibers and paper.
- Printed circuits, static bleed.
- Engine components for assembly and break-in requirements.
- Mating surfaces of assemblies and machinery components.

TECHNICAL DATA

(of wet product)

Color	black
Pigment	colloidal graphite
Binder	thermoplastic resin
Carrier	isopropanol
Diluent	isopropanol
Density, kg/L	0.9
Consistency	thixotropic gel
Flash Point, °C	11
Solids by weight, %	~20
VOC, g/L	710
Theoretical coverage, m ² /kg/ 25µm	9.3

(as cured)

Color	black
Coefficient of friction (static)	0.19
Service temperature: continuous, °C	200
Sheet resistance	<2,400 ohms/sq at 25 µm dry film thickness

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.

Pretreatment

To obtain good adhesion of the coating, the surface to be coated should be clean, dry and free of grease. A solvent wipe and air dry is usually sufficient. For porous surfaces, use the same procedure followed by heating to drive off entrapped contaminants, solvents or moisture.

Mixing/Blending/Dilution

BONDERITE L-GP 154 ACHESON is supplied in concentrated form.

It is thixotropic in nature and will gel upon standing.

Preparation involves thorough agitation of the concentrate, then dilution with isopropanol (or equivalent) to the consistency required by the application method chosen.

BONDERITE L-GP 154 ACHESON can be applied by brush, dip, roller, or spray. Always agitate thoroughly just prior to use.

Typical film thickness ranges from 5 to 12 microns.

A coating thickness of 25 micron of BONDERITE L-GP 154



ACHESON is best built up by the application of 5 coats of 5 microns thickness by spray application.

Dilution of 1 part by volume product to 3 parts by volume of solvent is necessary to obtain an adherent coating of this thickness.

Application

For small production work and prototypes, a suction cup gun may be used, if BONDERITE L-GP 154 ACHESON is thoroughly mixed prior to spray application.

For intermediate production runs or many small parts, propeller-type attachments should be used on the suction gun to ensure coating uniformity.

Full production is best handled with propeller-agitated pressure pot systems, which provide the best in application efficiency.

Note:

Handle BONDERITE L-GP 154 ACHESON as you would a quality automotive coating. AVOID DRY SPRAY, as this will cause poor adhesion. To reduce overspray, use the minimum atomization pressure required for adequate coverage.

Curing

The coating air dries to touch in 5 minutes and is ready for use in 30 minutes.

Following the air dry, bake for 5 minutes at 75°C to achieve optimum coating qualities in a shorter curing cycle.

Storage

Recommended Storage Temperature, °C	5 to 30
Shelf-life, months (in unopened original packaging)	24

Keep from freezing. Keep container tightly closed when not in use. Store in a cool, well ventilated area. Keep away from heat, sparks, and open flame. Protect material from direct sunlight. Ground and bond containers when transferring materials. Empty containers may retain hazardous properties.

Classification

Please refer to the corresponding **Material Safety Data**

Sheets for details on:

Hazardous Information
Transport Regulations
Safety Regulations

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 of Henkel Corporation in the U.S. and elsewhere. ® denotes a trademark registered in the U.S. Patent and Trademark Office.

Reference 0.0