

## BONDERITE L-GP 213 ACHESON

Known as Dag 213  
February 2016

### PRODUCT DESCRIPTION

BONDERITE L-GP 213 ACHESON provides the following product characteristics:

<b>Technology</b>	Lubricant
<b>Product Type</b>	Graphite dispersion in solvent
<b>Application</b>	Multi purpose

BONDERITE L-GP 213 ACHESON is designed to provide controlled electrical resistance properties.

BONDERITE L-GP 213 ACHESON is a dispersion of finely divided graphite pigment in an epoxy resin solution.

When properly cured, it has excellent adhesion to epoxy circuit boards, bushings, plastics and ceramics.

BONDERITE L-GP 213 ACHESON also has excellent wearing properties.

It provides chemical resistance to oils and many solvents, but not to enamel strippers.

BONDERITE L-GP 213 ACHESON as a lubricant coating provides clean, dry, long-wearing, and superior maintenance-free lubrication for a wide range of light to medium load applications.

A thin film of BONDERITE L-GP 213 ACHESON keeps wear uniform and reduces friction on mating metal parts without requiring increased manufacturing tolerances.

Components are protected from metal-to-metal contact even in applications approaching boundary lubrication, reducing the risk of damage due to partial or complete seizure.

Formulated from processed micro-graphite and epoxy resin, BONDERITE L-GP 213 ACHESON forms tightly adherent coatings on many types of substrates.

In addition to high lubricity, BONDERITE L-GP 213 ACHESON coatings exhibit extremely good wear resistance to oils and solvents (except enamel strippers).

### Application

- Static bleed on epoxy glass laminates.
- High voltage corona preventative.
- Heat generating coating on high voltage electrical bushings.
- Lubrication of cylinders and pistons, lock mechanisms.
- Lubrication of plungers, sliding rails and any light load mechanism.

### TECHNICAL DATA

#### (of wet product)

Colour	black
Pigment	graphite
Binder	thermosetting resin
Carrier	Arcosolv PM Acetate + Toluene + Butanol (2:2:1)
Diluent	Arcosolv PM Acetate + Toluene + Butanol (2:2:1)
Consistency	liquid
Density, kg/L	0.98
Solids content by weight, %	28
Flash Point, °C	7
VOC, g/L	709
Theoretical coverage, m <sup>2</sup> /L at 25 µm	8.4
Viscosity, mPa.s	2,800

#### (as a cured coating)

Colour	black
Sheet resistance	<1,000 ohms/sq at 25 µm dry film thickness
Service temperature:	
continuous, °C	150
intermittent, °C	260
Coefficient of friction (static)	0.114
Salt spray resistance	>96 hours over zinc phosphated surface, 25 micron 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

Substrates should be clean and dry. A chemical rinse or sandblast is usually sufficient to clean the surface properly. However, if maximum adhesion is required, the combination of cleaning and surface pre-treatment by mechanical or chemical means is essential.

#### Mixing/Blending/Dilution

BONDERITE L-GP 213 ACHESON is supplied in concentrated form. Add a small amount of the diluent slowly while stirring. The dilution ratio will depend on the viscosity required by the application method chosen, but in no case should the ratio exceed 1:2 (product:diluent).

**Application**

BONDERITE L-GP 213 ACHESON should be thoroughly mixed prior to use and agitated periodically during use.

The material can be applied by standard spray or dip methods.

An external atomizing type spray gun is recommended with air pressure in the range of 25 to 40 psi (2 to 3 metric atmospheres).

For maximum corrosion resistance use the appropriate surface pretreatment, then spray apply multiple coats with a ten minute air dry between coats.

Allow the final coat to air dry before oven curing.

**Note:**

Handle BONDERITE L-GP 213 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 applied film should be air dried for about 10 minutes before baking to avoid trapping any solvents. The recommended cure cycle is 177°C for 60 minutes or 220°C for 20 minutes.

**Storage**

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

**Classification**

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

**Sheets** for details on:

- Hazards identification**
- Transport information**
- Regulatory information**

**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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