

Technical Data Sheet

# **BONDERITE L-GP 386 ACHESON**

Known as Dag 386 November 2015

### PRODUCT DESCRIPTION

BONDERITE L-GP 386 ACHESON provides the following product characteristics:

Technology	Lubricant
Product Type	Graphite dispersion in solvent
Application	Multi purpose

BONDERITE L-GP 386 ACHESON is a colloidal dispersion of graphite in ethyl alcohol. It is used for the formation of dry lubricating films and electrically conducting coatings. It is also employed as an anti-seize material on screw threads.

BONDERITE L-GP 386 ACHESON is used in several metal processing techniques as well, generally spray applied.

BONDERITE L-GP 386 ACHESON is used as billet lubricant in e.g. hot forging of aluminium, orbital forging and cold extrusion.

It is also used as billet font breakthrough lubricant in aluminium extrusion and may be used as protective billet lubricant in warm forming.

BONDERITE L-GP 386 ACHESON is also extensively used as mould pre-treatment in metal casting and as a running-in coating on belts of e.g. Hazelett continuous casting machines.

### **Special features**

- Quick drying
- Good adhesion
- Good lubrication
- Remarkably heat resistant
- Low odour
- Low toxicity
- Dry lubricating film
- Electrically conductive

### Application

#### **Dry Film Lubrication**

The product is particularly suitable for operation under high loads at normal temperatures, e.g. machines for cigarette manufacture, office machines, vendingmachines and parking meters.

#### Electrically Conducting Coatings

Applications include plastic cable treatment, prevention of corona discharge in electrical equipment, as an electrode in radiation meters and counters.

### Screw Thread Treatment

BONDERITE L-GP 386 ACHESON dries rapidly to form a dry coating which, unlike pastes, does not attract dirt. The

coating provides constant torque/tension values and prevents seizure. It is applied by brush or dip after dilution to a suitable consistency. It is essential to first clean and degrease the surfaces to be coated.

#### **Other Applications**

Pretreatment of anode stubs for aluminium prebake process.

Impregnation of porous materials and incorporation into resins and plastics.

# **TECHNICAL DATA**

(as supplied)		
Pigment	graphite	
Binder	thermoplastic resin	
Solids content, %	~30	
Viscosity, mPa.s (Brookfield 20 °C, 20 rpm)	~250	
Flash Point, °C	12	
Density, kg/m³	970	
Diluent	butanol, ethylalcohol	butylacetate,

#### (as a cured coating)

Coatings will function as dry film lubricants up to maximum temperatures of 250 to 300 °C in air and 1,200 °C in inert atmospheres.

They will provide parting and screw thread anti-seize up to 700°C in air.

The ohmic value may vary from 200 to 1,100 Ohm/square, depending on coating thickness, method of application and drying or curing conditions.

Curing improves adhesion and film strength and increases conductivity.



# 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.

#### Application

After dilution BONDERITE L-GP 386 ACHESON can be applied by spray, brush or dip methods.

For normal use, dilution ratios of 1 part BONDERITE L-GP 386 ACHESON to 2 to 3 parts diluent are recommended but for spraying dilution up to 1: 15 is possible.

Where coatings with good adhesion are required a ratio of 1 : 3 should not be exceeded.

The diluted product should be stirred before use to maintain a homogeneous suspension.

Air dried films are dry to the touch in less than a minute and reach their maximum hardness and conductivity after an hour. Depending on the nature of the substrate the films may be cured for 10 min. to 1 hour, at a maximum temperature of 150  $^{\circ}$ C.

#### Disposal

The graphite in BONDERITE L-GP 386 ACHESON may be disposed of as low risk chemical waste or may be burnt. Liquid waste should be collected for solvent generation.

#### Storage

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

#### 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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