

**BONDERITE L-GP 333-1 EU ACHESON**

September 2020

**PRODUCT DESCRIPTION**

BONDERITE L-GP 333-1 EU ACHESON provides the following product characteristics:

<b>Technology</b>	Lubricant
<b>Product Type</b>	PTFE dispersion in solvent
<b>Application</b>	Dry film lubricant

BONDERITE L-GP 333-1 EU ACHESON is a unique blend of fluorocarbon lubricants in a special organic resin binder and solvent system designed for applications beyond the scope of conventional fluorocarbon coatings.

Its low coefficient of friction, hardness, adhesion, resiliency and low temperature cure allow application of BONDERITE L-GP 333-1 EU ACHESON in a multitude of places where pure sintered PTFE coatings cannot normally be considered.

**Special Features:**

Coatings of BONDERITE L-GP 333-1 EU ACHESON wear longer than pure PTFE, offer superior chemical resistance (see data below) and can be repaired without removing the existing coating. Specific advantages of this product include:

- low coefficient of friction: ~0.08 (static); ~0.06 (kinetic)
- one component, ready-for-use, no mixing required
- forms a clean, dry, tenacious film
- lower temperature cure than pure PTFE
- longer wear life than pure PTFE
- thin film - 10 to 30 µm
- not subject to cold flow
- does not require primers
- easy to apply
- can be reapplied
- resists chemicals, corrosion, humidity, abrasion

This superior coating material offers lifetime lubrication for heat-sensitive substrates, complex machine precision steel parts, light metals (copper, zinc, aluminium) and nonmetallic materials, that withstand the minimum curing temperature of 150 °C.

**Application Areas:**

Due to its high stability this product can be used in hard water without the risk of precipitations.

Closed Automotive Assemblies	Nozzles
Business Machine Parts	Levers
Outboard Motor Propellers	Washers
Marine Equipment	Springs
Spray Gun Parts	Drawer Guides
Lock Assemblies	Snow Shovels
Industrial Tools	Trash Containers

Printing Equipment  
Aerospace Parts  
Slides and Chutes  
Carburetor Shafts  
Valve Plugs

Valves  
Tank Linings  
Hedge Shears  
Saw Blades  
Press iron soles

**TECHNICAL DATA****(of wet product)**

Lubricant	special blend of fluorocarbons
Binder	thermosetting organic resin
Solids content, %	~28.0
Viscosity, mPa.s (Brookfield 20 °C, 20 rpm)	~1,000
Density, kg/m <sup>3</sup>	1,070
Flash Point, °C	61
Color	black
Typical coverage	17 m <sup>2</sup> /kg at 10 µm coatings thickness

**Diluent****(as cured)**

Color:	black
Coefficient of friction	~0.08 (static); ~0.06 (kinetic)
Service temperature (ASTM D 968-44)	maximum 240 to 250°C; intermittent 275°C
Sand Abrasion Test	21 liters/25 micron
Taber Wear Test (1,000 grs load)	weight loss, 16.9mg/1,000 cycles
Adhesion (ASTM 3359 B)	5B (excellent)

**Solvent and Chemical Resistance**

Humidity Test	98% humidity at 49°C for 500+ hours (no indication of rust)
Salt Spray (ASTM B117-64)	216 hours

Coatings are resistant against: alcohols, esters, ketones, chlorinated, aromatic and aliphatic hydrocarbons; mineral and synthetic oils and greases. They also show good resistance against acids, lyes, detergent and salt solutions.

**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.

**Surface Preparation:**

Substrates must be dry and free of contaminants (dirt, grease, powder, and other residues) before application of BONDERITE L-GP 333-1 EU ACHESON. Excellent results can be obtained without pretreatment. However, for maximum wear characteristics, these pretreatments are recommended: heat stable phosphate coating or grit blasting for steel, grit blasting or heat stable conversion coating for aluminium and chromate coating or etching for copper alloys.

**Application:**

Before application the product needs to be properly homogenised. BONDERITE L-GP 333-1 EU ACHESON is normally applied by spray techniques. An external atomizing type gun is recommended. One or two passes are usually required to obtain the optimum coating thickness of 10 to 25 microns. Use N-Ethyl-2-pyrrolidone to clean spray guns.

**Re-Application**

BONDERITE L-GP 333-1 EU ACHESON can be reapplied for repair purposes without removing the entire original film. Sand lightly or use steel wool to feather the edges of the area to be repaired. Light abrasion of the surrounding areas is also recommended for maximum adhesion. Then apply BONDERITE L-GP 333-1 EU ACHESON, using the same spray procedures as for the initial application. Follow the standard cure cycle as stated below.

**Curing:**

Air dry for two to five minutes, predry at 150°C for 10 minutes, followed by one of the following typical curing cycles: 316°C/5 min.; 205°C/30 min.; alternative cycles are possible too.

**Storage:**

Recommended Storage Temperature, °C	5 to 25
Shelf-life, months (in unopened original packaging)	18

**Classification:**

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

**Sheets** for details on:

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

**ADDITIONAL INFORMATION****Disclaimer**

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