

**BONDERITE S-FN 109B
FUNCTIONAL COATING
(KNOWN AS DAG 109B)**

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DESCRIPTION **BONDERITE S-FN 109B (known as DAG 109B)** is one of a series of coatings designed to provide controlled electrical properties.

BONDERITE S-FN 109B (known as DAG 109B) is a dispersion of finely divided graphite in a thermoplastic resin. This product rapidly air dries to form a flexible conductive coating. It is designed to be applied by typical spray or printing techniques. The flexibility of this product makes it an excellent choice for coating plastic as well as metal. **BONDERITE S-FN 109B (known as DAG 109B)** is tested for 11 elemental impurities. The high purity level of **BONDERITE S-FN 109B (known as DAG 109B)** makes for a highly conductive, flexible coating.

FEATURES

- Tested for 11 different elemental impurities, providing a highly pure coating
- The highly flexible thermoplastic resin provides excellent adhesion to most metal and plastic substrates
- Fast-drying and curing system

BENEFITS

- Very controlled electrical properties, reducing scrap and rework
- Controlled dry film thickness free of cracks providing controlled electrical properties, reducing scrap and rework
- Reduced energy costs; faster production rates for increased productivity and equipment utilization

TYPICAL APPLICATIONS

- Battery current collector coating
- Transformer bushing coating
- Cable coating
- Flexible conductive coating for plastics and metals

TYPICAL PROPERTIES (of wet product)

Color:	black
Pigment:	graphite
Binder:	thermoplastic
Carrier/Diluent:	MIBK, MEK or lacquer thinner
Consistency:	liquid
Viscosity:	1800 mPa·s
Density:	1.03 kg/l (8.6 lb/gal)
Solids content:	40%
Flashpoint:	16°C (61°F)
VOC:	618 g/l (5.2 lb/gal)
Theoretical Coverage:	8.7 m ² /kg @ 25 µm (365ft ² /gal @ 1 mil)

TYPICAL PROPERTIES (as cured)

Color:	black
Sheet resistance:	40 ohms/sq @ 25 µm (1 mil) dry film thickness
Service temperature -continuous:	104°C (220°F) maximum

METHOD OF USE **Surface Preparation**

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Surfaces to be coated must be clean, dry, and free of dust.

Mixing/Blending/Dilution

For spray application, use a mechanical stirrer or paint shaker to mix **BONDERITE S-FN 109B (known as DAG 109B)** thoroughly until it is of uniform consistency. Check to see that no sediment remains in the bottom of the container. Pour into a suitable container for dilution (e.g., pressure pot, etc.) **BONDERITE S-FN 109B (known as DAG 109B)** should initially be diluted 1:1 by volume with MIBK, MEK, or lacquer thinner. Final production dilution ratios may vary slightly according to individual needs. To dilute, add solvent to **BONDERITE S-FN 109B (known as DAG 109B)** and continue stirring until mixture is of uniform color.

Spray Application

For small production work and prototypes, a suction cup gun may be used providing **BONDERITE S-FN 109B (known as DAG 109B)** 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-actuated pressure pot systems, as this provides the best application efficiency.

NOTE: Handle **BONDERITE S-FN 109B (known as DAG 109B)** as you would a quality automotive lacquer. AVOID DRY SPRAY, as this will cause poor adhesion. To reduce overspray, use the minimum atomization pressure required for adequate coverage.

Print Application

Product is supplied ready for use for printing applications. If dilution is necessary, use MEK or MIBK.

Drying

Air dry coated parts approximately 10 minutes, depending on humidity, before carrying out resistance checks. Drying time for production operations can be accelerated by passing the coated parts through infrared heat or through batch or conveyor ovens, at some increase in resistance.

**STORAGE/
HANDLING**

Shelf life for this product is two years from date of qualification under original seal. Keep container tightly closed when not in use. Store in a cool, well ventilated area. Empty containers may retain hazardous properties. Follow all MSDS/label warnings even after container is emptied.

**APPLICATION
ASSISTANCE**

Henkel's Application Specialists are available to assist you in production start-up with **BONDERITE S-FN 109B (known as DAG 109B)**. Visit our website www.henkelna.com/metals for more information and for the Acheson global location nearest you.

HEALTH & SAFETY Please consult Material Safety Data Sheet.

