

BONDERITE S-FN M 254N AN

DRYFILM COATING

(KNOWN AS MOLYDAG 254N)

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DESCRIPTION

BONDERITE S-FN M 254N ACHESON (known as MOLYDAG 254N) is one of a series of Henkel's Acheson resin-bonded lubricant coatings designed to provide dry film lubrication in a variety of industrial, consumer and military applications.

BONDERITE S-FN M 254N ACHESON (known as MOLYDAG 254N) is a synergistic combination of MoS₂ and other lubricants dispersed in an epoxy resin solution. **BONDERITE S-FN M 254N ACHESON (known as MOLYDAG 254N)** can be applied by standard brush, dip-spin, or spray techniques.

BONDERITE S-FN M 254N ACHESON (known as MOLYDAG 254N) provides lifetime lubrication and good corrosion resistance for components which are inaccessible after assembly, but nevertheless must continue to function reliably.

BONDERITE S-FN M 254N ACHESON (known as MOLYDAG 254N) provides an effective performance, even as a very thin film (0.0003 inch or 8 microns), thus there is little interference with operating tolerances.

ADVANTAGES

- Good adhesion to metals
- Low coefficient of friction
- Good wear life (resistance to fretting and galling)
- Corrosion resistance
- Resistance to many chemicals and solvents

TYPICAL APPLICATIONS

- Construction Equipment
- Business Machines
- Jet Engine Parts
- Woodworking Equipment
- Mining Equipment
- Safety Equipment
- Cold-Heading Machinery
- Threaded Connections
- Farm Machinery
- Aircraft Fasteners
- High Tension Nuts and Bolts

TYPICAL PROPERTIES (as supplied)

BONDERITE S-FN M 254N ACHESON (known as MOLYDAG 254N)

Lubricant:	molybdenum disulfide and other lubricating solids
Color:	dark gray
Consistency:	liquid
Binder:	epoxy resin
Density:	11.2 lb/gal (1.34 kg/l)
Flash point:	24°F (-4°C)
VOC (dehydrated):	5.0 lb/gal (594 g/l)



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TYPICAL PROPERTIES (cured coating)

Color:	dark gray
Coefficient of friction:	0.14 (static)
Service temperature	
continuous:	275°F (135°C)
intermittent:	300°F (149°C)

APPLICATION DETAILS

Surface Preparation

The performance obtained by a coating of **BONDERITE S-FN M 254N ACHESON (known as MOLYDAG 254N)** depends on the care given to substrate preparation, application, and curing. The following pretreatments are recommended:

Steel:	Grit or vapor blast, degrease and chemically pretreat with treat with Bonderite M-ZN 20 (know as Granodine 20), Bonderite M-MN 2 (known as Lubrite 2), or equivalent
Stainless Steel:	Grit or vapor blast, degrease.
Aluminum:	Degrease or solvent clean and pretreat with Bonderite M-CR 1200S (known as Alodine 1200S). Coating may also be applied over anodized surface.
Copper Alloys:	Degrease or solvent clean, grit blast, or chemically pretreat .

Mixing

BONDERITE S-FN M 254N ACHESON (known as MOLYDAG 254N) lubricant is supplied as a one-component concentrate at a solids concentration of 55 percent. Dilution depends on the method of application to be used and the coating thickness desired. A 1:1 blend of toluene and MEK (methyl ethyl ketone) can be used as a diluent. Mixing is best accomplished by mechanical agitation.

Application

BONDERITE S-FN M 254N ACHESON (known as MOLYDAG 254N) may be applied by spray, dip-spin, or brush methods according to individual application requirements.

For spray application, external atomizing type spray guns are recommended

Adjust the spray gun to provide a well-atomized spray at 25 to 40 psi (1.8 to 2.8 kg/sq cm) air pressure. For maximum corrosion resistance, apply multiple thin coats with a ten-minute air dry period between coats to minimize pin holes. Oven curing is required only after the final coat of lubricant is applied.

Note: It is recommended that an agitator-type spray cup be used to maintain product suspension.

Curing

A normal cure schedule is a cure of 60 minutes at 300°F (149°C). However, performance may be improved with a cure of 60 minutes at 400°F (204°C). For example, this cure cycle increases the Falex endurance life.

STORAGE/SHIPPING HANDLING

Shelf life for this product is 2 years from date of qualification under original seal. Keep container tightly closed when not in



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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 M 254N ACHESON (known as MOLYDAG 254N)**. For more information, contact Henkel, (866) 332.7024 , or visit our website at www.henkelna.com/metals for the Henkel global location nearest you.

HEALTH & SAFETY

Harmful if swallowed, inhaled, or absorbed through skin. May cause eye irritation. Wash thoroughly after handling. Keep container tightly closed when not in use. Use with adequate ventilation. Avoid breathing vapor. See Henkel's Material Safety Data Sheet for proper first aid instructions.

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