

**BONDERITE S-AD 1261 ACHESON
ADDITIVE
(KNOWN AS SLA 1261)**

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Description:

BONDERITE S-AD 1261 ACHESON (known as SLA 1261) (U.S. Patent 4715972) is an extremely stable colloidal dispersion of uniform ultrafine molybdenum disulfide particles in highly refined petroleum oil. It is designed for use in formulating single and wide-range multiviscosity grade automotive and industrial gear oils.

BONDERITE S-AD 1261 ACHESON (known as SLA 1261) does not allow the emulsification of water into gear oils as do other MoS₂ dispersions. The use of **BONDERITE S-AD 1261 ACHESON (known as SLA 1261)** enables MoS₂ gear oils to meet the stringent demulsification requirements of U.S. Steel specification 224 and AGMA gear oil specifications 250.03 and 250.04.

BONDERITE S-AD 1261 ACHESON (known as SLA 1261) substantially reduces friction and improves the extreme pressure, load carrying, and antiwear capabilities of gear oils. It helps prevent metal-to-metal contact and surface scuffing and provides reliable lubrication in boundary conditions. Since **BONDERITE S-AD 1261 ACHESON (known as SLA 1261)** functions independently of temperature, it performs well at high and low operating temperatures. Advantages include:

- Greater energy efficiency
- Reduced gear wear
- Protection during intermittent, heavy load conditions
- Reduced gear noise levels
- Reduced start-up torque
- Reduced new gear break-in time
- Lower gear oil operating temperatures

**Typical Properties:
(as supplied)**

Lubricating solid: molybdenum disulfide
 Carrier: 150 solvent neutral paraffinic petroleum oil
 Viscosity: 12,000 cP at 25°C (77°F)
 Solids content: 20% molybdenum disulfide
 Particle size: median less than 1/2 micron
 Density: 8.4 lb/gal (1.01 kg/l)
 Flash point: 290°C (465°F)
 Color: gray/green
 Shelf life: two years from date of qualification under original seal.

**Demulsibility
Characteristics:
(ASTM-D-2711)**

	<u>% Water in Oil</u>	<u>Total Free Water, ml</u>	<u>Emulsion ml</u>
U.S. Steel 224 Specification Typical Gear Oil with 5% BONDERITE S-AD 1261 ACHESON (known as SLA 1261)	Not Req'd None	80 min. 85.0	1 max. None



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Method of Use:**Dilution**

BONDERITE S-AD 1261 ACHESON (known as SLA 1261) can be blended with most commercially available gear oils. The services of Henkel's laboratories are available to advise and/or evaluate the compatibility of **BONDERITE S-AD 1261 ACHESON (known as SLA 1261)** with proposed diluents, oils, and additive combinations. **BONDERITE S-AD 1261 ACHESON (known as SLA 1261)** is compatible with most oil additive treatments.

When blending large quantities, the oils should be heated to about 50°-55°C (122°-131°F) since blending is more efficient when oil viscosities are reduced. Stir **BONDERITE S-AD 1261 ACHESON (known as SLA 1261)** thoroughly to achieve a uniform consistency; then premix equal parts of **BONDERITE S-AD 1261 ACHESON (known as SLA 1261)** and the oil diluent before blending with the balance of the oil. Maintain continuous agitation by mechanical stirring throughout the blending operation.

Application

For best results, use **BONDERITE S-AD 1261 ACHESON (known as SLA 1261)** at one percent MoS₂ solids by weight in the finished oil, or approximately five percent by weight of **BONDERITE S-AD 1261 ACHESON (known as SLA 1261)**. Final concentration of **BONDERITE S-AD 1261 ACHESON (known as SLA 1261)** may be determined by the level of performance desired.

Precautions: May be harmful if swallowed. May cause eye irritation. Wash thoroughly after handling. Keep container tightly closed when not in use to avoid contamination. (See Henkel Material Safety Data Sheet for proper first aid instructions.)

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