

SLA 2010 (CERFLON®)*

Colloidal PTFE/ Boron Nitride CERFLON in Oil

Description:

SLA 2010 is a concentrated dispersion of PTFE and Boron Nitride in a highly refined petroleum oil. Compared to ordinary PTFE or Boron Nitride dispersions alone, SLA 2010 provides a new dimension in durable boundary lubrication. It is an exceptionally stable dispersion that is straw yellow in color which makes SLA 2010 desirable for applications where use of other dark colored solid lubricants would be objectionable.

SLA 2010 utilizes patented technology to “ceramically” reinforce” the PTFE, thereby, significantly increasing its durability and application range. This translates to improved extreme pressure, load carrying and anti-wear properties of lubricants. Benefits to the user would include energy savings, smoother operation, extended life, and reduced maintenance costs of the object being lubricated. The “reinforced” PTFE prevents surface-to-surface contact and scuffing while providing reliable low-friction lubrication under boundary conditions.

Typical Applications:

Penetrating Fluids	Chain Lubricants	Aerosols
General Purpose Lubricants	Gear Lubricants	

**Physical Properties:
(as supplied)**

Lubricating solid	: CERFLON (PTFE/BN)
Carrier	: 150 solvent neutral petroleum oil
Viscosity	: 400 cP @ 25°C (77°F) typical
Solids content	: 18% (PTFE/Boron Nitride)
Particle size	: median 2-4 microns by volume
Density	: 8.0 lb/gal (0.96 kg/l) @ 25°C (77°F)
Flash point	: 210°C (410°F)
Color	: pale yellow
Shelf life	: 12 months from date of qualification under original seal

Performance:

(In comparison to other solid lubricants)

Solid Lubricant	Falex Wear (teeth)	Falex Extreme Pressure (lbs)	Falex Calculated Coefficient of Friction	Four Ball Extreme Pressure Weld (kg)	Four Ball Extreme Pressure Weld LWI (kg)	Four Ball Wear Scar 40kg, mm
Diluted to 1% Solids in base oil	ASTM D-2670	ASTM D-3233	Falex Method	ASTM D-2783	ASTM D-2783	ASTM D-4172
None-Base Oil	Failed Break In	750	0.159	126	17.2	1.06
Graphite	78	1250	0.123	160	18.7	0.855
Molybdenum Disulfide	8	4375	0.114	250	24.3	0.805
PTFE	10	4250	0.094	200	27.6	0.89
Boron Nitride	9	4500	.105	200	25.9	0.76
CERFLON	6	4500	0.092	400	38.4	0.74

The information given and the recommendations made herein are based on our research and are believed to be accurate but no guaranty of their accuracy is made. In every case, we urge and recommend that purchasers, before using any product in full scale production, make their own tests to determine to their own satisfaction whether the product is of acceptable quality and is suitable for their particular purposes under their own operating conditions. THE PRODUCTS DISCLOSED HEREIN ARE SOLD WITHOUT ANY WARRANTY AS TO MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR ANY OTHER WARRANTY, EXPRESS OR IMPLIED. No representative of ours has any authority to waive or change the foregoing provisions but, subject to such provisions, our engineers are available to assist purchasers in adapting our products to their needs and to the circumstances prevailing in their business. Nothing contained herein shall be construed to imply the non-existence of any relevant patents or to constitute a permission, inducement or recommendation to practice any invention covered by any patent, without authority from the owner of this patent. We also expect purchasers to use our products in accordance with the guiding principles of the American Chemistry Council® program.

Method of Use:**Dilution**

SLA 2010 can be blended with most commercially available oils. SLA 2010 is compatible with most oil additive treatments.

When blending large quantities, the oil should be heated to about 50°-55°C (122°-131°F) since blending is more efficient when oil viscosities are reduced. Stir SLA 2010 thoroughly to achieve a uniform consistency; then premix equal parts of SLA 2010 and the oil diluent before blending with the balance of the oil. Maintain continuous agitation by mechanical stirring throughout the blending operation.

Note: A small amount of soft settling of the larger particles may occur during long periods of storage. Mild agitation will restore these particles back into suspension.

Application

For best results, use SLA 2010 at one percent PTFE/BN solids by weight in the finished oil, or approximately five-seven percent by weight of SLA 2010. Final concentration of SLA 2010 may be determined by the level of performance desired.

Companion Products:

SLA 2020, a colloidal dispersion of PTFE/ Boron Nitride (CERFLON*) in isopropyl alcohol.

SLA 2030, a colloidal dispersion of PTFE/ Boron Nitride (CERFLON*) in water.

Other companion products include colloidal dispersions of PTFE, molybdenum disulfide or graphite, all of which are available in different carriers.

Precautions:

Keep container closed when not in use to avoid contamination. See Acheson Colloids Company Material Safety Data Sheet for proper first aid instructions.

Container Sizes:

35 lb (15.8 kg). 5 gallon (19 liter)
400 lb (181.4 kg), 55 gallon (209 liter)

*Ceramic Reinforced Technology's registered trademark.