

Ultralube™ Process Technical Data

Composition	Modified Tungsten Disulfide (WS ₂)
Hardness	1-1.5 Moh's Scale
Appearance	Metallic silver-gray
Coefficient of Friction	Inclined plane technique 0.030 Maximum
Molecular Weight	248.02
Adhesion	Mechanical- Molecular interlock
Carrier	Dry air—Binders and adhesives not used.
Cure Time	None. Applied at ambient room temperature.
Thickness	1/2 a micron or less.
Density	7.4 GMS per CC
Substrates	All solid metals, glass, fiberglass, rubber, porcelain, and most man-made solids.
Temperature Range	Lubricates from -350°F through 1000°F
Chemical Stability	Inert. Non-toxic. Corrosion resistant.
Corrosion Resistance	Minor delay of corrosion. Will not inhibit the corrosion of substrate material.
Lox Compatibility	Insensitive to detonation by, or in the presence of, liquid oxygen.
Load Capacity	Same as substrate to 350,000 psi.
Magnetism	Non-magnetic.
Vacuum Environment	10 ⁻¹⁴ Torr.
Degradation	Will not cause distortive stress relief, additional stresses, or degradation to any surface
As a Substrate	Will accept most paints, some plating and is compatible with solvents, fuels, and oils.