



**TECHNICAL DATA SHEET FOR RADCOLUBE® BIOBASED CLP  
CLEANER, LUBRICANT, AND PRESERVATIVE FOR WEAPONS AND WEAPONS SYSTEMS  
MIL-PRF-63460F TYPE B BIOBASED**

<u>CHARACTERISTICS</u>	<u>REQUIREMENT</u>	<u>RESULTS</u>	<u>TEST METHOD</u>
Biobased Content, percent	33% min.	60%	ASTM D6866
Graphite content	None	None	MIL-PRF-63460F ¶ 4.2.1
Ozone depleting substances (ODSs) content	None	None	MIL-PRF-63460F ¶ 4.2.2
Toxicity and hazardous materials content	MIL-PRF-63460F ¶ 3.2.3	Conforms	MIL-PRF-63460F ¶ 4.2.3
Color and appearance	MIL-PRF-63460F ¶ 3.2.4	Conforms	MIL-PRF-63460F ¶ 4.2.4
Flash Point	65°C (149°F) max.	202°C (395.6°F)	ASTM D92
Pour Point	-59°C (-74°F) max.	-69°C (-92.2°F)	ASTM D97
Viscosity (without solid materials) at 40°C (104°F), cSt	14.0 min.	15.2	ASTM D445
Viscosity (without solids and solvent evaporated) at -40°C (-40°F), cSt	5000 max.	3071	ASTM D445; D972
Wear Preventive Characteristics, mm	0.8 max.	0.4	ASTM D4172
Load Carrying Capacity, pounds	500 min.	500	MIL-PRF-63460F ¶ 4.2.6
Corrosion Production, mg/cm <sup>2</sup>			MIL-PRF-63460F ¶ 4.3.1
Aluminum	0.2 mg/cm2 max.	0.0	
Brass Steel	1.0 mg/cm2 max.	0.0	
Cadmium	1.5 mg/cm2 max.	0.0	
Copper	1.5 mg/cm2 max.	0.0	
Magnesium	0.5 mg/cm2 max.	0.0	
Zinc	1.5 mg/cm2 max.	0.0	
Interference with chemical agent detector paper	MIL-PRF-63460F ¶ 3.3.2	Conforms	MIL-PRF-63460F ¶ 4.3.2
Humidity resistance after 900 hours	Pass	Pass	MIL-PRF-63460F ¶ 4.4.1
Salt-spray resistance after 100 hours	Pass	Pass	MIL-PRF-63460F ¶ 4.4.2
Water displacement and water stability	Pass	Pass	MIL-PRF-63460F ¶ 4.4.3
Firing residue removal	40% min.	52%	MIL-PRF-63460F ¶ 4.5.1
Weapon Performance			MIL-PRF-63460F ¶ 4.5.2
Cold temperature	Pass	Pass	MIL-PRF-63460F ¶ 4.5.2.6
Dust environments	Pass	Pass	MIL-PRF-63460F ¶ 4.5.2.7
Salt-spray environments	Pass	Pass	MIL-PRF-63460F ¶ 4.5.2.8

**Document Date: 9 March 2022**  
**Qualification#: AR-22-02**  
**Qualification Dated: 22 February 2022**  
**Date of Manufacture: March 2022**  
**Lot Number: 22LS102**  
**CAGE: 6ZS16**  
**Shelf Life: 36 months**  
**NSN: 9150-01-663-4623 (1 Liter Bottle with Trigger)**  
**NSN: 9150-01-663-4610 (1 Gallon Plastic Bottle)**

  
 Signed: \_\_\_\_\_ Dated: 9-Mar-2022