



PERRY JOHNSON LABORATORY ACCREDITATION, INC.

Certificate of Accreditation

Perry Johnson Laboratory Accreditation, Inc. has assessed the Laboratory of:

Aerospace Lubricants
1600 Georgesville Road, Columbus, OH 43228

(Hereinafter called the Organization) and hereby declares that Organization is accredited in accordance with the recognized International Standard:

ISO/IEC 17025:2017

This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality management system (as outlined by the joint ISO-ILAC-IAF Communiqué dated April 2017):

Optical and Mechanical Testing
(As detailed in the supplement)

Accreditation claims for such testing and/or calibration services shall only be made from addresses referenced within this certificate. This Accreditation is granted subject to the system rules governing the Accreditation referred to above, and the Organization hereby covenants with the Accreditation body's duty to observe and comply with the said rules.

For PJLA:

Tracy Szerszen
President

Perry Johnson Laboratory
Accreditation, Inc. (PJLA)
755 W. Big Beaver, Suite 1325
Troy, Michigan 48084

Initial Accreditation Date:

August 11, 2014

Issue Date:

November 15, 2022

Expiration Date:

January 31, 2025

Accreditation No.:

73799

Certificate No.:

L22-762

The validity of this certificate is maintained through ongoing assessments based on a continuous accreditation cycle. The validity of this certificate should be confirmed through the PJLA website: www.pjilabs.com



Certificate of Accreditation: Supplement

Aerospace Lubricants

1600 Georgesville Road, Columbus, OH 43228
 Contact Name: John Lorimor Phone: 614-878-3600

Accreditation is granted to the facility to perform the following testing:

FIELD OF TEST	ITEMS, MATERIALS OR PRODUCTS TESTED	SPECIFIC TESTS OR PROPERTIES MEASURED	SPECIFICATION, STANDARD METHOD OR TECHNIQUE USED	RANGE (WHERE APPROPRIATE) AND DETECTION LIMIT
Optical ^F	Chemical Properties: Oils & Greases	Infrared Spectrograph	ASTM E1252	Perkin Elmer Spectrum FTIR Scan: 4 400 cm ⁻¹ to 450 cm ⁻¹
Mechanical ^F	Tribological Tests: Oils and Greases	Wear Preventive Characteristics (4 Ball Method)	ASTM D2266 ASTM D4172	Wear Scar : 0.01 mm to 4 mm
		Extreme Pressure Properties (a.k.a. Load Wear Index, 4 Ball Method)	ASTM D2596 ASTM D2783	Load: 13 kg to 800 kg
	Rheological Tests: Oils and Grease	Cone Penetration of Lubricating Grease	ASTM D0217	8.5 mm to 47.5 mm
		Cone Penetration of Lubricating Grease, Using ¼ and ½ Scale	ASTM D1403	8.5 mm to 47.5 mm
		Kinematic Viscosity of Transparent and Opaque Liquids (0 °C to 150 °C)	ASTM D0445	0.42 cSt to 106 600 cSt
		Viscosity and Viscosity Change After Standing at Low Temperature (0 °C to -70 °C)	ASTM D2532	0.42 cSt to 106 600 cSt
		Low-Temperature Torque of Ball Bearing Greases (0 °C to -75 °C)	ASTM D1478	0 g/cm to 129 800 g/cm
	Corrosion Tests: Oil	Detection of Copper Corrosion from Petroleum Products	ASTM D130	#1A to #4C (Chart)
	Corrosion Tests: Greases	Detection of Copper Corrosion from Lubricating Grease	ASTM D4048	#1A to #4C (Chart)
		Determining Corrosion Preventative Properties of Lubricating Grease	ASTM D1743	Pass/Fail Rating
	Oxidation Tests: Greases	Oxidation Stability of Lubricating Greases by the Oxygen Pressure Vessel Method	ASTM D0942	-5 psi to 112 psi loss



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Mechanical ^F	Performance Tests: Greases	Evaporation Loss of Lubricating Greases and Oils (100 °C to 150 °C)	ASTM D0972	0 % to 100 % Evaporation
		Evaporation Loss Over Wide Temperature Range (93 °C to 316 °C)	ASTM D2595	0 % to 100 % Evaporation
		Determining the Water Washout Characteristics of Lubricating Grease	ASTM D1264	0 % to 100 % Washout
		Determining The Resistance of Lubricating Grease to Water Spray	ASTM D4049	0 % to 100 % Spray Off
		Roll Stability of Lubricating Grease	ASTM D1831	8.5 mm to 47.5 mm 0.1 mm (Change)
		Oil Separation from Lubricating Grease (Conical Sieve Method)	ASTM D6184	0 % to 100 % Separation
		Oil Separation from Lubricating Grease During Storage	ASTM D1742	0 % to 100 % Separation
		Dropping Point of Lubricating Grease Over Wide Temperature Range	ASTM D2265	0 °C to 316 °C
	Physical Properties: Greases	Specific Gravity, Apparent, of Liquid Industrial Chemicals	ASTM D0891	Temperature per specification

1. The presence of a superscript F means that the laboratory performs testing of the indicated parameter at its fixed location. Example: Outside Micrometer^F would mean that the laboratory performs this testing at its fixed location.