



CERTIFICATION
E-58D
BATCH # 21511

PRODUCT	DESCRIPTION	TYPE	METHOD	SENSITIVITY	FORM	CLASS	APPROVAL DATE
E-58D	Hydrophilic Emulsifier	1	D	N/A	N/A	N/A	28-Jan-2022

We hereby certify that this batch of inspection material when tested following manufacture meets the following:

Certificamos que este lote de material de inspección cumple con los siguientes requisitos cuando es probado despues de la fabricación:

- SAE AMS 2644H and on the Qualified Products List (test reference: AFWAL/MLS 86-88 & AFRL/MLS 98-165)
- ISO/FDIS 3452
- Boeing BSS 7039 & BAC 20-20-02
- Pratt & Whitney FPM PMC # 4355-7 Rev. AK
- Safran In-5000c; Snecma sensibilité S3 & S4
- Rolls-Royce RPS-702-7; CSS 232; OMat # 621B, RRP 58003C
- AMS 2647-F, ASTM E-165/E165-18 & ASTM E-1417/E1417M-21
- General Electric Gas Turbines LM6000 PC & Aircraft Engines 70-32-02
- ASME Boiler & Pressure Vessel Code 2019, Section V, Article 6, appendix II-J-641 & II-J-642
- 10 CFR part 21 applies.

PO# _____

- Shelf life is 5 years from date of batch approval.

Vida útil de garantía son 5 años desde la fecha del "approval date".

- Batch number is on bulk labels or bottom of aerosol cans.

Numeros de lote se encuentran en las etiquetas de los botes a granel o en el fondo de los botes de aerosol.

Is free of all known Ozone depleting substances and mercury contamination and was not made in any mercury bearing equipment. Does not contain polychlorinated biphenyl (PCB), nonylphenol ethoxylates (NPE), or RoHS banned substances.

Esta libre de todas sustancias degradantes del ozono, de contaminación de mercurio, y no fue fabricado usando equipo conteniendo mercurio. No contiene polychlorinated biphenyl (PCB), nonylphenol ethoxylates (NPE), o RoHS sustancias prohibidas.

QUALITY ASSURANCE TESTS	REQUIREMENTS	BATCH RESULTS
Appearance:	MLC: Clear, light red liquid, no sediment.	Pass
Density:	MLC: 975.6 g/L - 1192.4 g/L @ 21.1°C (70°F)	1043.0 g/L
Flash Point: ASTM D-93, AMS-2644 ¶ 3.3.3	MLW: $\geq 93.3^{\circ}\text{C}$ ($\geq 200^{\circ}\text{F}$)	237 °F
Viscosity: ASTM D-445; AMS-2644 ¶ 3.3.4, PMC 4355-7	PMC 4355-7: 17.9 - 24.2 mm ² /s @ 37.7°C (100°F)	24.1 mm ² /s
Water Content, ASTM E-1417/E1417M-21 annex A1 (Karl Fischer)	AMS-2644 & PMC 4355-7: $\leq 5\%$	4.4 %
Refractive Index of 20% conc. measured with AF-15	MLC: 13.8 - 15.2 Brix scale	14.0
Sulfur Content: per ASTM E-165/E165M-18 ¶ 9.1.2 Annex 4	ISO 3452: ≤ 200 ppm (0.02 %), PMC 4355-7: <1000 ppm (0.1%)	<200 ppm
Chloride Content: ASTM E-165/E165M-18 ¶ 9.1.2 - Annex 4	ISO 3452: ≤ 200 ppm (0.02 %), PMC 4355-7: < 400 ppm (0.04%)	<200 ppm
Fluoride Content: ASTM E-165/E165M-18 ¶ 9.1.2 - Annex 4	PMC 4355-7: ≤ 50 ppm (0.005 %)	<50 ppm
Total Halogen Content: ASTM E-165/E165M-18 ¶ 9.1.2 - Annex 4	ISO 3452: ≤ 200 ppm (0.02 %)	<200 ppm
Sodium Content: ASTM E-165/E165M-18 ¶ 9.1.2 - Annex 4 & MCL M-504	PMC 4355-7: ≤ 100 ppm (0.01 %)	<100 ppm

MET-L-CHEK QUALITY ASSURANCE

BATCH TESTED BY:

DENNIS MASON
QC CHEMIST

BATCH APPROVED BY:

JUSTINE FORD
PLANT CHEMIST



Met-L-Chek Company, 2910 Harvard Avenue | Cleveland, OH 44105

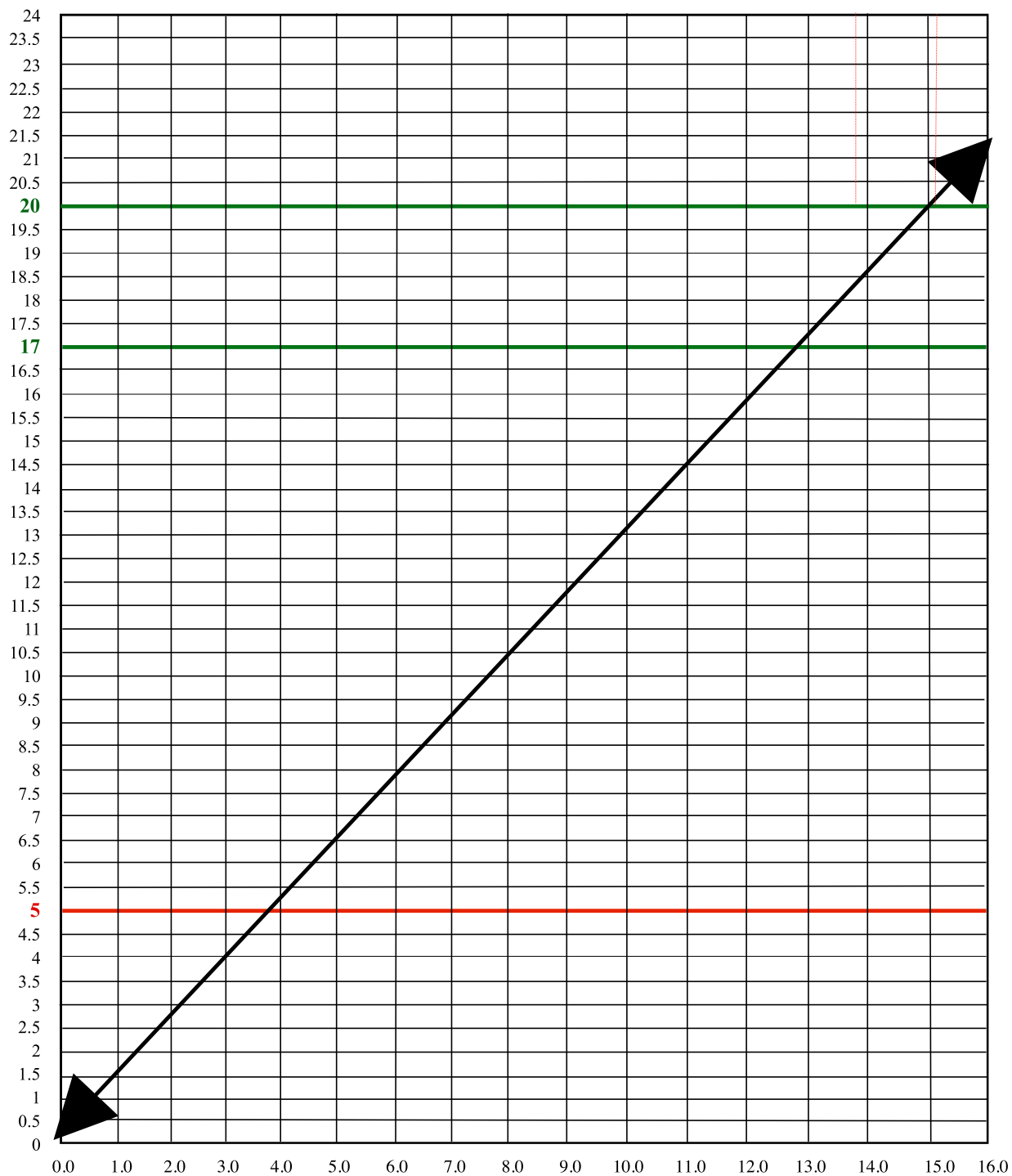
T: (216) 441-4900 | F: (216) 441-1377

E: info@met-l-chek.com W: www.met-l-chek.com



E-58D **CONCENTRATION CHART**

% CONCENTRATION



Brix Refractive Index Reading
Based on refractometer models Af-15