

OIL STANDARDS FROM ALPHA

Typical chemistry – Exact chemistry accompanies each bottle. The exact chemistry is on each label. Certificates of analysis are included with each order.

A certificate of analysis accompanies every oil standard. The certificate shows the NIST traceability, when possible, and the values and ASTM methods employed in the round robin program.

ULTIMATE OIL ANALYSIS

ALPHA NO.	OIL TYPE	Contents	Fe (ppm)	Ni (ppm)	V (ppm)	Si (ppm)	Cu (ppm)	Na (ppm)
*AR-2070	Wyoming Sweet Crude	500ml	2.04	0.584	0.32	0.32	0.366	1.4
*AR-2071	North Sea Sweet Crude	500ml	1.8	5.6	22.8	7.8	0.8	1.8
*AR-2072	Alaska North Slope Crude	500ml	1.6	16.0	40.0	10.5	<0.1	1.6
AR-2078	Vacuum Gas Oil	500ml	0.138	0.055	0.06	0.056	0.046	0.87

(continued from above)

ALPHA NO.	OIL TYPE	Contents	API (60°F)	Organic Cl (ppm)	Total Cl (ppm)	Benzene (wt %)	Nitrogen (ppm)	Sulfur (wt %)	Salt (lb/Mbbbls)	Carbon (wt %)
*AR-2070	Wyoming Sweet Crude	500ml		< .1	3.16	0.45	67.0	0.0824	0.708	
*AR-2071	North Sea Sweet Crude	500ml	40.00	<1.00	3.06	5.16	1779.37	1.160	0.70	
*AR-2072	Alaska North Slope Crude	500ml	27.4	<0.01	3.0	0.35	1521.00	1.17	0.40	
AR-2078	Vacuum Gas Oil	500ml	20.10				438.8	0.342		0.386

ULTIMATE OIL ANALYSIS PLUS DISTILLATION

ALPHA NO.	OIL TYPE	Contents	Distillation (°F)													
			IBP1	5	10	15	20	30	40	50	60	70	80	90	95	EP
*AR-2074	KEROSENE	500ml	350	382	400		428	440	454	468	480	504	528	550	560	570
AR-2075	#2 DIESEL	500ml	388.5	420	441	451	460	478	493	509	525	544	566	595		649
AR-2076	#1 DIESEL	500ml	454		471					490				552		548

(continued from above)

ALPHA NO.	OIL TYPE	Contents	API (60°F)	ConCarbon	Cetane Index	Cloud Pt. (°F)	Pour Pt. (°F)	Sulfur (wt. %)	Viscosity (40°C) cSt	Flash (°F)
AR-2074	KEROSENE	500ml	45.6	0.01	45.0	-20.0	-25.0	0.001	1.7	125.0
AR-2075	#2 DIESEL	500ml	35.6		48.0	+6	0	0.042	2.93	167
AR-2076	#1 DIESEL	500ml	46.9	<0.0	66.1	+18	+20.0	0.001	2.2	218.0

RESIDUAL OIL

118ml bottles

AR-2890	COMPLETE SET
AR-2891	0.10% Sulfur
AR-2811	0.15% Sulfur
AR-2892	0.20% Sulfur
AR-2893	0.30% Sulfur
AR-2809	0.35% Sulfur
AR-2894	0.40% Sulfur
AR-2895	0.50% Sulfur
AR-2812	0.60% Sulfur
AR-2896	0.70% Sulfur
AR-2813	0.80% Sulfur
AR-2897	0.90% Sulfur
AR-2814	1.00% Sulfur
AR-2818	1.50% Sulfur
AR-2815	2.00% Sulfur
AR-2819	2.50% Sulfur
AR-2816	3.00% Sulfur
AR-2817	4.00% Sulfur

NITROGEN in V.T.B.

118ml bottles

AR-2100	COMPLETE SET
AR-2101	Nitrogen (ppm) 200
AR-2102	Nitrogen (ppm) 400
AR-2103	Nitrogen (ppm) 600
AR-2104	Nitrogen (ppm) 1000
AR-2105	Nitrogen (ppm) 1500
AR-2106	Nitrogen (ppm) 2000
AR-2109	Nitrogen (ppm) 5000

ULTRA LOW KEROSENE

118mL bottles

AR-6215	COMPLETE SET
AR-6201	0.0010% Sulfur
AR-6207	0.0020% Sulfur
AR-6208	0.0030% Sulfur
AR-6209	0.0040% Sulfur
AR-6202	0.0050% Sulfur
AR-6210	0.0060% Sulfur
AR-6211	0.0070% Sulfur
AR-6212	0.0080% Sulfur
AR-6213	0.0090% Sulfur
AR-6203	0.0100% Sulfur
AR-6204	0.0150% Sulfur
AR-6205	0.0200% Sulfur
AR-6206	0.0400% Sulfur

SPENT HYDROCRACKER CATALYST TYPICAL DATA

AR-2088 Contents: 50 Gram Bottle

Carbon -	14.98% +/- 0.2
Sulfur -	6.99% +/- 0.2
Molybdenum	7.92% +/- 0.2
Aluminum	4.47% +/- 0.2
Vanadium -	31.57% +/- 0.2

VACUUM GAS OIL

AR-2077 Contents: 118 mL

Sulfur (wt %)	0.45
Nitrogen (ppm)	1267.0

KEROSENE & #1 DIESEL OIL

118mL bottles

AR-2950	COMPLETE SET
AR-2849	0.0000% Sulfur
AR-2841	0.01% Sulfur
AR-2951	0.02% Sulfur
AR-2842	0.03% Sulfur
AR-2952	0.04% Sulfur
AR-2843	0.05% Sulfur
AR-2953	0.06% Sulfur
AR-2954	0.07% Sulfur
AR-2955	0.08% Sulfur
AR-2956	0.09% Sulfur
AR-2844	0.10% Sulfur
AR-2845	0.20% Sulfur
AR-2846	0.30% Sulfur
AR-2847	0.40% Sulfur
AR-2848	0.50% Sulfur

JP-8 JET FUEL

*AR-5201 Contents: 500 mL

Total Acid (mg KOH/g)	0.0055
Aromatics (vo. %) 13.51	
Olefin (vol. %)	0.85
Total Sulfur (wt %) 0.091	
Mercaptan Sul. (wt %)	0.0006
API Gravity (60°F) 47.5	
Freeze pt. (°F)	-60.1
BTU (lb)	18682.5
Smoke pt. (mm)	24.5
Flash pt. (°F) closed cut	124.4
Viscosity (-4°F Cst)	5.6

*This item is a hazardous material and will be shipped accordingly. Exact chemistry accompanies each bottle.

Stand: 03.2009



Max F. Keller GmbH
D-68169 Mannheim · Einsteinstrasse 14a
Geschäftsführer: Dipl.-Kfm. Harald Keller
Handelsregister: Mannheim HRB 2855

Telefon ++49 (0)621-32 279-0
Telefax ++49 (0)621-32 279-27
info@keller-mannheim.de
www.keller-mannheim.de

Postbank Karlsruhe (BLZ 660 100 75) 799 36-750
Commerzbank AG, Mannheim (BLZ 670 400 31) 3 000 429
Deutsche Bank AG, Mannheim (BLZ 670 700 10) 0 293 688
Ust.-Id.Nr.: DE 143869516

