

# HEAVY DUTY FLEET SAE 20W-50

# MOTOR OIL API: CI-4/SL

## **BENEFITS:**

- » Excellent Protection for Metal Components from Rust, Corrosion, and Wear
- » Superior Protection Across a Wide Temperature Operating Range
- » Shear Stable Formulation
- » High Soot Handling
- » Improved Sludge Control

AMALIE ALAS+ (AMALIE Lubricant Analysis System) is AMALIE's used oil analysis program designed exclusively for AMALIE XLO, AMALIE XLO Ultimate and AMALIE Super XLO Ultimate customers. It allows them to get an inside look at what is going on in their engine. ALAS+ measures wear metals, contaminants, viscosity and other used oil characteristics to help prevent component failure, determine optimum drain intervals and help to reduce fuel costs. ALAS+ is a comprehensive analysis program using the most modern laboratory equipment available, that provides valuable information about your engine's condition every time the oil is changed for the life of the equipment. ALAS+ supplies clear concise analytical reports in a timely fashion that include the necessary data needed to help you successfully manage your highly expensive equipment investment.

MADE IN U.S.A.



### For Diesel and Gasoline Engines



**AMALIE XLO Heavy Duty Fleet 20W-50 Engine Oil** is formulated with high quality base stocks and an improved additive system. This latest technology additive system imparts improved anti-wear, corrosion protection, oxidation inhibition, detergency, and de-foaming ability. Rigorous laboratory and field testing have proven that **AMALIE XLO Heavy Duty Fleet 20W-50 Engine Oil** is up to the task of protecting your engine; helping your engine operate within the new emission and pollution requirements as well as meeting or exceeding the OEM requirements. It will deliver superior long-lasting protection for both turbocharged and naturally aspirated diesel and gasoline engines, including those engines that have exhaust gas recirculation (EGR) systems. It is formulated for extended service/extended drain when operated under typical operating conditions.

**AMALIE XLO Heavy Duty Fleet 20W-50 Engine Oil** will meet or exceed the CI-4/SL API Service Classifications as well as the CH-4, CG-4, CF-4, CF-2, CF and CD API Service Classifications. **AMALIE XLO Heavy Duty Fleet 20W-50 Engine Oil** are recommended for use wherever MIL L 2104-G and MIL L 46152-E are recommended; or wherever the following European approval standards are specified: E7, E6, E5, E3, E2 and E1. Always consult your vehicle's owner's manual when selecting the appropriate viscosity and service grade.

#### TYPICAL PHYSICAL AND CHEMICAL PROPERTIES

Viscosity Grade	20W-50
Kinematic Viscosity @100°C, cSt	20.0
Kinematic Viscosity @40°C, cSt	180
Viscosity Index	
Cold Cranking Viscosity, cP @ (-15°C)	5500
Flash Point, °C (°F)	230 (446)
Pour Point, °C (°F)	21 (-5)
HT/HS Viscosity, cP	5.0
TBN, mgKOH/g	10.5
Noack Volatility, %weight loss	8.0
Sulfated Ash, Mass%	1.3

Typical values are listed. Variations not affecting the performance of this fluid may occur during production; however, these variations will not fall outside of set specification parameters.

Please consult AMALIE Technical Services or your local representative for a full listing of applications.

Technical Services: • (800) 368-1264 • techservices@amalie.com

#### **XLO HEAVY DUTY FLEET**

VISCOSITY	PACK SIZE	PART #
20W-50	4-1 Gallon	160-71797-36
	5 Gallon Pail	160-71794-25
	55 Gallon Drum	160-71793-05

Always refer to your vehicles operating manual to select the correct grade of oil for your engine. The data presented herein are believed to be accurate; however, Amalie Oil Company shall not be liable for its content and makes no warranty with respect thereto.

#### Health and Safety

Safety Data Sheets (SDS) are available from your sales representative or at AMALIE.com.

#### **APPLICATION CHART**

SPECIFICATION	IS	XLO 20W-50 HD Fleet
API		
	CI-4, CH-4, CG-4, CF-4 and previous	√
	SL and previous	√
Allison	·	
	C-4, C-3	√
Mil-PRF		
	2104H	√
Caterpillar		
	ECF-2, ECF-1	√
	CAT TO-2 (Exceeds API CD Performance)	√
Mack		
	EO-M Plus, EO-N	√
Cummins		
	CES 20078	$\checkmark$
JASO		
	DH-1	$\checkmark$
GB		
	11122-2006 CI-4	√
Global		
	DHD-1	√
Navistar		
	TSI-99-12-06	√
Detroit Diesel		
	93K215	$\checkmark$
	7SE270	$\checkmark$
Daimler (MB)		
	228.3	√
ACEA		
	E7, E5	$\checkmark$
	A3/B4	√
Volvo		
-	VDS-2	√
Renault		
	RLD-2	$\checkmark$
Man		
	3275	V
MTU		İ İ
	Туре II	√
		l v