

Product Description

D-A **White Flame**™ is designed specifically for use in medium and high speed (rpm) gas engines fueled by processed natural gas or other clean gas sources. The TBN comes from an exclusive detergent/dispersant additive system providing a new level of deposit control for low ash oils while also effectively neutralizing the corrosive by-products of combustion.

D-A **White Flame**™ is formulated with thermally stable, high VI base oils that are naturally resistant to oxidation. These base oils are combined with a unique additive system that further extends oil oxidation life. Special valve cushioning additive components help reduce exhaust valve seat and face wear during severe service. The low ash, low phosphorus composition is compatible with exhaust gas catalytic converters and promotes longer spark plug life for minimized maintenance costs.

Product Features and Benefits

D-A **White Flame**™ optimum level of active detergent reduces piston ring and cylinder liner wear.

Effective detergent alkalinity helps control corrosive wear, providing protection when using clean quality fuel sources.

Special additives maximize retention of effective TBN, providing extra corrosive wear protection during longer service intervals.

Formulated with thermally stable, high VI base oils in combination with multiple oxidation inhibitors for an oil with outstanding resistance to oxidation, nitration and viscosity increase for longer oil life.

Compositionally matched with exhaust gas converters to minimize loss of converter activity due to poisoning and masking of the catalyst.

Cushioning additive components lubricate exhaust valve surfaces for reduced face and seat wear and extended valve service intervals.

Lower oil volatility and viscosity loss at elevated temperatures promotes reduced oil consumption rates, cleaner combustion chambers, longer spark plug life and longer cylinder head servicing intervals.

Typical Applications

Gas compression and transmission
Wellhead gas pumpers
Oil pumpers
Irrigation systems
Total energy systems

Engine Applications:

- Caterpillar
- Cummins
- Dresser Rand
- Guascor
- Jenbacher
- MAN Diesel & Turbo 4T
- MTU
- MWM
- Niigata
- Wartsila 4T
- Waukesha

Meets Non-Selective Catalytic Reduction (NSCR) catalyst compatibility requirements.

For other engine makes and models, consult the D-A Technical Service Department.

Typical Properties

SAE Viscosity Grade	Test Method	40	15W-40
Viscosity @ 100°C, cSt @ 40°C, cSt	ASTM D445	14.2	14.7
	ASTM D445	123.8	106.2
Viscosity Index	ASTM D2270	115	142
Pour Point, °F (°C)	ASTM D97	5 (-15)	-38 (-39)
Flash Point, °F (°C)	ASTM D92	470 (243)	440 (227)
API Gravity	ASTM D4052	27.0	28.5
Sulfated Ash, Weight %	ASTM D874	0.5	0.5
TBN	ASTM D2896	6.0	6.0
CCS @ -20°C, cP	ASTM D5293	N/A	5900

D-A Part Number:

Bulk

52511

52521