

Blue Flame HB-5™



Product Description

D-A **Blue Flame HB-5™** is designed specifically for use in medium and high speed (rpm) gas engines fueled by processed natural gas or other gas sources that may contain corrosive materials. The HardBase TBN of five (HB-5) 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 **Blue Flame HB-5™** 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

Optimum level of active detergent reduces piston ring and cylinder liner wear.

Effective detergent alkalinity helps control corrosive wear, providing additional protection when using poorer 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.

Meets sensitive CD/CF bearing wear requirements assuring longer bearing life.

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.

Unique additives protect against excessive valve sink or recession caused by rapid valve seat and face wear.

Typical Applications

Gas compression and transmission
Wellhead gas pumps
Oil pumps
Irrigation systems
Total energy systems
Waste water treatment cogeneration plants
Landfill gas cogeneration systems
Manure gas cogeneration

Engine Applications:

- Caterpillar
- Cummins Rio-Grande
- Deutz
- Enterprise
- Fairbanks Morse
- Jenbacher
- Minneapolis-Moline
- Stewart & Stevenson
- Waukesha
- White

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	30	40	15W-40
Viscosity @ 100°C, cSt	ASTM D445	11.5	14.5	14.0
Viscosity @ 40°C, cSt	ASTM D445	100	145	110
Viscosity Index	ASTM D2270	102	98	127
Pour Point, °F (°C)	ASTM D97	-5 (-21)	10 (-12)	-20 (-29)
Flash Point, °F (°C)	ASTM D92	450 (232)	460 (237)	430 (221)
Sulfated Ash, Weight %	ASTM D874	0.5	0.5	0.5
Total Base Number	ASTM D2896	5.0	5.0	5.0
CCS @ -20°C, cP	ASTM D5293	N/A	N/A	<7,000

D-A Part Number:

Bulk	52621	52631	52671
Tote – 330 Gal	52623	52633	52673
Drum – 55 Gal	52622	52632	52672