



Shell Caprinus XS9 40

Railroad Diesel Engine Oil

Shell Caprinus® XS9 40 railroad engine oil is a 9 TBN high quality, zinc-free, railroad engine oil. Recommended for use where low and ultra-low sulphur diesel is used.

DESIGNED TO MEET CHALLENGES

Performance, Features & Benefits

- Formulated with a zinc free additive system
- Provide excellent engine cleanliness and sludge control
- Compatible with EPA Tier 3 and Tier 4 engine

Main Applications



- Recommended for use where low and ultra-low sulphur diesel is used

- Recommended for medium speed two-cycle railroad diesel engines, including EMD and General Electric

Specifications, Approvals & Recommendations

- Electro-Motive Diesel, Inc. (EMD)
- General Electric, Generation 4 Long Life Oils
- Locomotive Maintenance Officers Association (LMOA) Generation 5

For a full listing of equipment approvals and recommendations, please consult your local Shell Technical Helpdesk.

Typical Physical Characteristics

Properties			Method	Shell Caprinus XS9 40
SAE Viscosity Grade				40
Kinematic Viscosity	@40°C	mm ² /s	ASTM D445	143
Kinematic Viscosity	@100°C	mm ² /s	ASTM D445	14.6
Viscosity Index			ASTM D2270	100
Total Base Number	mg KOH/g		ASTM D2896	9
Sulfated Ash	%		ASTM D874	1.0
Density	@15°C	kg/l	ASTM D4052	0.890
Flash Point (COC)	°C		ASTM D92	260
Pour Point	°C		ASTM D97	-9

These characteristics are typical of current production. Whilst future production will conform to Shell's specification, variations in these characteristics may occur.

Health, Safety & Environment

• Health and Safety

Shell Caprinus® XS9 40 is unlikely to present any significant health or safety hazard when properly used in the recommended application, and good standards of industrial and personal hygiene are maintained.

Avoid contact with skin. Use impervious gloves with used oil. After skin contact, wash immediately with soap and water.

Guidance on Health and Safety is available on the appropriate Material Safety Data Sheet, which can be obtained from <http://www.epc.shell.com/>

• Protect the Environment

Take used oil to an authorised collection point. Do not discharge into drains, soil or water.

Additional Information

- **Advice**

Advice on applications not covered here may be obtained from your Shell representative.