



Previous Name: Shell Corena NG

# Shell Gas Compressor Oil S3 PSN 220

Extra Performance

Natural Gas Applications

Special Applications Natural/Sour Gas Compressor Oil

Shell Gas Compressor S3 PSN is a high quality blend designed for the total loss lubrication of cylinders of high pressure reciprocating compressors used in severe, wet and/or sour, natural gas service.

# **DESIGNED TO MEET CHALLENGES**

### Performance, Features & Benefits

#### Outstanding wear protection

Shell Gas Compressor Oil S3 PSN has good wetting ability and helps form a resistant lubricant film on the cylinder wall when compared to "compounded" oils. This special lubricant film strength resists wash-off by wet air, wet gases and solvent and helps provide excellent wear resistance for sliding contacts in the Compressor.

## Maintaining system efficiency

Shell Gas Compressor Oils S3 PSN Oils have been designed with excellent low temperature flow Characteristics without sacrificing Wear protection. The superior low temperature properties lessens the need for heat tracing of flow lines from the day tank to the oil pump and reduces the chance of "no-flow" shutdowns of the Compressor.

Excellent cleanliness and Oxidation resistance of Shell Gas
Compressor Oils S3 PSN helps maintain exhaust valve
cleanliness and reduce carbon deposits on pistons, rods and in
the packing areas to help preventing premature packing
failure and/or reduced Compressor efficiency.

# Specifications, Approvals & Recommendations

 Shell Gas Compressor Oil S3 PSN complies with requirements of Dresser Industries and most other manufacturers.
 For additional questions regarding equipment approvals and recommendations, please consult your local Shell Technical Helpdesk, or the OEM Approvals website.

## Main Applications





### Natural gas/sour gas compressors

Shell Gas Compressor Oil S3 PSN is designed for "oncethrough" cylinder lubrication of reciprocating compressors which use oil injection systems to lubricate cylinders and rod packings.

# ■ Propane Gas Compression

It provides premium performance in propane compression and has been proven in field tests to satisfactorily lubricate propane refrigeration cylinders with -30°C suction temperatures.

# Other applications

Shell Gas Compressor Oil S3 PSN oils are ideal for break-in of Compressor cylinders and rod packings.

They are also suitable for use when compressing wet air, wet gases/steam or solvent gases such as propane, and organic chemicals like aldehydes and ketones.

#### Compatibility & Miscibility

#### Seal Compatibility

Shell Gas Compressor Oil S3 PSN is compatible with all sealing materials commonly used in gas compressors.

# Typical physical characteristics

Properties			Method	Shell Gas Compressor Oil S3 PSN 220
Kinematic Viscosity	@40°C	mm²/s	ASTM D 445	211
Kinematic Viscosity	@100°C	mm²/s	ASTM D 445	17.9
density	@15°C	kg/m³	ASTM D 1298	888
Flash Point (COC)		°C	ASTM D 92	268
Rust Test - 48 Hrs Distilled Water			ASTM D 665	Pass
Rust Test - 48 Hrs Synthetic Sea Water			ASTM D 665	Pass

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

# Heath, Safety & Environment

# Health and Safety

Shell Gas Compressor Oil S3 PSN is unlikely to present any significant health or safety hazard when properly used in the recommended Application and good standards of 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 authorized collection point. Do not discharge into drains, soil or water.

# **Additional Information**

#### Advice

Product recommendations for applications and specifications not covered here may be obtained from your Shell representative.