Technical Data Sheet

Formerly Known As: **Shell Corena P**

Shell **Corena** ***S2 P 150***

- Reliable Protection
- Standard Life Applications

Reciprocating (Piston) Air Compressor Oil

Shell Corena S2 P is high quality air compressor oil designed to deliver the lubrication performance for high pressure reciprocating compressors. It is suitable for most reciprocating air compressors running at up to 220°C discharge temperatures at elevated pressures.

DESIGNED TO MEET CHALLENGES

Performance, Features & Benefits

- **Long oil life – Maintenance saving**

  Shell Corena S2 P allows the interval between valve and piston maintenance to be extended under certain applications. Compressors can be kept in service for much longer periods, operating at a consistently high level of efficiency.

  Extended maintenance capability is supported by resistance to formation of carbon deposits and lacquer on valves and piston crowns at high working temperatures and pressures.

- **Outstanding wear protection**

  Shell Corena S2 P helps provide effective protection of internal metal surfaces from corrosion and wear to help prolong the life of critical parts such as bearings and pistons.

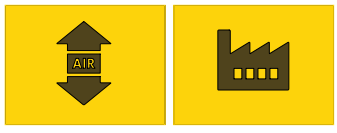
- **Maintaining system efficiency**

  Shell Corena S2 P helps prevent the formation of carbon deposits and lacquer on valves and piston crowns at high working temperatures and pressures. These can cause serious damage, lower compressor efficiency and increase maintenance costs. In addition, Shell Corena S2 P has good water separation to help prevent accelerated corrosion, facilitating easy condensate draining.

- **Enhanced air line safety**

  In discharge air-lines, the combination of rust particles, dispersed in carbonaceous deposits, coupled with heat from recently compressed air, can cause a reaction leading to the possibility of fires and explosion. Shell Corena S2 P helps to minimise the likelihood of this danger.

Main Applications



- **Reciprocating air compressors**

  Shell Corena S2 P is suitable for use in industrial reciprocating air compressors operating with air discharge temperatures of up to 220°C.

- **Breathing air compressors**

  Shell Corena S2 P may be used in breathing air compressors, provided subsidiary clean-up apparatus is used to ensure that the air produced is fit for breathing.

Specifications, Approvals & Recommendations

- DIN 51506 VBL
- ISO 6743-3-L DAA Normal Duty
- ISO 6743-3A L-DAB

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

Compatibility & Miscibility

- **Seal Compatibility**

  Shell Corena S2 P oils are compatible with all sealing materials commonly used in air compressors.

Typical Physical Characteristics

Properties			Method	Shell Corena S2 P 150
ISO Viscosity Grade			ISO 3448	150
Kinematic Viscosity	@40°C	mm^2/s	ASTM D445	155
Kinematic Viscosity	@100°C	mm^2/s	ASTM D445	12.1
Density	@15°C	kg/m^3	ASTM D1298	902
Flash Point (COC)		°C minimum	ASTM D92	210
Pour Point		°C	ASTM D97	-30
Neutralisation Value		mg KOH/g	ASTM D974	0.3
Sulphated Ash		% m	DIN 51575	0.06
Oxidation Stability (delta CCR)		% m	DIN 51352-2	2.3
Properties Of The Distillation Residue (20%) - Carbon Residue (C		% m	DIN 51551	0.3
Properties Of The Distillation Residue (20%) - Kinematic Viscosi	@40°C	mm^2/s	DIN 51562	280
Rust Prevention - Synthetic Sea Water		degree	ASTM D665B	Pass
Water Separability	@54°C	min	ASTM D1401	-
Water Separability	@82°C	min	ASTM D1401	20

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 Corena S2 P 150 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 Safety Data Sheet, which can be obtained from https://www.epc.shell.com

- **Protect the Environment**

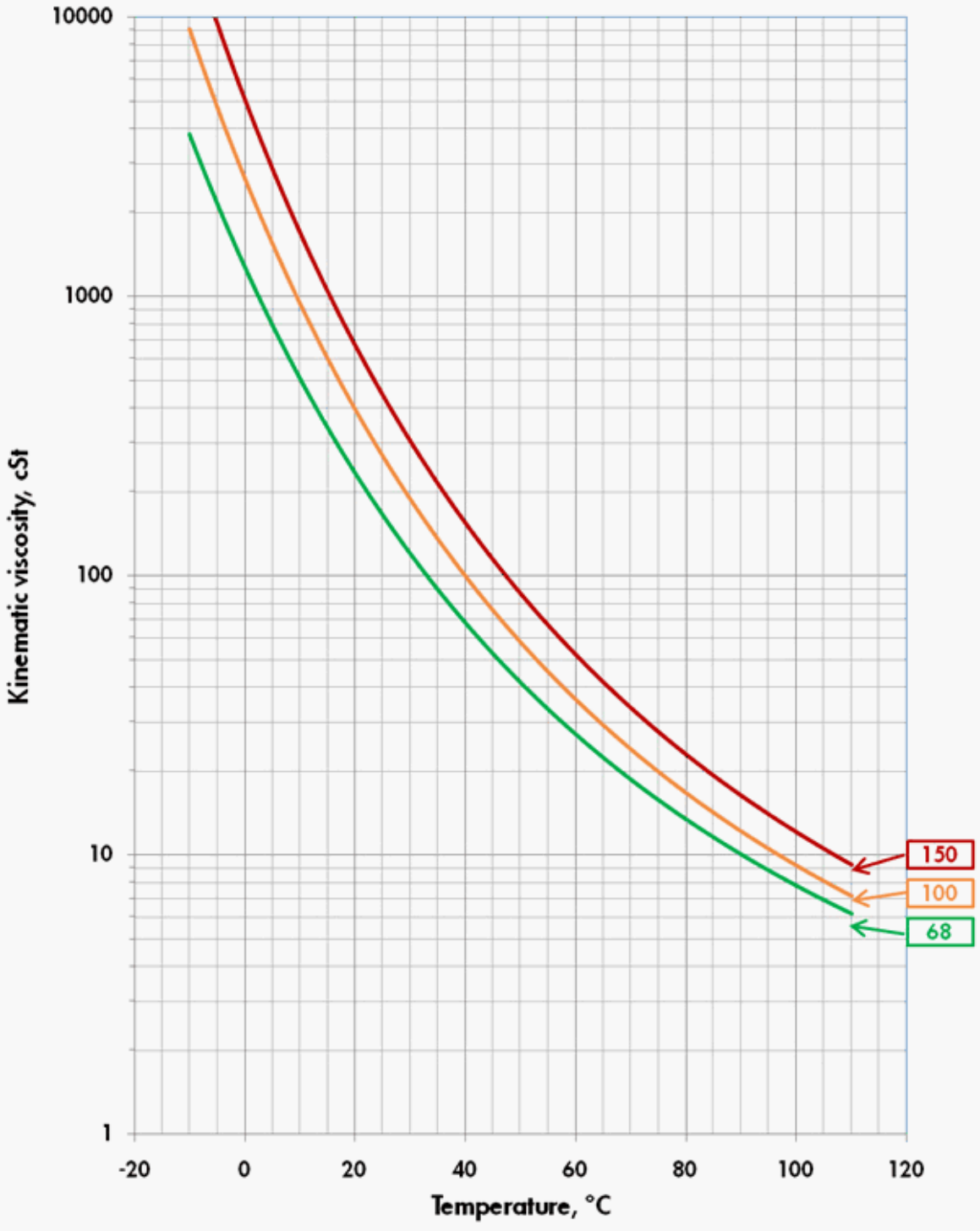
  Take used oil to an authorised collection point. Do not discharge into drains, soil or water.

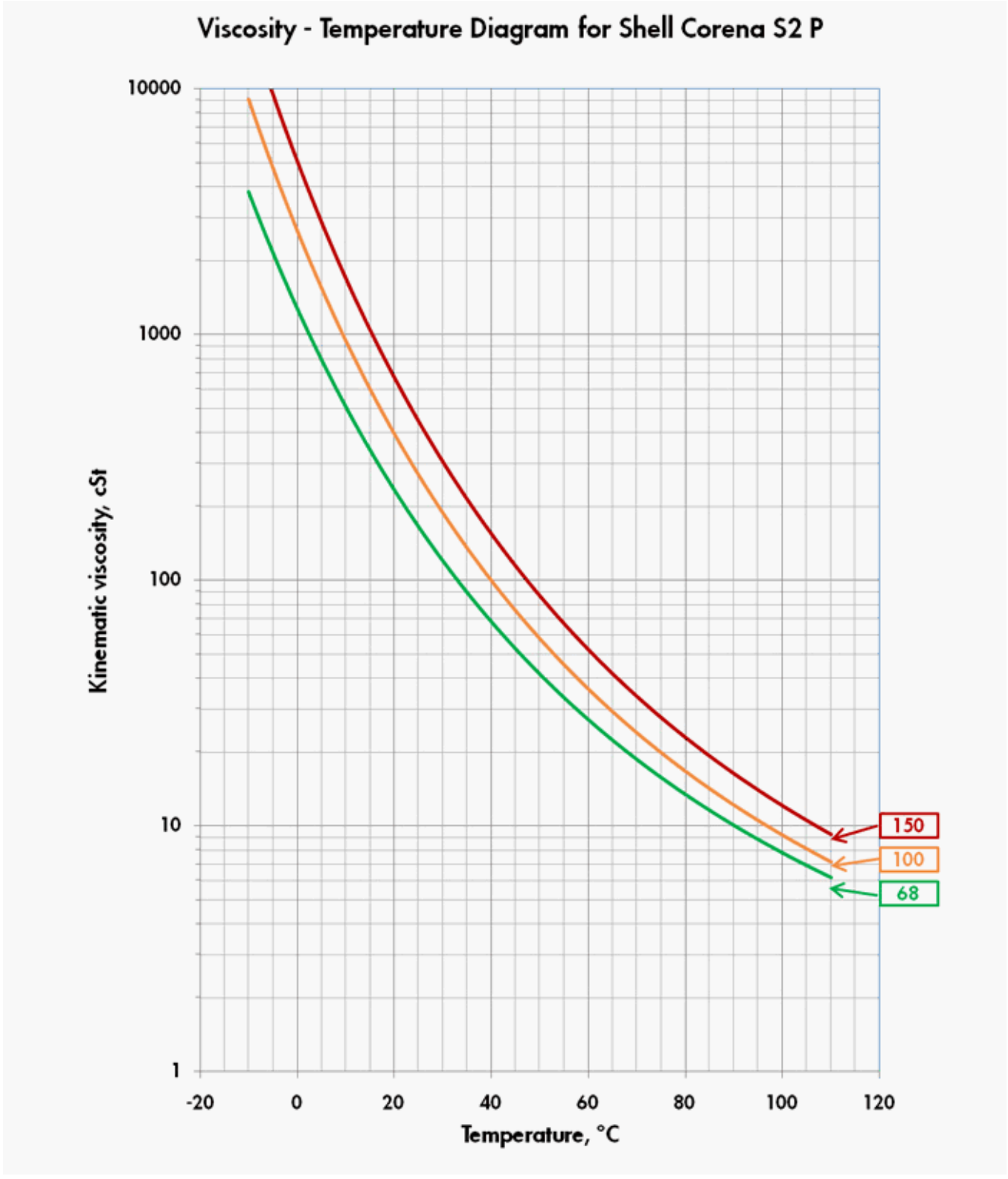
Additional Information

- **Advice**

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

Viscosity - Temperature Diagram for Shell Corena S2 P




Viscosity - Temperature Diagram for Shell Corena S2 P
Kinematic viscosity, cSt
10000
1000
100
10
1
-20
0
20
40
60
80
100
120
Temperature, °C
150
100
68