Technical Data Sheet

Shell **Catenex** *Oil S 541*

Paraffinic Process Oil

Shell Catenex Oils S are paraffinic process oils manufactured via the solvent extraction process. They are general purpose process oils used as extender or carrier fluids.

DESIGNED TO MEET CHALLENGES

Specifications, Approvals & Recommendations

For a full listing of equipment approvals and recommendations, please consult your local Shell Technical Helpdesk, or the OEM Approvals website.

Typical Physical Characteristics

Properties			Method	Shell Catenex Oil S 541
Colour (ASTM)			ASTM D1500	4.0
Density	@15°C	kg/m³	ISO 12185	888
Refractive Index	@20°C		ASTM D1218	1.487
Flashpoint (COC)		°C	ISO 2592	240
Pour Point		°C	ISO 3016	-9
Kinematic Viscosity	@20°C	mm²/s	ISO 3104	330
Kinematic Viscosity	@40°C	mm²/s	ISO 3104	100
Kinematic Viscosity	@100°C	mm²/s	ISO 3104	11.2
Sulphur (X-Ray)		% m/m	ISO 14596	1.1
Carbon Type Distribution : C/A (S-corr.)		%	DIN 51378/ASTM D2140 mod.	4
Carbon Type Distribution : C/N (S-corr.)		%	DIN 51378/ASTM D2140 mod.	28
Carbon Type Distribution : C/P (S-corr.)		%	DIN 51378/ASTM D2140 mod.	68
Refractive Intercept (RI)			DIN 51378	1.0450
Viscosity Gravity Constant (VGC)			DIN 51378	0.819
Aniline Point		°C	ISO 2977	112
Clay Gel Analysis : Polar Components		% m/m	ASTM D2007	1.2
Clay Gel Analysis : Aromatic Components		% m/m	ASTM D2007	28.6
Clay Gel Analysis : Saturated Components		% m/m	ASTM D2007	67.0
Evaporation Loss (22 hrs)	@107°C	% m/m	ASTM D972	0.1
Noack Volatility (1 hr)	@250°C	% m/m	ASTM D5800	4
PCA Content (DMSO Method)		% m/m	IP 346	<3

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 Catenex Oil S 541 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 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.