

# Shell Catenex Oils PH

## High quality paraffinic process oils



Shell Catenex Oils PH are paraffinic process oils higher refined than Catenex Oils S and H applying an additional hydrotreating step to improve the colour and light stability. They possess a neutral smell and are recommended for use in those process oil applications, where improved light stability and low sulphur levels are required.

---

### Applications

- **Extender oil and plasticiser**  
for the production of high quality rubber and technical rubber articles, seals, automotive car components, toys, glues, adhesives and many other applications.
- **Carrier fluid**  
for printing inks, textile aids, leather and fur treatment oils, defoaming agents, household articles, polishes, agricultural products etc.

Catenex PH oils can be used in a variety of process oil applications, when enhanced light stability and low sulphur levels are desired but technical or medicinal white oils not mandatory.

### Performance Features and Benefits

- **Severely hydrotreated oils**  
Catenex PH oils are manufactured via a double stage process from paraffinic feedstocks resulting in light coloured, stable oils after the last hydrotreating step.
- **Low colour and enhanced stability**  
The low process oil colour allows the formulation of light stable, white and coloured products of high quality.
- **Low sulphur**  
Catenex PH oils should be used when the sulphur level in the Catenex S oils prevent their use.
- **Universal paraffinic process oil**  
Catenex PH oils are universal grades for black, white and coloured finished products using only one paraffinic process oil quality. They can also be used in those applications, where the quality of Catenex S and H oils would be sufficient.

### Specification and Approvals

- Catenex PH oils can be classified as a 'paraffinic' process oil type (VGC < 0.820))
- Catenex PH oils meet the US FDA §178.3620(c) specification for 'Mineral oil' and hence the following FDA paragraphs, e.g.  
§175.105, §175.210,  
§176.200, §176.210,  
§177.2260, §177.2600, §177.2800,  
§178.3120, §178.3570, §178.3910.

### Advice

Advice on applications not covered in this leaflet may be obtained from your Shell representative.

### Health and Safety

Guidance on Health and Safety are available on the appropriate Material Safety Data Sheet which can be obtained from your Shell representative.

#### Protect the environment

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

## Typical Physical Characteristics

Catenex		PH 737	PH 908	PH 921	PH 933	PH 941
Colour (ASTM)	ISO 2049	0.5	L0.5	L0.5	L0.5	L0.5
Density at 15 °C	ISO 12185	879	825	856	873	875
kg/m <sup>3</sup>						
Refractive Index at 20 °C	ASTM D 1218	1.482	1.454	1.469	1.479	1.480
Flashpoint COC	ISO 2592	240	125	200	235	265
°C						
Pour Point	ISO 3016	-9	-9	-18	-9	-9
°C						
Kinematic Viscosity	ISO 3104					
at 20 °C		248	6.0	40	160	350
mm <sup>2</sup> /s						
at 40 °C		77	3.7	17	54	105
mm <sup>2</sup> /s						
at 100 °C		9.4	1.4	3.7	7.4	11.4
mm <sup>2</sup> /s						
Sulphur (X-Ray)	ISO 14596	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
%m/m						
Carbon Type Distribution	DIN 51378 /					
C/A (S-corr.)	ASTM D 2140	2	0	0	1	1
%						
C/N (S-corr.)	mod.	33	36	36	34	30
%						
C/P (S-corr.)		65.0	64	64	65	69
%						
Refractive Intercept (RI)	DIN 51378	1.0440	1.0430	1.0430	1.0438	1.0440
Viscosity Gravity Constant (VGC)	DIN 51378	0.811	0.813	0.81	0.81	0.802
Aniline Point	ISO 2977	114	85	103	111	120
°C						
Clay Gel Analysis	ASTM D 2007					
polar components		0.1	< 0.1	< 0.1	0.1	0.2
%m/m						
aromatic components		14.7	3.0	6.5	11.4	14.6
%m/m						
saturated components		85.2	97.0	93.5	88.5	85.2
%m/m						
Evaporation Loss (22h/107°C)	ASTM D 972	0.5	65	1.5	0.8	0.1
%m/m						
Noack Volatility (1h/250°C)	ASTM D 5800	6	100	38	7.3	3.1
%m/m						
PCA-Content (DMSO method)	IP 346	< 3	< 3	< 3	< 3	< 3
%m/m						

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

Thank you for evaluating Wondershare PDF Password Remover.

With the trial version, only the first 5 pages of each file can be exported.

To get all the pages exported, you need to purchase the software from

<http://www.anypdftools.com/buy/buy-pdf-password-remover.html>