Shell Corena Oil V

Special purpose premium vacuum pump lubricant

Shell Corena Oil V is a formulated from selected premium performance, highly refined mineral oils. This selection provides the low vapour pressure and high performance desired for the proper lubrication of rotary vacuum pumps.

Applications

- ***Rotary vacuum pump***
  Corena V is designed for the use in rotary and slide vane vacuum pumps. It can be used to a vacuum pressure of up to $1x10^{-3}$ mbar at 75°C. This will cover most of the industrial and laboratory applications.

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

Performance Features and Advantages

- ***Superior oxidation stability***
  The selected formulation of Corena V offers superior resistance to oil degradation. This ensures the oil will provide a long service life as well as reduced tendency for sludge build up and deposit formation
- ***Sufficient low vapour pressure***
  The careful selection of the base oils provides a very low vapour pressure of the oil because of the narrow boiling range. This will enable the pump to easily reach the vacuum for which it was designed while minimising oil thickening due to light-end carry off.
- ***Corrosion protection***
  Corena V provides rust protection to components exposed to moisture and condensate.
- ***Good demulsibility***
  Corena V offers good inherent demulsibility, reducing the amount of moisture and free water in the oil to a minimum.

Specification and Approvals

ISO 6743-3A-DVC
Shell Corena V is known and used by many key OEM's throughout the world.

Application advice

Corena V is recommended in applications where ambient temperatures are above 0°C and where maximum operating temperatures do not exceed 100°C. Maximum vacuum pressure capability generally tends to decrease as the pump operating temperature increase. Corena V is not recommended for use when corrosive gasses or chemical vapours are involved in the extraction process.

Health and Safety

Guidance on Health and Safety are available on the appropriate Material Safety Data Sheet that 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

Corena V			**100**
ISO Viscosity grade		ISO 3448	100
Kinematic viscosity		ASTM D445	
at 40°C	mm^2/s		108
at 100°C	mm^2/s		11,8
Density at 15°C	kg/m^3	ASTM D1298	882
Flash point COC	°C	ASTM D92	265
Pour point	°C	ASTM D97	-9
Neutralisation value	mg KOH/g	ASTM D947	<0,04
Ash content	%m	ISO 6245	<0,01
Conradson carbon residue	%m	DIN 51551	0,05
Vapour pressure versus temperature, Isoteniscope		ASTM D 2879	
70°C	mbar		1.3
120°C	mbar		2.7
175°C	mbar		6.7
232°C	mbar		13.3
250°C	mbar		16.9
300°C	mbar		31.6

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