

STANDARD SPECIFICATIONS OF VIRGIN BASE OIL SN – 500

Virgin Base Oils are used to manufacture products including lubricating greases, motor oil and metal processing fluids. Different products require different compositions and properties in the oil. One of the most important factors in the liquid's viscosity at various temperatures. Whether or not crude oil is suitable to be made into base oil is determined by the concentration of base oil molecules as well as how easily these can be extracted.

Virgin Base oil is produced by means of refining crude oil. This means that the crude oil is heated so that various distillates can be separated from one another. During the heating process, light and heavy carbons are separated. The light ones can be refined to make petrol and other fuels, while the heavier ones are suitable for bitumen and base oils.

There are large numbers of crude oils all around the world that are used to produce base oils. The most common one is a type of paraffinic crude oil, although there are also naphthenic crude oils that create products with better solubility and very good properties at low temperatures.

Standard Specification of Virgin Base Oil SN – 500:

BASE OIL SPECIFICATION SN – 500				
GENERIC				
PROPERTY	UNIT	TEST METHOD	SPECIFICATION	TYPICAL RESULT
Appearance	–	ASTM D – 1524	Bright & Clear	
Color	–	ASTM D – 1500	–	1.8
Density @ 15°C	Kg/m ³	ASTM D – 4052	–	893
Kinematic Viscosity @ 40 °C	mm ² /s (cSt)	ASTM D – 445	–	108
Kinematic Viscosity @ 100 °C	mm ² /s (cSt)	ASTM D – 445	Min 10.8	10.9
Viscosity Index	–	ASTM D – 2270	Min 87	88
Flash Point	°C	ASTM D – 92	Min 235	245
Pour Point	°C	ASTM D – 97	Max – 3	– 4
Noack at 250 °C	wt%	ASTM D – 5800	Max 5	3.5
Sulfur Content	wt%	ASTM D – 4951	–	0.7
Carbon residue (Conradson)	wt%	ASTM D – 189	–	0.15
Copper Corrosion (3hrs @ 100	°C	ASTM D – 130	–	1A
Foam	MI	ASTM D – 892	Nil	–

