

Base Oil Category	Sulfur (%)		Saturates (%)	Viscosity Index
Group I	>0.03	and/or	<90	80 to 120
Group II	<0.03	and	>90	80 to 120
Group III	<0.03	and	>90	>120
Group IV	All polyalphaolefins (PAOs)			
Group V	All others not included in Groups I, II, III or IV (Esters)			

Base Oil Category	Manufacturing Method	Oil Characteristics
<b>Group I</b>	Solvent Freezing	Group I base oils are the least refined of all of the groups. They are usually a mix of different hydrocarbon chains with little or no uniformity. While some automotive oils on the market use Group I stocks, they are generally used in less demanding applications.
<b>Group II</b>	Hydroprocessing and Refining	Group II base oils are common in mineral-based motor oils currently available on the market. They have fair to good performance in lubricating properties such as volatility, oxidative stability and flash/fire points. They have only fair performance in areas such as pour point, cold crank viscosity and extreme pressure wear.
<b>Group III</b>	Hydroprocessing and Refining	Group III base oils are subjected to the highest level of <b>mineral oil</b> refining of the base oil groups. Although they are not chemically engineered, they offer good performance in a wide range of attributes as well as good molecular uniformity and stability. They are commonly mixed with additives and marketed as synthetic or semi-synthetic products. Group III base oil products have become more common in America during the past decade.
<b>Conventional Synthetics – Labeled as full synthetic Lower Quality</b>	Even though these are not 100% Synthetic basestocks they can still Label them full synthetic due to a Court Ruling which expanded the Definition Of synthetics to group III	
<b>Group IV</b>	Chemical Reactions	Group IV base oils are chemically engineered synthetic base stocks. Polyalphaolefins (PAOs) are a common example of a synthetic base stock. Synthetics, when combined with additives, offer excellent performance over a wide range of lubricating properties. They have very stable chemical compositions and highly uniform molecular chains. Group IV base oils are becoming more common in synthetic and synthetic-blend products for automotive and industrial applications.
<b>AMSOIL SYNTHETIC LUBRICANTS</b>	Engineered to be uniform and are Designed to exact properties.	
<b>100% Full Synthetic</b>		
<b>Group V</b>	As Indicated	Group V base oils are used primarily in the creation of oil additives. Esters and polyolesters are both common Group V base oils used in the formulation of oil additives. Group V oils exhibit a wide variety of properties specific to each individual oil's formulation. Group V base oils are generally not used as base oils themselves, but add beneficial properties to other base oils.