

## ***Is Oil Ready to be Drained When it Turns Dark?***

***LubeDoc 9***

What do you do if your lubricating oil changes from amber to dark in color? Does this mean that the oil is no longer fit for use? Should it be changed immediately? What causes the oil to change color? New oils come in a variety of colors anyway, so when do we make the decision to change oil?

A quick look at the oil will tell you the color and the clarity of an oil sample. This style of oil analysis was used many decades ago before instrumented oil analysis was developed which has spread world wide for sampling all forms of oil in today's industry.

When looking at the oil in an oil sample bottle, if the oil is cloudy or milky, that normally will tell you that the oil is full of air bubbles or water droplets. If it clears up over time with out forming layers then the air is most likely the culprit. If it doesn't clear up, or separates into layers, then water is most often the problem.

Besides from appearance resulting from air or water, what causes the oil to change colors?

Oxidation or oxidized oil is a big factor for oil changing colors. There are other things that can change the color of oil other than oxidation. This is a major necessity of determining causes to oil lubricants color change.

Another important observation that you will notice is that a wiped sleeve or journal bearing will cause the darkening of oil with no real change in an oil oxidation or chemical index. In addition to oil becoming dark due to localized overheating, a wiped sleeve will drive particle counts to a very high level.

There are many other things such as fuel soot and other options that will change the appearance of lubricating oils, but most of them are not harmful to the oil itself. So always determine the cause before jumping to conclusions because most likely your oil is still in great condition and can be used for a much longer, extended life.