Technical Bulletin

Health, Safety and Environmental Affairs – Biodegradability

The standard definition of biodegradable is "capable of being broken down especially into innocuous products by the action of living things (such as microorganisms)." In the North American metalworking fluid market, the claim "this product is biodegradable" implies that the product can be "dumped" into sanitary sewers without problem – and this, of course, is **NOT TRUE**.

"Used" metalworking fluids can be legally "sewered" ONLY in very specific situations; and details need to be worked out with local POTW (Publicly Owed Treatment Works) facility prior to commencing to dump the used material. Some POTWs accept "reasonable" amounts of some used fluids, but you need to ask BEFORE dumping. (Remember that used fluids pick up tramp oils and metals from the machined materials, and this "pick up" may make the fluid non-sewerable.)

Focusing on the more accurate definition of biodegradable as a product "easily broken down by bacterial action", we find the most frequent cause of coolant failure and resulting DCR (dump, clean, and recharge) is the noxious odor generated by bacterial action. So, it seems that to develop a fluid for biodegradability is to design for failure.

As a matter of corporate philosophy, Master Fluid Solutions focuses on designing products with the longest possible sump life – with the belief this is the responsible and ethical solution. However, Master Fluid Solutions develops products that are as resistant to bacterial action as possible, recognizing the need for products to be treated easily using conventional industrial technologies – like ultra filtration or a kind of chemical split.

Note:

1. Be sure to check with "those who are about to receive" before dumping any metalworking fluid into a drain.

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