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Will Advanced Degreaser “Spoil” Younger Engineers?

BY DAVID MURRAY

Bob Jaudon of Custom Compounds Inc., sometimes uses an eyedropper and a piece of white-enamelled sloped steel, covered with a film of oil in his demonstrations to potential customers. He starts with a competing degreaser. A few drops of the competing product leave a clear trail down through the greasy soil revealing the white surface below.

But when Jaudon's product is dropped, the white spreads out like a fan.

That's because Jaudon's product, which he calls “L-44 WCD” Degreaser, “slips beneath the oil and releases it from the surface”, he said. To put it another way, it uses “surface tension properties” to operate mechanically rather than chemically to release the oil. “L-44 WCD” is the end result of a collaborative effort to develop a degreaser focused on worker safety, maximum performance, and held within a framework dedicated for environmental compatibility.

Not An Emulsifier

Many previous degreasers work by emulsification, in which oil breaks up into tiny droplets that disperse evenly in a non-oil medium, much like the way salad oil breaks into tiny droplets and disperses in vinegar or water when you shake a salad dressing bottle. In a perfect emulsion, the droplets never rejoin each other. “But “L-44 WCD”'s unique surface tension property, said Jaudon, does not incorporate the oil with water as emulsification does.”

The fact that his degreaser does not work by emulsifying leads to an important time and cost advantage. “With other degreasers, you may need a de-emulsifier to separate out the oil again”, said Jaudon. But

not his product. That saves steps and time, and therefore money. This allows for simple oil separation and collection. “Not needing another chemical is always a plus in this age of strict environmental regulations,” he said.

Luhr Bros. Tested Product

After Luhr Bros. Inc., performed a 6-month course of tests on Jaudon's degreaser, company president Mike Luhr said, “L-44 WCD” saved his company money and avoided unnecessary HAZMAT shipping costs.

Ron Sadler, 2nd engineer on the mv. Michael Luhr, said “Whatever they are cleaning, it is just a matter of spraying it on and rinsing. The dirt and grease come off the surface without removing or dulling the paint.”

Rick Myers, chief engineer on the mv. Twyla Luhr, was even more enthusiastic. “I have been using degreasers for many years, and have never had the quality of degreaser that I am now using with the “L-44 WCD”. It reduces the amount of time I have to spend in the engine room cleaning, which allows me more time to concentrate on my other duties.”

Non-Toxic

And Sadler appreciated a welcome bonus: “If the “L-44 WCD” comes in contact with the skin, there is no burning or redness, like with other degreasers.” None of its components are corrosive according to Jaudon.

Both engineers stressed the benefits of not having to worry about skin exposure. “The younger generation of engineers, Myers said, will be spoiled by using a higher quality



Luhr Bros. engineer degreases diesel engine.

of degreaser than we had in the past.

Since Jaudon's degreaser contains no corrosive chemicals or volatile organic compounds (VOCs), no HAZMAT labeling is necessary, which saves shipping costs, as Luhr noted.

Environmental Certification

Jaudon is currently undergoing third-party reviews for performance and toxicity (lack of) verifications as part of effort to receive national recognition as an “EPA Partner” for “L-44 WCD”. The third party certifiers are mandated “outside” chemical profilers, chosen for their expertise in determining “environmentally safer” chemical products. For this strict certification process, each component must be separately judged to be non-toxic and environmentally friendly, as well as all the components when combined together. It is important to note that the definition of “the environment”, as used in the government program, includes all considerations for compatibility as pertain to air, water, land, and personal exposure.

Jaudon feels approval may be completed soon. Approved products are certified for an initial period of three years, during which the manufacturer is required to demonstrate ongoing performance and toxicity efforts for improvement. The underlying philosophy is to insure a continued responsibility for even safer products in the future.

Now and the Future

At times, Jaudon said, compliance for safer chemistries may seem difficult, but it remains that chemical manufacturers have the responsibility to provide products which are “safe”! This also indicates the producer's obligation to inform the user of any hazards associated with its use. Disregard for this approach not only increases the potential for worker injury, but it does nothing to lessen the negative consequences when chemicals are released to the environment.

In the end, said Luhr, it didn't come down to details of chemistry. “I don't know a lot about degreasers, but I do know about clean engine rooms, safety and the environment.”