

CLEANING LABORATORY EVALUATION SUMMARY

SCL #: 1999
 DateRun: 05/18/1999
 Experimenters: Jason Marshall
 ClientType: Department of Public Works
 ProjectNumber: Project #1
 Substrates: Aluminum, Brass, Carbon Steel, Rubber, Stainless Steel, Steel
 PartType: Coupon
 Contaminants: Cutting/Tapping Fluids, Greases, Lubricating/Lapping Oils, Rust/Scale, Dirt, Oxides, Oil
 Cleaning Methods: Manual Wipe
 Analytical Methods:
 Purpose: Information request
 Experimental Procedure:

Results: I have enclosed some information on the three main chemicals in the Safety Kleen product. I tried to highlight some of the more important health risks associated with each chemical. If you have any questions on these, let me know and we can discuss them in more detail.

I have found a couple of the CAS#s from the few oil products at the Greenfield DPW. They have been successfully removed for similar cleaning situations. The reports on the Mass Highway testings that I gave you is one of the examples for successful cleaning. I have included eight products which I feel would be a better alternative to TCE, TCA and Benzene for cleaning the oil and grease from the parts. Since these products have been tested before on some of the contaminants, I think it would be a good idea for me to obtain a couple of dirty parts from the DPW to evaluate the cleaners on actual parts. Ask the DPW for eight dirty parts (one for each cleaner) that they will not miss for a couple of days. If you have any questions, feel free to give me a call at (978)934-3133.

| Substitute Products | | |
|------------------------|-----------------------------|-------------------------------|
| Manufacturer | Product | Classification |
| WR Grace | Daraclean 282 | Alkaline Aqueous |
| EMKAY | Safety Wash | Alkaline Aqueous |
| Safe CleanUp | Super-Neutral | Aqueous |
| Envirosolutions | SolSafe 245 | Alcohol-aliphatic hydrocarbon |
| AG Environmental | Soy Gold 2000 | Soy Methyl Ester |
| International Products | Micro 90 | Alkaline Aqueous |
| Gemtek Products | SC Aircraft & Metal Cleaner | Alkaline Aqueous |
| Watson Technical | Formula 7300 | Alkaline Aqueous |

Summary:

Conclusion: