

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

FEBRUARY 22, 1989

Mr. Raymond B. O'Day
Senior Product Manager
Chemical & Supplies
Packard Instrument Company
2200 Warrenville Road
Downers Grove, IL 60515

Dear Mr. O'Day:

This letter is in response to your letter dated November 11, 1988 and the accompanying background material. I want to apologize for the delay in responding to your request for an evaluation of the regulatory status of your "Ultima-Gold" product.

When characterizing any commercial chemical product (CCP) as a hazardous waste under Subtitle C of the Resource Conservation and Recovery Act (RCRA), it must first be determined if the CCP can be defined as a solid waste (40 CFP Section 261.2). If defined as a solid waste, the CCP would also be a hazardous waste if it is either a "P" or "U" listed hazardous waste in 40 CFR Section 261.33(e) or (f) and/or the discarded CCP exhibits a characteristic of a hazardous waste as defined in 40 CFR Subpart C of Part 261. If the CCP is not defined as a solid waste, it cannot be a hazardous waste.

For the product solvent "Ultima-Gold" to be defined as a solid waste, it must be characterized as a discarded material. A discarded material is any material that is abandoned, recycled, or considered inherently waste-like as specified in 40 CFR Section 261.2(a)(2). Generally, a CCP like "Ultima-Gold" becomes discarded material by being abandoned (e.g., disposed of or incinerated) or sent for recycling (e.g., reclamation or burned for energy recovery). A CCP that is abandoned is a solid waste. If a CCP is recycled by being reclaimed, the CCP is not defined as a solid waste in accordance with 40 CFR Section 261.2(c)(3), Table 1. However, if a CCP is recycled by being burned for energy recovery, the CCP is defined as a solid waste (Table 1).

In determining if "Ultima-Gold" is a discarded material, it must be noted that the preceding regulatory interpretation applies only to "Ultima-Gold" as a commercial product prior to it being used. As an unused product, if not defined as a discarded material (e.g. solid waste), any transportation or sale of the "Ultima-Gold" product is not regulated under Subtitle C of RCRA.

If defined as a solid waste, it must be determined if the CCP can be identified as a hazardous waste. Again, the following regulatory interpretation concerns "Ultima-Gold" as an unused commercial

product that meets the definition of a solid waste. Normally, this condition exists when an unused CCP is found to be off-specification (for whatever reason) and discarded; when unused CCP container residues are discarded; or when unused CCP is spilled (spill residues).

In any case, the product solvent "Ultima-Gold" must be evaluated to determine if any of the "P" or "U" hazardous waste listings apply and/or if the product exhibits a characteristic of a hazardous waste. For a solid waste (CCP) to be identified as a "U" or "P" listed hazardous waste, several listing criteria must be met by the CCP. These criteria are:

1. - an unused CCP that is discarded or spilled (as explained above);
2. - a chemical ingredient in the CCP is listed in 40 CFR Section 261.33(e) or (f) (the "P" or "U" list);
3. - the chemical on the "P" or "U" list serves as the sole active ingredient in the product (i.e., the chemical identified on the "P" or "U" list is the only chemically active component of the product, for the function of the product).

All three listing criteria must be met simultaneously for the "P" or "U" listing to be applicable. The product solvent "Ultima-Gold", based on the materials provided, contains no chemical ingredients that are listed in 40 CFR Section 261.33(e) or (f). Therefore, if the unused "Ultima-Gold" is discarded or spilled, it is not identified as a listed hazardous waste under Subtitle C of RCRA.

To determine if unused "Ultima-Gold" is a characteristic hazardous waste when discarded, the generator must test the waste according to methods in 40 CFR Part 261 Subpart C or the generator may apply knowledge of the hazard characteristic of the waste, as specified in 40 CFR Section 261.11(c)(1) and (2). Based on the Material Safety Data Sheet (MSDS) data you provided, "Ultima-Gold" will not exhibit the hazardous waste characteristics of ignitability ability or EP toxicity as defined in 40 CFR Sections 261.21 and 261.24, respectively.

The MSDS Reactivity Data on "Ultima-Gold" is marked stable. However, the "Condition To Avoid" section under the Reactivity Data states "Oxidation; ignition sources". This indicates that the reactivity characteristic defined in 40 CFR Section 261.23(a)(6) may be applicable since the "Ultima-Gold" is capable of detonation or explosive reaction if it is subjected to a strong initiating source or if heated under confinement. Elsewhere in the materials you provided (Toxicology and Physiochemical Studies On KMC, Heybrock, 1985, page 6), however, there are indications otherwise—"The chemically inert composition of KMC further ensures that there are no reactions with other raw materials used..." This may indicate a non-reactive solid waste under RCRA.

No data regarding the pH or corrosivity of "Ultima-Gold" was provided in the MSDS. Whether it exhibits the characteristic of corrosivity as defined in 40 CFR Section 261.22 depends on the pH reading of "Ultima-Gold". Data provided in Toxicology and Physiochemical Studies On KMC, Heybrock, 1985, page 5, states "The chemical composition of KMC clearly shows it is a chemically

neutral hydrocarbon. No undesirable acidic compounds arise in the KMC during the manufacturing process; acid number has a value of 0 (according to DIN 53402)". This may indicate a non-corrosive solid waste under RCRA.

More data or actual hazardous waste characteristic test results may be needed to definitively determine whether "Ultima-Gold" exhibits the characteristics of reactivity or corrosivity. Your regulatory interpretation request is for the "Ultima-Gold" product itself. No regulatory interpretation regarding the status of "Ultima-Gold" as a hazardous waste after its use (i.e., spent solvent) is required.

If you have any additional questions, please feel free to contact me at (202) 475-8551.

Sincerely,

Stephen L. Cochran
Acting Chief, Review Section