

PPC 9443.1991(01)

DETERMINATION OF THE IGNITABILITY CHARACTERISTIC
UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

SEP 6 1991

Ms. DeAnna M. Senegal
AnalytiKEM Inc.
2925 Richmond Avenue
Houston, TX 77098

Dear Ms. Senegal,

I am writing in response to your letter of June 28, 1991 requesting clarification on the determination of the ignitability characteristic. The characteristic, as defined in 40 CFR §261.21, is applicable to both solid and liquid wastes; however, test methods are currently not available for solid waste. Because standardized, approved methods are not available, the characteristic determination for solids (e.g., determining whether solids will cause vigorous and persistent fires through friction, absorption of moisture, or spontaneous chemical changes, as listed in the regulations) has to depend upon knowledge of the waste stream, as noted in 40 CFR §261.10(a)(2)(ii) and §262.11(c)(2). Waste analyses of solid materials may be helpful for determining if any of the detectable compounds are known to be ignitable. Please note that meeting any (not all) of the properties specified in the definition of ignitability qualifies a waste as characteristically ignitable.

There are no specific definitions of "liquid" (i.e., 5%, 10%) in the ASTM method D-93 (Standard Test Method for Flash Point by Pensky-Martens Closed Tester) but the types of materials that may be tested are specified in the method as "fuel oils, lube oils, suspensions of solids, liquids that tend to form a surface film under test conditions, and other liquids of similar viscosities". You are correct to note that results obtained from applying the test outside of the specifications (e.g., paddle does not turn freely) do not provide proof for a characteristic determination. However, if you are assured that the paddle moves freely, then you may accept the determined flashpoint as reliable.

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Flash point and ignitability are not used interchangeably, instead, flash point is used as an indicator of ignitability. As stated in the 1990 D-93 method, "flash point measures tendency of the sample to form a flammable mixture with air under controlled laboratory conditions. It is only one of a number of properties which must be considered in assessing the overall flammability hazard of a material".

Regarding your question about how the results should appear to clients if the procedures are not followed as written, specific notations according to any deviation from the method should be cited in the client's report.

If you have any further questions, please call me at (202) 260-4761.

Sincerely yours,

Gail Hansen
Chief,
Methods Section
(OS-331)

cc: Alec McBride
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