

3745-51-21

**Characteristic of ignitability.**

(A) A waste exhibits the characteristic of ignitability if a representative sample of the waste has any of the following properties:

(1) ~~The waste~~ is a liquid, other than an aqueous solution containing less than twenty-four per cent alcohol by volume, and has a flash point less than sixty degrees Celsius (C) [one hundred forty degrees Fahrenheit (F)], as determined by a "Pensky-Martens Closed Cup Tester," using the test method specified in "ASTM Standard D-93-79 or D-93-80," or a "Setaflash Closed Cup Tester," using the test method specified in "ASTM Standard D-3278-78."

(2) ~~The waste~~ is not a liquid and ~~is capable~~, under standard temperature and pressure, ~~of causing~~ can cause fire through friction, absorption of moisture, or spontaneous chemical changes and, when ignited, burns so vigorously and persistently that ~~the waste~~ creates a hazard.

(3) ~~The waste~~ is an ignitable compressed gas.

(a) The term "compressed gas" designates any ~~material~~ materials or ~~mixture~~ mixtures having in the container an absolute pressure exceeding forty pounds per square inch (psi) at seventy degrees F or, regardless of the pressure at seventy degrees F, having an absolute pressure exceeding one hundred four psi at one hundred thirty degrees F; or any liquid flammable material having a vapor pressure exceeding forty psi absolute at one hundred degrees F as determined by "ASTM Test ~~D-323~~ D323."

(b) A compressed gas is characterized as ignitable if any one of the following occurs:

(i) Either a mixture of thirteen per cent or less (by volume) with air forms a flammable mixture, or the flammable range with air is wider than twelve per cent regardless of the lower limit. These limits are determined at atmospheric temperature and pressure. The method of sampling and test procedure shall be acceptable to the "Bureau of Explosives" and approved by the director of the "Pipeline and Hazardous Materials Safety Administration" of the U.S. department of transportation (U.S. DOT) (see [Comment 2] of this rule).

(ii) Using the "Bureau of Explosives" flame protection apparatus (see [Comment 1] of this rule), the flame projects more than eighteen inches beyond the ignition source with valve opened fully, or, the

flame flashes back and burns at the valve with any degree of valve opening.

(iii) Using the "Bureau of Explosives" open drum apparatus (see [Comment 1] of this rule), there is any significant propagation of flame away from the ignition source.

(iv) Using the "Bureau of Explosives" closed drum apparatus (see [Comment 1] of this rule), there is any explosion of the vapor-air mixture in the drum.

(4) ~~H~~The waste is an oxidizer. An "oxidizer," for the purpose of this rule, is a substance such as chlorate, permanganate, inorganic peroxide, or a nitrate, that yields oxygen readily to stimulate the combustion of organic matter (see [Comment 4] of this rule).

(a) An organic compound containing the bivalent -O-O- structure and which may be considered a derivative of hydrogen peroxide where one or more of the hydrogen atoms have been replaced by organic radicals shall be classed as an "organic peroxide" (see [Comment 4] of this rule unless:

(i) The material meets the definition of a "Class 1" explosive in "Division 1.1," "Division 1.2," or "Division 1.3," as described in paragraph (A)(8) of rule 3745-51-23 of the Administrative Code, in which case, ~~it shall be~~the material is classed as an explosive,

(ii) The material is forbidden to be offered for transportation according to 49 CFR 172.101 and 49 CFR 173.21,

(iii) ~~It is determined that the~~The predominant hazard of the material containing an organic peroxide is other than that of an organic peroxide, or

(iv) According to data on file with the "Pipeline and Hazardous Materials Safety Administration" in the U.S. DOT (see [Comment 3] of this rule), ~~it has been determined that~~ the material does not present a hazard in transportation.

(b) [Reserved.]

(B) A waste that exhibits the characteristic of ignitability has the EPA hazardous waste number of D001.

[Comment 1: A description of the "Bureau of Explosives" flame projection apparatus, open drum apparatus, closed drum apparatus, and the method of tests may be procured from the "Bureau of Explosives" at [www.boe.aar.com](http://www.boe.aar.com).]

[Comment 2: As part of a U.S. DOT reorganization, the "Office of Hazardous Materials Technology" (OHMT), which was the office listed in the 1980 publication of 49 CFR 173.300 ~~for the purposes of approving~~ to approve sampling and test procedures for a flammable gas, ceased operations on February 20, 2005. OHMT programs moved to the "Pipeline and Hazardous Materials Safety Administration" (PHMSA) in the U.S. DOT.]

[Comment 3: As part of a U.S. DOT reorganization, the "Research and Special Programs Administration" (RSPA) which was the office listed in the 1980 publication of 49 CFR 173.151a ~~for the purposes of determining~~ to determine that a material does not present a hazard in transport, ceased operations on February 20, 2005. RSPA programs moved to the "Pipeline and Hazardous Materials Safety Administration" (PHMSA) in the U.S. DOT.]

[Comment 4: The U.S. DOT regulatory definition of an "oxidizer" is in 49 CFR 173.127, and the definition of an "organic peroxide" is in 49 CFR 173.128; see also 49 CFR 173.152. An organic peroxide is a type of oxidizer.]

[Comment 5: For dates of non-regulatory government publications, publications of recognized organizations and associations, federal rules, and federal statutory provisions referenced in this rule, see rule 3745-50-11 of the Administrative Code titled "Incorporated by reference."]

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Certification

09/14/2021

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Date

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