

(C) The concentration of ingredient A in mixture (A+B) equals the concentration of ingredient C in mixture (C+B);

(D) Data on skin corrosion for ingredients A and C are available and substantially equivalent, *i.e.*, they are the same skin corrosion packing group and do not affect the skin corrosion potential of B.

(E) If the above mixture (A+B) or (C+B) is already classified based on test data, then the other mixture may be assigned to the same packing group.

(2) *Calculation method based on the classification of the substances.* Where a mixture has not been tested to determine its skin corrosion potential, nor is sufficient data available on similar mixtures, the corrosive properties of the substances in the mixture shall be considered to classify and assign a packing group. Applying the calculation method is only allowed if there are no synergistic effects that make the mixture more corrosive than the sum of its substances. This restriction applies only if Packing Group II or III would be assigned to the mixture.

(i) All Class 8 ingredients present at a concentration of $\geq 1\%$ shall be taken into account, or $< 1\%$ if these ingredients are still relevant for classifying the mixture to be corrosive to skin.

(ii) To determine whether a mixture containing corrosive substances must

be considered a corrosive mixture and to assign a packing group, the calculation method in the flow chart in appendix I must be applied. For this calculation method, generic concentration limits apply where 1% is used in the first step for the assessment of the packing group I substances, and where 5% is used for the other steps respectively.

(iii) When a specific concentration limit (SCL) is assigned to a substance following its entry in the Hazardous Materials Table or in a special provision, this limit shall be used instead of the generic concentration limits (GCL).

(iv) The following formula must be used for each step of the calculation process. The criterion for a packing group is fulfilled when the result of the calculation is ≥ 1 . The generic concentration limits to be used for the evaluation in each step of the calculation method are those found in appendix I of this part. Where applicable, the generic concentration limit shall be substituted by the specific concentration limit assigned to the substance(s) (SCL_i), and the adapted formula is a weighted average of the different concentration limits assigned to the different substances in the mixture:

$$\frac{PGx_1}{GCL} + \frac{PGx_2}{SCL_2} + \dots + \frac{PGx_i}{SCL_i} \geq 1$$

PG x_i = concentration of substance 1, 2 . . . i in the mixture, assigned to packing group x (I, II or III)

GCL = generic concentration limit

SCL_i = specific concentration limit assigned to substance i

NOTE TO §173.137: When an initial test on either a steel or aluminum surface indicates the material being tested is corrosive, the follow up test on the other surface is not required.

[85 FR 27880, May 11, 2020, as amended at 87 FR 44993, July 26, 2022]

§ 173.140 Class 9—Definitions.

For the purposes of this subchapter, *miscellaneous hazardous material* (Class

9) means a material which presents a hazard during transportation but which does not meet the definition of any other hazard class. This class includes:

(a) Any material which has an anesthetic, noxious or other similar property which could cause extreme annoyance or discomfort to a flight crew member so as to prevent the correct performance of assigned duties; or

(b) Any material that meets the definition in §171.8 of this subchapter for an elevated temperature material, a

hazardous substance, a hazardous waste, or a marine pollutant.

[Amdt. 173-224, 57 FR 45463, Oct. 1, 1992, as amended by Amdt. 173-231, 57 FR 52939, Nov. 5, 1992; Amdt. 173-233, 58 FR 33305, June 16, 1993]

§ 173.141 Class 9—Assignment of packing group.

The packing group of a Class 9 material is as indicated in column 5 of the § 172.101 table.

§ 173.144–173.145 [Reserved]

§ 173.150 Exceptions for Class 3 (flammable and combustible liquids).

(a) *General.* Exceptions for hazardous materials shipments in the following paragraphs are permitted only if this section is referenced for the specific hazardous material in the § 172.101 Table of this subchapter.

(b) *Limited quantities.* Limited quantities of flammable liquids (Class 3) and combustible liquids are excepted from labeling requirements, unless the material is offered for transportation or transported by aircraft, and are excepted from the specification packaging requirements of this subchapter when packaged in combination packagings according to this paragraph. For transportation by aircraft, the package must also conform to applicable requirements of § 173.27 of this part (*e.g.*, authorized materials, inner packaging quantity limits and closure securement) and only hazardous material authorized aboard passenger-carrying aircraft may be transported as a limited quantity. A limited quantity package that conforms to the provisions of this section is not subject to the shipping paper requirements of subpart C of part 172 of this subchapter, unless the material meets the definition of a hazardous substance, hazardous waste, marine pollutant, or is offered for transportation and transported by aircraft or vessel, and is eligible for the exceptions provided in § 173.156 of this part. In addition, shipments of limited quantities are not subject to subpart F (Placarding) of part 172 of this subchapter. Each package must conform to the packaging requirements of subpart B of this part and may not exceed 30 kg (66 pounds) gross weight. Except

for transportation by aircraft, the following combination packagings are authorized:

(1) For flammable liquids in Packing Group I, inner packagings not over 0.5 L (0.1 gallon) net capacity each, packed in a strong outer packaging;

(2) For flammable liquids in Packing Group II, inner packagings not over 1.0 L (0.3 gallons) net capacity each, packed in a strong outer packaging.

(3) For flammable liquids in Packing Group III and combustible liquids, inner packagings not over 5.0 L (1.3 gallons) net capacity each, packed in a strong outer packaging.

(c) [Reserved]

(d) *Alcoholic beverages.* (1) An alcoholic beverage (wine and distilled spirits as defined in 27 CFR 4.10 and 5.11), when transported via motor vehicle, vessel, or rail, is not subject to the requirements of this subchapter if the alcoholic beverage:

(i) Contains 24 percent or less alcohol by volume;

(ii) Is contained in an inner packaging of 5 L (1.3 gallons) or less; or

(iii) Is a Packing Group III alcoholic beverage contained in a packaging 250 liters (66 gallons) or less;

(2) An alcoholic beverage (wine and distilled spirits as defined in 27 CFR 4.10 and 5.11), when transported via aircraft, is not subject to the requirements of this subchapter if the alcoholic beverage:

(i) Contains 24 percent or less alcohol by volume;

(ii) For transportation aboard a passenger-carrying aircraft, contains more than 24% but not more than 70% alcohol by volume when in unopened retail packagings not exceeding 5 liters (1.3 gallons) carried in carry-on or checked baggage, with a total net quantity per person of 5 liters (1.3) gallons (See § 175.10(a)(4) of this subchapter); or

(iii) When carried as cargo, contains more than 24% but not more than 70% alcohol by volume in an inner packaging not exceeding 5 L (1.3 gallons).

(e) *Aqueous solutions of alcohol.* An aqueous solution containing 24 percent or less alcohol by volume and no other hazardous material—

(1) May be reclassified as a combustible liquid.