



U.S. Department
of Transportation
**Pipeline and Hazardous
Materials Safety
Administration**

1200 New Jersey Ave., S.E.
Washington, DC 20590

SEP 24 2007

Mr. Steve J. Catania
Regulatory Compliance Manager
Charkit Chemical Corporation
32 Haviland Street
P.O. Box 90
South Norwalk, CT 06853

Reference No. 07-0160

Dear Mr. Catania:

This is in response to your August 6, 2007 letter and August 28, 2007 telephone conversation with a member of my staff concerning Class 3 (flammable) liquids placed in packagings in amounts up to 200 grams (0.44 pounds). You ask what exceptions may be used to transport these materials by motor vehicle and aircraft under the Hazardous Materials Regulations (HMR; 49 CFR Parts 171-180). According to your letter, the materials meet the definition of Class 3 material in Packing Group II or III, are used for the research and development of new fragrances and products, and do not meet the definition of another hazard class, a hazardous waste, hazardous substance, or marine pollutant.

The HMR provide a number of exceptions for the transportation of Class 3 materials, depending on their flashpoint and how they are packaged and transported. Specifically, Class 3 materials may be transported in accordance with the small quantity exception in § 173.4, the materials of trade exception in § 173.6, or the limited quantity exception in § 173.150. In addition, certain Class 3 materials may be re-classed as combustible liquids. These exceptions are explained in detail below.

Small Quantity Exception

Under the small quantity exception prescribed in § 173.4, high-integrity packagings containing small amounts of hazardous materials that are packaged as specified are not subject to regulation under the HMR. Class 3 materials that qualify for this exception meet Packing Group II or III and are placed in inner packagings or articles in amounts up to 30 milliliters (1 ounce) that are placed in strong outside packagings. The inner packagings must not be liquid full at 55 °C (131 °F) and must have removable closures held securely in place with wire, tape, or other positive means. Cushioning and absorbent material that will not react chemically with the hazardous material and is capable of absorbing the entire contents must surround either each inner packaging or the inside of the outer packaging. The completed package must be capable of completing without leakage or a substantial reduction in effectiveness the drop tests prescribed in § 173.4(a)(6) from a height of 1.8 meters (5.9 feet). The gross mass of the completed package must not exceed 29 kg (64 pounds). A shipper certifies the package



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complies with the small quantity exception by marking the outside of the package with the statement "This package conforms to 49 CFR 173.4." When offered or intended for transportation by aircraft, § 173.4(a)(11) requires that the hazardous materials in these packages must be authorized for transport on board passenger-carrying aircraft. Carriage of the hazardous material in checked or carry-on baggage is not authorized.

Materials of Trade Exception

A material of trade (MOT) is a hazardous material, other than a hazardous waste, that is carried on a motor vehicle: (1) to protect the health and safety of the operator or passengers; (2) to support the operation of maintenance of the motor vehicle, including its auxiliary equipment; or (3) by a private motor carrier in direct support of a principal business that is other than transportation by motor vehicle. See § 171.8. For the Class 3 materials you described, you may utilize the MOTs exception provided the materials are packaged in the manufacturer's original packaging or a packaging of equal or greater strength and integrity that is leak proof for liquids, securely closed, secured against shifting, and protected from damage. Receptacles, such as cans and bottles, containing MOTs do not require outer packagings if the receptacles are secured against shifting in cages, carts, bins, boxes, or compartments. Non-bulk packagings must be marked with a common name or proper shipping name that identifies the hazardous material it contains, including the letters "RQ" if it contains the reportable quantity of a hazardous substance. The carrier must be informed of the presence of the hazardous material and the requirements contained in § 173.6. The gross mass or capacity of the packaging must not exceed 30 kg (66 pounds) or 30 L (8 gallons). The aggregate gross weight of most MOTs on a motor vehicle may not exceed 200 kg (440 pounds), and may be transported in the same vehicle with other hazardous materials without affecting its eligibility as a MOT.

Limited Quantity Exception

A limited quantity is the maximum amount of a hazardous material for which there is a specific labeling and packaging exception under the HMR. See § 171.8. Section § 173.150(b) authorizes Class 3 materials meeting Packing Groups II and III to be transported as a limited quantity when placed in inner packagings up to 1 L (0.3 gallons) and 5 L (1.3 gallons), respectively, in strong outer packagings that weigh up to but do not exceed 30 kg (66 pounds). When complete, the package must conform to the general packaging requirements prescribed in §§ 173.24 and 173.24a. When transported by aircraft, the Class 3 material must be authorized for transport on board passenger-carrying aircraft, and the package must conform to the general requirements for transportation by aircraft prescribed § 173.27. Limited quantity packages are exempted from labeling, unless transported by aircraft, and placarding, as prescribed in Subparts E and F of Part 172.

Combustible Liquid Exception

A combustible liquid is a liquid that does not meet the definition of any other hazard class and has a flash point above 60 °C (140 °F) and below 93 °C (200 °F). In addition, a flammable liquid with a flash point at or above 38 °C (100 °F) that does not meet the definition of any other hazard class may be reclassified as a combustible liquid. See § 173.120(b). Under

§ 173.150(f)(2), when not transported by vessel or aircraft, a combustible liquid that is not a hazardous substance, hazardous waste, or marine pollutant is not subject to the HMR when placed in a non-bulk package (i.e., a package with a maximum capacity of 450 L (119 gallons) or a maximum net mass of 400 kg (1,000 pounds)).

You mentioned that many of the air carriers your company uses prefer to use the International Air Transport Association's (IATA's) Dangerous Goods Regulations. The IATA regulations do not have official standing under the HMR. The regulations recognized by the HMR and authorized in § 171.11 as an alternative to the HMR for transporting hazardous materials by aircraft are the International Civil Aviation Organization's (ICAO's) Technical Instructions for the Transport of Dangerous Goods by Air (Technical Instructions). A hazardous material classed, packaged, marked, labeled, described and certified on a shipping paper in accordance with the ICAO Technical Instructions may be offered and accepted for transportation within and through the United States by aircraft provided it also conforms to the requirements prescribed in § 171.11. The ICAO Technical Instructions provide similar exceptions to those prescribed in the HMR for small quantities and limited quantities under Sections 2.4 and 2.5, respectively, but do not prescribe requirements for combustible liquids or MOTs.

I hope this satisfies your request.

Sincerely,

A handwritten signature in black ink, appearing to read "Hattie L. Mitchell".

Hattie L. Mitchell, Chief
Regulatory Review and Reinvention
Office of Hazardous Materials Standards



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Applicability
07-0160

August 6, 2007

Mr. Edward T. Mazzullo
Director, Office of Hazardous Materials Standards
U.S. DOT/PHMSA (PHH-10)
1200 New Jersey Avenue, SE East Building
2nd Floor
Washington, DC 20590

Dear Mr. Edward T. Mazzullo:

I am writing to your office for an official interpretation regarding the transportation of a hazardous material in a motor vehicle (automobile) in quantities less than 200 grams.

As I am fully aware of the requirements of transporting hazardous materials, I am uncertain of the requirement when hazardous materials are transported in such small quantities. Are shipments of hazardous materials in quantities less than 200 grams regulated by DOT and if so can you provide the specific regulation in 49 CFR? In addition, can you provide the requirements necessary to transport this small quantity (if applicable)? Lastly, is it permissible to transport this quantity by automobile and if so please advise the requirements?

I look forward to receiving your interpretation and if you have any questions regarding my request, please feel free to contact me at 203-299-3262.

Sincerely,

Steve J. Capania
Regulatory Compliance Manager
CHARKIT CHEMICAL CORPORATION