



U.S. Department  
of Transportation

**Pipeline and Hazardous  
Materials Safety  
Administration**

1200 New Jersey Avenue, SE  
Washington, DC 20590

**May 5, 2020**

Brian Conners  
EPA Certified Reclaimer  
SDS Refrigerant Service  
4301 N. Delaware Avenue  
Philadelphia, PA 19137

Reference No. 20-0016

Dear Mr. Conners:

This letter is in response to your February 18, 2020, letter requesting clarification of the Hazardous Materials Regulations (HMR; 49 CFR Parts 171-180) applicable to limited quantities of compressed gases. In your letter, you describe a refrigerant gas industry practice where companies facilitate transportation of DOT 39 cylinders containing “UN1028, Dichlorodifluoromethane” (refrigerant gas R12) as limited quantities. You note, with regard to these cylinders, that they are transported for purposes of reclaiming any remaining R12 in the cylinder because the gas is no longer produced. Further, you describe the shipping practice by reclaimers which involves providing a prepaid packaging that displays a limited quantity mark. Finally, you state that the cylinders are shipped by ground transportation as limited quantity material provided each completed package is less than 66 pounds. Specifically, you ask whether the use of the limited quantity provisions provided in § 173.306 is permitted for transportation of a DOT 39 cylinder containing R12 having a fluid capacity of 480 ounces and weighing up to 66 pounds.

The answer is no. Although “UN1028, Dichlorodifluoromethane” is an eligible material for the exceptions provided in § 173.306 (Limited quantities for compressed gases), a non-refillable DOT 39 cylinder with a fluid capacity of 480 ounces is not an authorized packaging for the exceptions listed in § 173.306.

I hope this information is helpful. Please contact us if we can be of further assistance.

Sincerely,

Dirk Der Kinderen  
Chief, Standards Development Branch  
Standards and Rulemaking Division

Casey

20-0016

SDS Refrigerant Services  
4301 N. Delaware Ave  
Philadelphia PA 19137

February 18, 2020

Hazardous Materials Information Center  
[infocntr@dot.gov](mailto:infocntr@dot.gov)

**Re: 49 CFR § 173.306 Limited quantities of compressed gases**

Dear Info Center Team;

Is the practice of ground shipping (via UPS or similar) 30lb. and 50lb. DOT 39 compressed gas cylinders containing liquified Dichlorodifluoromethane (R12) UN1028 packaged and labeled as Limited Quantity Compressed Gas allowed using Section §173.306?

We are requesting guidance on an industry interpretation of a 49 CFR § 173.306 Limited quantities of compressed gases. The practice of ground shipping DOT 39 Cylinders containing Dichlorodifluoromethane (R12) UN1028 is becoming commonplace in our industry as long as the packaging and material is less than 66 lbs. We interpret section §173.306(a)1 would apply and therefore Limited Quantity would not apply to a single non refillable metal cylinder of 480 oz fluid capacity weighing 36 lb.

Chlorofluorocarbon refrigerants, specifically, Dichlorodifluoromethane (R12) UN1028 is being collected by refrigerant reclaimers in the United States. This refrigerant has not been produced in over 20 years. There are still many small cylinders that have been in storage or are no longer needed for servicing older equipment.

Reclaimers have been sending a prepaid box with a ground shipping label using the Limited Quantity rules (49 CFR § 173.306 - Limited quantities of compressed gases) to anyone who offers the material for sale to facilitate shipment to their reclamation facility. The HVAC and Automotive supply industry typically used a cylinder manufactured to the DOT 39 Specification for sale and distribution. (49 CFR § 178.65 - Specification 39 non-reusable (non-refillable) cylinders). These cylinders came in many sizes but the commonly sold version was 30 lbs. and 50 lb. versions.

In looking at 49 CFR § 173.306 we believe ground shipment via companies like United Parcel Service (UPS) Ground using the Limited Quantities of compressed gases is allowed for cylinders of 4 fl oz. or less. Section 49 CFR § 173.306 covers many different products. We are specifically concerned with Non Flammable Refrigerants (Division 2.2 ) shipped in DOT39 cylinders commonly used in the HVAC and MVAC industry weighing up to 66 lbs.

We interpret;

#1 - The exception must be permitted under 49 CFR § 171.101; In this case Chlorodifluoromethane (R12) does have a listed exception.

§ 173.306 (a) *Limited quantities of compressed gases for which exceptions are permitted as noted by reference to this section in §172.101 of this subchapter are excepted from labeling, except when offered for transportation or transported by air, and, unless required as a condition of the exception, specification packaging*

#2 - The package (material, contents, packaging, etc.) must not exceed 66 lbs.

§ 173.306 (a) .....*Except as otherwise provided in this section, each package may not exceed 30 kg (66 lbs.) gross weight.*

#3 - § 173.306 (a) 1 - Applies specifically to containers of not more than 4 fluid ounces. In this particular case the DOT39 cylinders are 30lb or 50lb capacity (480 oz / 800oz). The cylinder in question is greater than 4 fluid ounces and therefore not allowed.

§ 173.306(a)1 *When in containers of not more than 4 fluid ounces capacity (7.22 cubic inches or less) except cigarette lighters. Special exceptions for shipment of certain compressed gases in the ORM-D class are provided in paragraph (i) of this section)*

We believe the balance of § 173.306 is for materials, containers, and conditions that do not apply to our example.

- #4 - § 173.306 (a)2
- #5 - § 173.306 (a)3
- #6 - § 173.306 (a)4
- #7 - § 173.306 (a)5
- #8 - § 173.306 (b)
- #9 - § 173.306 (c - d) Reserved
- #10 - § 173.306 (e)
- #11 - § 173.306 (f)
- #12 - § 173.306 (g)
- #13 - § 173.306 (h)
- #14 - § 173.306 (i)

Thank you for time and effort in the matter.

Sincerely,

Brian Conners  
President  
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SDS Refrigerant Services  
EPA Certified Reclaimer