



U.S. Department
of Transportation

**Pipeline and Hazardous
Materials Safety
Administration**

1200 New Jersey Avenue SE
Washington, DC 20590

SEP 15 2015

Ms. Robyn Kinsley
Director, Transportation
The Chlorine Institute
1300 Wilson Blvd., Suite 525
Arlington, VA 22209

Ref. No. 14-0230

Dear Ms. Kinsley:

This responds to your November 18, 2014 letter requesting clarification of the Hazardous Materials Regulations (HMR; 49 CFR Parts 171-180) applicable to the securement of Intermediate Bulk Containers (IBCs). Your questions are paraphrased and answered as follows:

- Q1. In regard to § 177.834(a), how does PHMSA define “relative motion between packages”?
- A1. PHMSA does not define “relative motion between packages.” Under the HMR, § 177.834(a) requires any hazardous material (hazmat) package that is not permanently attached to a motor vehicle to be secured against shifting, including relative motion between packages, within the vehicle on which it is being transported under conditions normally incident to transportation. Conditions normally incident to transportation include vehicle starting, stopping, cornering, accident avoidance, and varied road conditions. Thus, the securement of hazmat packages requires that such packages do not shift when experiencing these conditions. It is the opinion of this Office that “shifting” would involve a change in the place or position of the package from the original place or position that it occupied when it was loaded onto the motor vehicle.

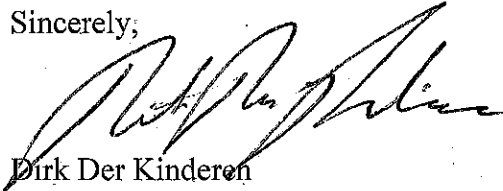
Section 393.100(c) of the Federal Motor Carrier Safety Regulations (FMCSR) is the general securement requirement for all types of cargo. It is a safety performance standard intended to prohibit shifting of cargo that would compromise the vehicle’s stability or maneuverability. The requirements in the HMR § 177.834(a) represent a higher standard of safety for packages containing hazardous materials, where securing the packages against motion is necessary to prevent damage to the packages themselves, ensure their integrity, and prevent a release of the contained material.

Q2. Does "relative motion between packages" mean "zero motion"?

A2. No. In terms of preventing motion of the package(s) during transportation, securement against shifting and relative motion between packages in accordance with § 177.834(a) requires that the package(s) be secured against shifting (see A1 above) as well as secured against relative motion to the greatest extent practicable.

I hope this answers your inquiry. If you need additional assistance, please contact this Office at 202-366-8553.

Sincerely,



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