



Dangerous Goods Safety Bulletin No. 0216

Load restraint systems for packaged dangerous goods

Background

When transporting packaged dangerous goods there is a requirement for the load to be restrained in a manner that will prevent any movement during transport that could change the orientation of the packages or cause them to be damaged. This can take the form of the primary load restraints which include, but are not limited to, fastening straps, sliding slatboards, adjustable brackets and chains.

In addition, secondary load restraints are required in the form of rigid sides or gates of sufficient height for the load. On the 14 November 2012, the Competent Authorities Panel gave an exemption (CA2012/185) for consignors, loaders, prime contractors and drivers to be able to use an approved load-restraint curtain system instead of rigid sides or gates.

Guidance on stowage and restraint can be found in the *Further information* section.

Summary of hazard

There has been an increase in the number of observed and reported instances of non-compliant load restraint of packaged dangerous goods on Western Australian roads. It has also been reported to the Department that incorrect information appears to be circulating regarding to the use of load-rated curtains.

Examples include:

- incorrect, absent or poorly applied load restraint
- use of non-approved load restraint systems.

Note: Only an approved load-restraint system will ensure an exemption from the requirement for rigid sides or gates on a vehicle when transporting packaged dangerous goods.

Insufficient or incorrect restraint has the potential to damage dangerous goods packaging, other goods and equipment. This can lead to spills, leaks, and the release of fumes and gases which could affect the driver, the public and potentially result in an incident.



Restrained load examples. Left. Correctly restrained load with primary and secondary restraint (behind gates). Right: Incorrectly restrained load – rigid sides of insufficient height for load (e.g. load protruding more than 30 per cent above the rigid sides) and no gates.

Contributory factors

- Confusion regarding load restraint requirements for packaged dangerous goods.
- Drivers, loaders and supervisors are unaware of correct restraint procedures.

Actions required

Prime contractors are reminded of the requirements to restrain loads in accordance with regulation 128 Dangerous Goods Safety (Road and Rail Transport of Non-explosives) Regulations 2007.

The following actions by prime contractors, consignors, loaders and drivers will ensure the appropriate stowage and restraint of packaged dangerous goods for safe transport.

Risk management

- Develop, implement and review restraint procedures for packaged dangerous goods.

Equipment

- Develop, implement and review load restraint systems.
- Assess suitability of restraint equipment (e.g. approved, rated, fit-for-purpose).
- Maintain and inspect restraint equipment on a regular basis.

Training

- Train supervisors, loaders and drivers in appropriate methods of load restraint, using a competent person with relevant industry background.

Further information

- National Transport Commission

Australian Code for the Transport of Dangerous Goods by Road and Rail (Edition 7.4), www.ntc.gov.au/heavy-vehicles/safety/australian-dangerous-goods-code/

Load restraint guide, www.ntc.gov.au/heavy-vehicles/safety/load-restraint-guide/

- Department of Infrastructure and Regional Development, The Competent Authorities Panel – National exemptions, approvals and determinations
https://infrastructure.gov.au/transport/australia/dangerous/competent_authorities.aspx

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