Executive Summary

When shipped by ground, air, or vessel, small quantities of hazardous materials (or dangerous goods)—referred to as “limited quantities”—are granted relief from certain hazmat shipping requirements. Some of the limited quantity reliefs are identical across the intermodal transport rules, but others are reserved for specific modes of transport. Shippers can and should capitalize on these limited quantity reliefs when possible, but must recognize that some hazmat requirements still apply to shipping limited quantities.
Limited Quantity Hazmat by Ground (49 CFR)

Generally speaking, limited quantity ground shipments allow for the most expansive set of reliefs from the hazmat shipping regulations. When shipped by ground, limited quantity hazmat packages are typically excepted from:

- Hazard class labeling
- Using specification packaging
- Filling out shipping papers and emergency response information
- Placarding vehicles

However, because a limited quantity package is still a hazmat package, certain basic hazmat shipping rules still apply. The package:

- Must meet the general packaging requirements of 49 CFR 173, Subpart B (i.e., be a “strong outer packaging”)
- Must be “combination” packaging (i.e., cans/bottles in a box)
- Cannot exceed a gross weight of 30 kg (66 lbs.)
- Is typically limited to 1 to 5 liters or kilograms capacity for inner packagings, depending on the hazard class and packing group

All limited quantity reliefs considered, a ready-to-ship limited quantity hazmat package needs to only display the limited quantity marking and sometimes orientation arrows to meet the DOT’s requirements for hazmat ground shipments.

TRAINING

US DOT’s Pipeline and Hazardous Materials Safety Administration (PHMSA) requires training for all hazmat employees, including those who package, handle, and offer hazmat limited quantities. 49 CFR 172.704 requires complete re-training once every three years.

For training to ship limited quantities by all modes of transport, see the Shipping Limited Quantities and Consumer Commodities Online Course.

Ship more than limited quantities of hazmat? See Lion.com/Hazmat for comprehensive hazmat training for ground, air, and vessel shippers.
Limited Quantity Hazmat by Air (IATA Dangerous Goods Regulations)

Shipping any dangerous goods (DG) by air is inherently more dangerous than shipping by other modes. As a result, stricter rules apply to limited quantity hazmat air shipments than to ground or vessel shipments. When shipped by air, limited quantity hazmat packages are excluded only from the following IATA DGR requirements:

- Performance testing requirements of IATA DGR 6.3
- Performance marking requirements of IATA DGR 6.0.4

The following requirements still apply to limited quantity DG air shipments:

- Must meet most general packaging requirements of IATA DGR 5.0.2-5.0.4; (i.e., be a “strong outer packaging”)
- Must be a “combination” packaging
- Cannot exceed a gross weight of 30 kg
- Must be limited to the maximum net quantity per package indicated in Column H of the List of Dangerous Goods [IATA DGR 4.2]
- Follows the “Y” packaging instructions indicated in Column G of the List

The completed package will display the “Y” limited quantity air marking, but must also display all the markings and hazard labels required for a fully regulated package (UN ID #, Proper Shipping Name, hazard labels, etc.).

Full shipping papers (a Shippers’ Declaration) are required for limited quantity hazmat air shipments.

TRAINING

The IATA Dangerous Goods Regulations (DGR) Section 1.5 requires that all hazmat employees complete training once every 24 months.

Shipping Limited Quantities and Consumer Commodities Online Course

Limited Quantity Hazmat by Vessel

(IMDG Code)

The rules for shipping limited quantities of hazmat by vessel (IMDG Code) are closer to the 49 CFR ground shipping rules than the IATA air shipping rules.

When shipped by vessel, limited quantity hazmat packages are excluded from:

- Most marking requirements
- Labeling
- Placarding
- Most segregation requirements of IMDG 7.2
- Packaging testing requirements

Even for limited quantities of hazmat, packages still must:

- Meet select general packaging requirements at IMDG 4.1.1.1–4.1.1.8
- Be “combination” packaging
- Not exceed a gross weight of 30 kg
- Conform to the inner packaging quantity limits specified in Column 7a of the IMDG Code 3.2 Dangerous Goods List

Full shipping papers are required for limited quantity hazmat shipments by vessel.

TRAINING

The International Maritime Dangerous Goods Code (IMDG Code) Section 1.3.1 requires shippers to follow the hazmat training rules of a “competent national authority.” In the US, this means shippers must comply with US DOT’s 49 CFR 172.704 standard to train employees and provide re-training once every three years.

Shipping Limited Quantities and Consumer Commodities Online Course

Convenient Limited Quantity Hazmat Training

Be confident that you know how to capitalize on the limited quantity reliefs and meet the requirements that apply to your shipments. Avoid rejection, delays, and US DOT fines now over $81,993 per violation, per day.

The **Limited Quantity and Consumer Commodities Online Course** covers the 49 CFR, IATA air, and IMDG vessel shipping rules for limited quantities and satisfies the DOT’s training requirement for hazmat employees who prepare limited quantities for transport (49 CFR 172.704).