

ICS 65.100

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National Standard of the People's Republic of China

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Replaces GB 3796-1999

General Rule for Packing of Pesticides
(For Approval)
(Completed on 20 Dec 2003)

Issued on -- -- 200-

Effective from -- -- 200-

Issued by General Administration of Quality Supervision, Inspection and Quarantine of the
People's Republic of China.

Foreword

Chapters 4, 5, 6 and 8 are mandatory, the others recommended.

This Standard is an amendment to the mandatory GB 3796-1999 *General Rule for Packing of Pesticides*.

This Standard differs from GB 3796-1999 *General Rule for Packing of Pesticides* in the following aspects:

1. Added “The product standards shall prevail if the product standards thus specify” to Clause 4.4.1 of the Standard.
2. Changed “Production date and batch number” to “Production date or batch number” in Clause 4.5.3.2 1 of the Standard.
3. If the Standard involves label contents on the packages, the *Guideline on Labels for Pesticide Products* shall apply.

This Standard shall take the place of GB 3796-1999 *General Rule for Packing of Pesticides* as from the effective date.

This Standard is proposed by China Petroleum and Chemical Industry Association.

This Standard is managed by National Technical Committee of Standardisation for Pesticides (CSBTS/TC 133).

This Standard is drafted by (unit) Shenyang Research Institute of Chemical Industry.

This Standard is drafted by (individual) Lou Shaowei

This Standard was first issued in July 1983, and first revised in November 1999. This is the second revision.

General rule for packing of pesticides

1 Scope

This Standard stipulates classification of packaging, requirements for packing of pesticides, transportation of packages, storage of packages, test methods, and inspection rules.

This Standard applies to packaging of pesticides.

2 Standard Reference Documents

Clauses of the following documents become clauses of this Standard once quoted herein. None of the revisions (excluding contents of the corrigenda) or revised versions of dated reference documents are applicable to this Standard. However, we encourage parties to reach an agreement in accordance with this standard and to discuss whether the latest editions of these documents are applicable. For undated reference documents, the latest edition is applicable in the standard.

GB 190 Hazardous goods packing marks

GB 191 Packaging and storage marks

GB/T 1605 Commercial pesticide sampling methods

GB/T 4857.3–1992 Packaging Transportation of packages Net load piling test method

GB/T 6388 1986 Transport package shipping mark

GB/ 13251 1991 Packing containers—Steel pails

GB/T 17344 1998 Packaging packing containers air-tight test method

GB xxxx *Guideline on Labels for Pesticide Products*

3 Terms and definitions

The following terms and definitions shall apply throughout this Standard.

3.1 Batch number

Batch number consists of production date (yyymmdd) and number of batches (how many batches a day).

4 Classification of packages

4.1 By level of hazard, pesticides are classified into two levels: Level-1 hazardous products, consisting of three classes; level-2 non-hazardous products.

4.2 Table 1 presents the test items and quantitative values of pesticide transport packages and containers.

Table 1 Test Items and Quantitative Values

Test Item	Level 1			Level 2
	Class I	Class II	Class III	
Pile (common package, 24h; plastic pail, 40°C, 28 d), m \geq	3.0	3.0	3.0	3.0
Air-tight (5min), kPa \geq	30	20	20	20
Hydraulic pressure (common package, 5min; plastic pail, 30 min) kPa \geq	250	100	100	–

4.3 Requirements of pesticides of different hazard levels for packing containers and materials

4.3.1 Packages for level-1 products

Steel pail, plastic pail, aluminum bottle, glass bottle, high-density polyethylene fluorinated bottle, plastic bottle, plastic bag, high-density paper pail, box, and aluminum foil bag.

4.3.2 Packages for level-2 products

Steel pail, plastic pail, glass bottle, plastic bottle, plastic bag, high-density polyethylene fluorinated bottle, box and paper bag.

4.3.3 The packages of pesticides shall meet the requirements for storage, transportation, sales and use.

Equivalent packages other than specified herein are allowed but must meet the test requirements related to this Standard.

5 Technical requirements for packaging

5.1 Packaging environment

5.1.1 Pesticides shall be packaged in places that are level, clean and well ventilated.

5.1.2 There shall be appropriate safety and protection facilities, such as gas masks, goggles, respirators, and fire extinguishers.

5.2 Pesticides

Before packaging, pesticides shall be inspected by the quality inspection department and shall comply with relevant product standards.

5.3 Packing materials

5.3.1 The packing materials for pesticides shall ensure that the pesticides are not damaged during normal storage and transportation, and shall comply with relevant standards for packing materials.

5.3.2 The external packing materials for pesticides shall be firm and durable and protect the contents from damage. Optional external packing materials are: wood, metal, composite materials, corrugated box with moisture-proof layer, calp box, paper bag, textile, and other materials approved by the transportation department and users.

5.3.3 The internal packing materials for pesticides shall be firm and durable, shall not react with or damage the pesticides physically or chemically, shall not swell or leak to affect the quality of the products. Optional internal packing materials are: glass, high-density polyethylene material, plastics, metal, composite materials, aluminum foil and paper bag.

Shockproof materials: Common shockproof materials for pesticides are: corrugated lag, foam plastic film, and foam polystyrene moulding film.

5.4 Packaging requirements

5.4.1 Pesticide preparations shall be packaged in light of their formulations, uses, toxicity, and physical and chemical properties. The net weight of each box of liquid preparations must not exceed 15 kg, and the net weight of each bag of solid preparations must not exceed 20 kg. The net weight of each pail must not exceed 250 kg. The product standards shall prevail if the product standards thus specify.

5.4.2 Packing containers for bottled liquid preparations shall be provided with appropriate internal corks and external covers, or external covers with lining, so that there will be no leakage if the containers fall upside down. The covers of pails of liquid raw pesticides shall be provided with lining and shall be tightened to avoid leakage. The loads of packages shall comply with GB/T 1605.

5.4.3 After glass bottles with liquid pesticides are put into external packing containers, shockproof materials shall be filled in between the bottles and containers to avoid damages from mutual collision.

5.4.4 Appropriate quantities of small packages shall, if necessary, be put into larger boxes or bags before being put into external packing containers for storage and transportation.

5.4.5 The external packing containers must contain quality certificates and instructions (if the contents of the internal labels do not comply with GB xxxx *Guideline on Labels for Pesticide Products*).

5.5 Package marks

5.5.1 Marking methods

5.5.1.1 The external packing containers shall have marks.

5.5.1.2 The markings shall be printed and stuck on directly.

5.5.2 Marking positions

See Table 2 for the marking positions

Table 2 Marking Positions

Packaging form	Marking position
Metal pail or other pails	Cylindrical surface
Bottle (glass or plastic)	Cylindrical surface
Bag or small package	Front and back
Box (wood, carton, plastic, etc.)	Front and back

5.5.3 Marking contents

5.5.3.1 The surfaces of internal packing containers of pesticides shall be provided with labels complying with GB xxxx *Guideline on Labels for Pesticide Products*.

5.5.3.2 The external packages of pesticides shall specify:

a The common Chinese and English names, contents and formulations of respective available components.

b Pesticide registration number.

c Production license number (production permit number).

d Corresponding pesticide standard number.

e Trademarks.

f Manufacturer name

g Manufacturer address, telephone number, fax number, postcode, etc.

h Toxicity marks: Products shall be marked by the measured acute peroral toxicity (extreme toxicity, high toxicity, middle toxicity, low toxicity and slight toxicity);

Hazard marks other than toxicity marks, such as “Inflammable” and “Guard against damp”, shall comply with GB 190 and GB 191.

i Storage and transportation marks shall comply with GB 191. Transport package shipment and delivery marks shall comply with GB 6388–1986.

j Gross weight and net weight.

k Box volume: $L \times W \times H$ (mm).

l Production date or batch number.

m Product quality warranty period.

5.5.3.3 Bags of pesticide preparations shall be marked as specified in 5.5.3.1 and 5.5.3.2 or in the contract, and raw pesticides used for processing shall be marked as specified in 5.5.3.2.

5.5.3.4 Various pesticides shall be marked with non-fading characteristic colour strips in compliance with GB xxxx *Guideline on Labels for Pesticide Products*.

6 Package transportation

- 6.1 Packages shall be transported in compliance with relevant transportation standards.
- 6.2 Packages shall be covered to avoid direct sunshine or rain and shall be ventilated properly.
- 6.3 Packages shall not be piled higher than 3.0m during transportation.
- 6.4 Packages shall not be thrust, rolled or placed upside.

7 Package storage

- 7.1 Packages shall be stored in well-ventilated warehouses or covered open-air areas, with adequate fire extinguishing materials and equipment.
- 7.2 Packages may be placed separately or piled in an appropriate way.

8 Test method

- 8.1 Piling test method shall comply with GB/T 4857.3–1992.
- 8.2 Air-tight test method shall comply with GB/T 17344–1998.
- 8.3 Hydraulic test method shall comply with 6.3 of GB/T 13251–1991.

9 Inspection rules

- 9.1 The manufacturers shall ensure the packages of their products comply with this Standard and shall obtain quality certificates after inspection by the quality inspection department.
- 9.2 In case of any dispute over the package quality between users and manufacturers, the users shall have the right to make rechecks according to this Standard. If the recheck results fall short of this Standard, the users shall have the right to reject the products.
- 9.3 Other types of inspections shall comply with relevant state regulations.