CHAPTER 4.1: PACKING INSTRUCTION P200 FOR SUBSTANCES NOT ASSIGNED TO CLASS 2

CHAPTER 3.2: ASSIGNMENT OF PACKING INSTRUCTIONS

Proposal by the Government of Germany*

The secretariat has received from the Central Office for International Carriage by Rail (OCTI) the proposal reproduced below.

Introduction

During checking of the particulars contained in Table A of Chapter 3.2 for the entry UN 1051 hydrogen cyanide, stabilized, which is assigned to packing instruction P200, it emerged that other entries were concerned by the same problem. RID/ADR currently provides for special requirements for the packing of all these entries - UN Nos. 1051, 1052, 1614, 1745, 2495 and 2983 - with the exception of UN No. 2983.

* Circulated by the Central Office for International Carriage by Rail (OCTI) under the symbol OCTI/RID/GT-III/2001/28.
The United Nations Committee of Experts decided at its December session to extend the application of packing instruction P200 to the above entries, with the exception of UN No. 1614. The reference to P200 in column 8 of Table A in Chapter 3.2 may therefore be kept in anticipation of the twelfth revision of the United Nations Recommendations. Notwithstanding the decisions of the United Nations Committee of Experts, RID/ADR should make an addition to packing instruction P200, and the reference to UN No. 2983 should be deleted since this substance is a mixture for which no special requirement for packing currently exists.

Proposal

For UN Nos. 1051, 1052, 1745, 1746 and 2495

1. Add the following table to Chapter 4.1, packing instruction P200:
### Table of substances which do not belong to Class 2

<table>
<thead>
<tr>
<th>UN No.</th>
<th>Name and description</th>
<th>Class</th>
<th>Classification Code</th>
<th>LC\textsubscript{50} ml/l&lt;sup&gt;3&lt;/sup&gt;</th>
<th>Packing</th>
<th>Test pressure (P&lt;sub&gt;e&lt;/sub&gt;)</th>
<th>Period (years)&lt;sup&gt;1&lt;/sup&gt;</th>
<th>Maximum filling degree kg/l or MPa or vol %</th>
<th>Special requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>1051</td>
<td>HYDROGEN CYANIDE, STABILIZED containing less than 3% water</td>
<td>6.1</td>
<td>TF1</td>
<td>140</td>
<td>(1), (3), (5)</td>
<td>100</td>
<td>5</td>
<td>0.55 k</td>
<td></td>
</tr>
<tr>
<td>1052</td>
<td>HYDROGEN FLUORIDE, ANHYDROUS</td>
<td>8</td>
<td>CT1</td>
<td>966&lt;sup&gt;2&lt;/sup&gt;</td>
<td>(1), (3), (5)</td>
<td>10</td>
<td>5</td>
<td>0.84</td>
<td></td>
</tr>
<tr>
<td>1745</td>
<td>BROMINE PENTAFLUORIDE</td>
<td>5.1</td>
<td>OTC</td>
<td>25&lt;sup&gt;2&lt;/sup&gt;</td>
<td>(1), (3), (5)</td>
<td>10</td>
<td>5</td>
<td>0.92 k</td>
<td></td>
</tr>
<tr>
<td>1746</td>
<td>BROMINE TRIFLUORIDE</td>
<td>5.1</td>
<td>OTC</td>
<td>180</td>
<td>(1), (3), (5)</td>
<td>10</td>
<td>5</td>
<td>0.92 k</td>
<td></td>
</tr>
<tr>
<td>2495</td>
<td>IODINE PENTAFLUORIDE</td>
<td>5.1</td>
<td>OTC</td>
<td>120</td>
<td>(1), (3), (5)</td>
<td>10</td>
<td>5</td>
<td>0.92 k</td>
<td></td>
</tr>
</tbody>
</table>

1. Not applicable to receptacles made of composite materials.

2. This LC\textsubscript{50} value requires to be checked.
2. Under 4.1.4.4, add “P200” before “P400.”

3. Under 4.1.4.4, include the following new special requirements in the table of special requirements for gas cylinders and receptacles:

**For UN No. 1051**

“PRw Hydrogen cyanide, stabilized, when not absorbed by a porous material, shall be packed in carbon steel cylinders which shall satisfy the following conditions:

(1) cylinders shall satisfy the relevant requirements of Chapter 6.2;

(2) the pressure test shall include a meticulous inspection of the inside of the receptacle and a check of the tare.”

**For UN No. 1052**

“PRx Hydrogen fluoride, anhydrous, shall be packed in pressure receptacles made of carbon steel or suitable alloy steel. The following pressure receptacles shall be permitted:

(1) cylinders;

(2) pressure drums, which shall satisfy the following conditions:

(a) pressure receptacles shall satisfy the relevant requirements of Chapter 6.2;

(b) the pressure test shall include an inspection of the inside of the pressure receptacles and a check of their equipment;

(c) in addition, resistance to corrosion and the state of the equipment shall be checked by means of suitable instruments (e.g. ultrasound), and the condition of the equipment verified;

(d) wall thickness shall not be less than 3 mm;

(e) tests and inspections shall be carried out under the supervision of an expert approved by the competent authority.”

**For UN Nos. 1745, 1746 and 2495**

“PRy The substances shall be packed in pressure receptacles made of carbon steel or suitable alloy steel. The following pressure receptacles shall be permitted:

(1) cylinders;

(2) pressure drums, which shall satisfy the following conditions:
(a) pressure receptacles shall satisfy the relevant requirements of Chapter 6.2;

(b) pressure receptacles shall be designed for a design pressure of not less than 2.1 Mpa (21 bar) (gauge pressure);

(c) the pressure test shall include an inspection of the inside of the pressure receptacles and a check of accessories;

(d) in addition, resistance to corrosion and the state of the equipment shall be checked by means of suitable instruments (e.g. ultrasound), and the condition of the accessories verified;

(e) wall thickness shall not be less than 3 mm;

(f) the receptacles shall bear, in clearly legible and durable characters, the following particulars:

- the name or mark of the manufacturer and the number of the receptacle;
- the name of the substance according to Chapter 3.2;
- the tare of the receptacle and its maximum permitted mass when filled;
- the date (month and year) of the initial test and of the most recent periodic test;
- the stamp of the expert who carried out the tests and examinations.”

4. Add “PRw” to column 8 of Table A in Chapter 3.2 for the entry UN 1051.

5. Add “PRx” to column 8 of Table A in Chapter 3.2 for the entry UN 1052.

6. Add “PRy” to column 8 of Table A in Chapter 3.2 for the entries UN 1745, 1746 and 2495.

For the entry UN 1614

7. Replace “P200” by “P601” in column 8 of Table A in Chapter 3.2.

8. Add “PRz” to column 8 of Table A in Chapter 3.2.

9. Add “PRxx” to column 9a of Table A in Chapter 3.2.

10. Add a special provision “PRxx” with the following wording to packing instruction P601 in 4.1.4.1;
“PRxx Only receptacles which satisfy one of the special requirements for the gas cylinders and receptacles listed in 4.1.4.4 shall be used.”

11. Include a new special requirement in 4.1.4.4 for gas cylinders and receptacles, to read:

“PRz Liquid hydrogen cyanide, stabilized, when completely absorbed by an inert porous material, shall be packed in metal receptacles of a capacity of not more than 7.5 litres, placed in wooden cases in such a manner that they cannot come into contact with one another. Such combination packagings shall comply with the following conditions:

(1) the receptacles shall be tested at a pressure of not less than 0.6 MPa (6 bar) (gauge pressure);

(2) the receptacles shall be entirely filled with the porous material which shall not shake down or form dangerous spaces even after prolonged use or under impact, even at temperatures of up to 50° C;

(3) the date of filling shall be durably marked on the lid of each receptacle;

(4) combination packagings shall be tested and approved, in accordance with 6.1.5.21 for packing group I;

(5) a package shall not weigh more than 120 kg.”

For entry UN 2983

12. Replace “P200” by “P001” in column 8 of Table A in Chapter 3.2.

Justification

For entries UN 1051, 1052, 1745, 1746 and 2495

According to the restructured RID/ADR, the substances in question can no longer be carried since there are no particulars on the packagings permitted for these substances.

On the basis of the proposed additions, carriage under RID/ADR is again possible.

These additions are merely transposed from the twelfth revised edition of the United Nations Recommendations.
For the entry UN 1614

Special requirements for packing are currently applicable to goods assigned to this entry. The packagings described in special provision PRz are not suitable for the gas receptacles described in Chapter 6.2. For this reason it is not possible to assign them to packing instruction P200 and carriage must be governed as at present by means of a special provision for gas cylinders and receptacles in 4.1.4.4.

For the entry UN 2983

No special requirement for packing is currently applicable to the mixtures assigned to UN No. 2983. These mixtures should be assigned to Class 3, 17° (a). Since they must not be carried in pressure receptacles, they should be assigned here to packing instruction P001, as provided for the other entries of Class 3, 17° (a) (UN 1986, 1988 and 2336).