ECONOMIC COMMISSION FOR EUROPE

INLAND TRANSPORT COMMITTEE

Working Party on the Transport of Dangerous Goods

Joint Meeting of Experts on the Regulations annexed to the European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways (ADN) (ADN Safety Committee)

Fifteenth session
Geneva, 24-28 August 2009
Item 4 (c) of the provisional agenda

PROPOSALS FOR AMENDMENTS TO THE REGULATIONS ANNEXED TO ADN

Table C: UN 2672 AMMONIA SOLUTION

Transmitted by the Government of Germany1, 2

Introduction

1. In the implementation of the new provisions for the protection of the aquatic environment, an assessment of the substances listed in table C was carried out. The application of the new provisions resulted in changes for some of the substances including UN 2672 AMMONIA SOLUTION, relative density between 0.880 and 0.957 at 15°C in water, with more than 10 % but not more than 35 % ammonia. According to the classification and labelling of the EU,

---

1 Distributed in German by the Central Commission for the Navigation of the Rhine (CCNR) under the symbol CCNR/ZKR/ADN/15/AC.2/2009/32.

2 In accordance with the programme of work of the Inland Transport Committee for 2006-2010 (ECE/TRANS/166/Add.1, programme activity 02.7 (b)).
aqueous solutions of ammonia with more than or equal to 25 mass % have to be labelled as R50 = N1 (acute 1).\(^3\) The aquatic environmental hazard of aqueous solutions of ammonia with less than 25 mass % correspond to N3.\(^4\) Therefore according to the new provisions, a type-C vessel is required only for the carriage of aqueous solutions with equal to or more than 25 mass % ammonia.

2. The cargo tank internal pressures of such solutions at a degree of filling of 95 % and a surface temperature of the liquid of 30°C and 37.8°C in the gaseous phase, is however higher than 50kPa. This implies that ammonia solutions of more than 25 % but nor more than 35 % ammonia have to be carried either in a C11 pressure tank or with refrigeration C221.

**Proposal**

3. It is proposed to divide the entry in chapter 3.2, table C, UN 2672 AMMONIA SOLUTION, relative density between 0.880 and 0.957 at 15°C in water, with more than 10 % but not more than 35 % of ammonia, into two entries:

   (a) First entry:
   
   UN 2672
   
   AMMONIA SOLUTION, relative density between 0.880 and 0.957 at 15°C in water, with more than 10 % but not more than 35 % ammonia (more than 25 % but not more than 35 % ammonia).

<table>
<thead>
<tr>
<th>Column 6</th>
<th>Column 7</th>
<th>Column 8</th>
<th>Column 9</th>
<th>Column 10</th>
</tr>
</thead>
<tbody>
<tr>
<td>C</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td>50</td>
</tr>
</tbody>
</table>

   (b) Second entry:

   UN 2672
   
   AMMONIA SOLUTION, relative density between 0.880 and 0.957 at 15°C in water, with more than 10 % but not more than 35% ammonia (not more than 25 % ammonia).

<table>
<thead>
<tr>
<th>Column 6</th>
<th>Column 7</th>
<th>Column 8</th>
<th>Column 9</th>
<th>Column 10</th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
<td>2</td>
<td>2</td>
<td></td>
<td>10</td>
</tr>
</tbody>
</table>

---
