Proposal for amendment of UN 2057 (Tripropylene) in Table C

Transmitted by the European Chemical Industry Council (CEFIC)* **

Introduction

Based on the two amendments to Table C of chapter 3.2 already introduced in ECE/ADN/45 (page 50/51)

For UN No. 2057 packing group II:

In column (5) Replace “3 + N3” by “3 + N1”.
In column (6) Replace “N” by “C”.
In column (8) Replace “3” by “2”.
In column (13) Replace “3” by “2”.

For UN No. 2057 packing group III:

In column (5) Replace “3 + N3” by “3 + N1”.
In column (6) Replace “N” by “C”.
In column (7) Replace “3” by “2”.
In column (8) Replace “3” by “2”.
In column (13) Replace “3” by “2”.

* Distributed in German by the Central Commission for the Navigation of the Rhine under the symbol CCNR/ZKR/AND/WP.15/AC.2/2019/27.
** In accordance with the programme of work of the Inland Transport Committee for 2018–2019 (ECE/TRANS/2018/21/Add.1, cluster 9.3).
The substance has to be carried in a Type C vessel instead of a Type N. As a consequence, the maximum degree of filling and High-velocity vent valve opening pressure (kPa) require to be updated accordingly.

**Justification**

According to 9.3.2.21.1 a) the maximum degree of filling for type C of tank vessels would have to be modified accordingly to 95 % instead of 97 % (type N).

Respect to the High-velocity vent valve opening pressure (kPa), and based on paragraph 3.2.3.3, for vessels of type C, this value needs to be determined based on the internal pressure of the tank and using the formula provided on the code but, in case internal pressure is unknown, the high-velocity vent valve opening pressure could be 10, 35 or 50 kPa based on the boiling point (as indicated in the Scheme A of the current code version (see below) as well as in the proposal submitted for improving readability of this scheme A (see Informal document INF.10 of the thirty-fourth session).

In the case of UN 2057 Tripropylene, for both packing groups II and PG III the boiling point is greater than 115 °C, and, if the cargo tank internal pressure is unknown, therefore the high-velocity vent valve opening pressure should be **35 kPa**.

**Scheme A:**

**Criteria for cargo tank equipment in vessels of type C**

<table>
<thead>
<tr>
<th>Cargo tank equipment</th>
<th>Cargo tank internal pressure at liquid temperature of 30 °C and gaseous phase temperature of 37.8 °C &gt; 50 kPa</th>
<th>Cargo tank internal pressure at liquid temperature of 30 °C and gaseous phase temperature of 37.8 °C &gt; 50 kPa</th>
<th>Cargo tank internal pressure unknown, owing to absence of certain data</th>
</tr>
</thead>
<tbody>
<tr>
<td>With refrigeration (No. 1 in column (9))</td>
<td>Refrigerated</td>
<td>Cargo tank internal pressure at 50 °C &gt; 50 kPa without water spraying</td>
<td>Boiling point ≤ 60°C</td>
</tr>
<tr>
<td>Pressure tank (400 kPa)</td>
<td>Non-refrigerated</td>
<td>Cargo tank internal pressure at 50 °C &gt; 50 kPa with water spraying</td>
<td>60 °C &lt; boiling point ≤ 85 °C</td>
</tr>
<tr>
<td>High velocity vent valve opening pressure: 50 kPa, with water-spraying system (No. 3 in column (9))</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>High velocity vent valve opening pressure as calculated, but at least 10 kPa</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>High velocity vent valve opening pressure: 50 kPa</td>
<td></td>
<td></td>
<td>85 °C &lt; boiling point ≤ 115 °C</td>
</tr>
<tr>
<td>High velocity vent valve opening pressure: 35 kPa</td>
<td></td>
<td></td>
<td>Boiling point &gt; 115 °C</td>
</tr>
</tbody>
</table>
Proposal for amendment

The following amendments should be made to Table C:

For UN No. 2057, packing groups II and III, amend column (10) to read “35” and column (11) to read “95”.