Proposal for an exemption of manufactured articles containing small amounts of gallium (update of document ST/SG/AC.10/C.3/2021/53)

Transmitted by the expert from China*

Introduction

1. At the fifty-eighth session of Sub-Committee, experts from China submitted working document ST/SG/AC.10/C.3/2021/17, proposing to amend special provision SP366 to make it also adjust to "gallium contained in manufactured articles", so that articles containing gallium and meeting relevant requirements may be not subject to the Model Regulations. Although one delegation expressed the view that the proposed amendment was not necessary, the Sub-Committee generally supported the principle of that proposal.

2. Since no consensus was reached on how to revise the texts at the fifty-eighth session, experts from China submitted another working document (ST/SG/AC.10/C.3/2021/53) to the fifty-ninth session. Unfortunately, the Sub-Committee still did not come to an agreement on which of proposed options should be adopted. To achieve better clarity, some experts believed that a new entry should be created as in the case of UN 3506 (MERCURY CONTAINED IN MANUFACTURED ARTICLES), while some other experts believed that, to achieve better conciseness, only minor changes should be made as far as possible.

3. During the intersessional period, experts from China carefully considered all the comments received, and finally decided to submit this working document to the Sub-Committee, proposing to introduce the exemption for products containing small amounts of gallium by creating a new entry, consistent with mercury contained in manufactured articles. Although it will cause relatively larger changes to the Model Regulations, we believe the new entry can not only make the text the clearest and minimize possible misunderstandings, but also be conducive for potential amendments in the future. On the contrary, the other option of adding a special provision to the existing UN 2809 entry, though causing smaller changes, may be less convenient for readers, and to achieve better clarity, the content of the added

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*A/75/6 (Sect.20), para. 20.51
special provision will be very complicated, confusing readers, so we disregarded it as the most suitable option.

4. In addition, at the last session, an expert raised the question whether it is reasonable to adjust the exemption quantity of gallium contained in products exactly the same as that of mercury in mass, considering the huge difference between the density of gallium and mercury. Currently, the limited quantities in column 7 (a) of UN 2803 (GALLIUM) and UN 2809 (MERCURY) in Chapter 3.2, Dangerous Goods List, are both 5 kg, and the exemption amounts for gallium and mercury in special provision A69 (b) of the International Civil Aviation Organization (ICAO) Technical Instructions are both 100 mg. Thus, experts from China believe that the exemption amount for gallium contained in manufactured articles can be the same as that of mercury (15 g / 1 kg).

**Proposal**

5. It is proposed to add in Chapter 3.2 Dangerous Goods List a new entry for gallium contained in manufactured articles and to insert in the new entry the modified special provision 366 as follows (new text is underlined, deleted text in strikethrough):

<table>
<thead>
<tr>
<th>UN No.</th>
<th>Name and description</th>
<th>Class or division</th>
<th>Subsidiary hazard</th>
<th>UN packing group</th>
<th>Special Provisions</th>
<th>Limited and excepted quantities</th>
<th>Packagings and IBCs</th>
<th>Portable tanks and bulk containers</th>
</tr>
</thead>
<tbody>
<tr>
<td>35XX</td>
<td>GALLIUM CONTAINED IN MANUFACTURED ARTICLES</td>
<td>8</td>
<td></td>
<td></td>
<td>366</td>
<td>5kg</td>
<td>E0</td>
<td>P003 PP90</td>
</tr>
</tbody>
</table>

6. In 4.1.4.1 amend in packing instruction P003, special packaging provision PP90 to read as follows (new text is underlined, deleted text in strikethrough):

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P003 PACKING INSTRUCTION

P003

...

PP90 For UN 3506 and UN 35XX, sealed inner liners or bags of strong leak-proof and puncture resistant material impervious to mercury or gallium which will prevent escape of the substance from the package irrespective of the position or the orientation of the package shall be used. For air transport additional requirements may apply.
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7. In Chapter 3.3 amend special provision 366 to read as follows (new text is underlined, deleted text in strikethrough):

“366 For land and sea transport, manufactured instruments and articles containing not more than 1 kg of mercury or gallium are not subject to these Regulations. For air transport, articles containing not more than 15 g of mercury or gallium are not subject to these Regulations.”

8. And amend special provision 365 to read as follows (new text is underlined, deleted text in strikethrough):

“365 For manufactured instruments and articles containing mercury or gallium, see UN 3506 or UN 35XX.”
9. In addition, amend in 3.2.2 the existing entry UN No. 2803 GALLIUM to apply special provision 365:

<table>
<thead>
<tr>
<th>UN No.</th>
<th>Name and description</th>
<th>Class or division</th>
<th>Subsidiary hazard</th>
<th>UN packing group</th>
<th>Special Provisions</th>
<th>Limited and excepted quantities</th>
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<th>Portable tanks and bulk containers</th>
</tr>
</thead>
<tbody>
<tr>
<td>2803</td>
<td>GALLIUM</td>
<td>8</td>
<td>III</td>
<td>365</td>
<td>5 kg</td>
<td>E0</td>
<td>P800</td>
<td>PP41</td>
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</tbody>
</table>