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**Committee of Experts on the Transport of Dangerous Goods  
and on the Globally Harmonized System of Classification  
and Labelling of Chemicals****Sub-Committee of Experts on the Transport of Dangerous Goods****Forty-ninth session**

Geneva, 27 June – 6 July 2016

Item 3 of the provisional agenda

**Listing, classification and packing****Polymerizing substances UN 3302, 2-  
dimethylaminoethyl acrylate****Transmitted by the expert from Germany<sup>1</sup>**

1. During the last biennium polymerizing substances were introduced into the provisions for the transport of dangerous goods. Not all substances, which are transported in a stabilized form, can be assigned to the polymerizing substances.
2. UN 3302 was mentioned as a candidate for polymerizing substances in document ST/SG/AC.10/C.3/2014/82 but not included in the adopted amendments as a verification of its properties was regarded as necessary. German experts reviewed the issue again and came to the conclusion that UN 3302 2-DIMETHYLAMINOETHYL ACRYLATE is a substance able to polymerize. Under conditions of elevated temperature or heat radiation (sunshine) 2-Dimethylaminoethyl acrylate (DMAEA) is tending to spontaneous polymerization. That's why it is recommended to store DMAEA with sufficient stabilization, in complete darkness and at low temperatures (< 25 °C).
3. An indication for the necessity of stabilization of DMAEA can also be found in the IMDG Code. In column (17) Properties and observations of the Dangerous Goods List in Part 3 it is noted: "Colourless to light yellow liquid. Acrid odour. Miscible with water. Causes tears. **Stabilized with hydroquinone derivatives.** Hydrolyses in water to give off acrylic acid and dimethylaminoethanol. Toxic if swallowed, by skin contact or by inhalation."

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<sup>1</sup> In accordance with the programme of work of the Sub-Committee for 2015–2016 approved by the Committee at its seventh session (see ST/SG/AC.10/C.3/92, paragraph 95 and ST/SG/AC.10/42, para. 15).

## Proposal

3. The expert from Germany proposes the following amendments:
    - (a) For UN 3302 in column (2) of the Dangerous Goods List (Chapter 3.2) add at the end “, STABILIZED”.
    - (b) For UN 3302 in column (6) of the Dangerous Goods List (Chapter 3.2) add “386”.
    - (c) In column “Name and description” of the Alphabetical Index of Substances and Articles for the entry “2-DIMETHYLAMINOETHYL ACRYLATE” add at the end “, STABILIZED”.
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