Classification of oxidizing gases

Note by the secretariat

1. According to ADR/RID/ADN 2009, paragraph 2.2.2.1.5, oxidizing gases are "gases which may, generally by providing oxygen, cause or contribute to the combustion of other material more than air does. Oxidizing ability is determined either by tests or by calculation methods adopted by ISO (see ISO 10156:1996 and ISO 10156-2:2005).".

2. In addition, ADR 2009 contains special provision 292, assigned to the following entries:

   UN 1002 AIR, COMPRESSED
   UN 1956 COMPRESSED GAS, N.O.S.

   which reads as follows:

   "Mixtures containing not more than 23.5% oxygen by volume may be carried under this entry when no other oxidizing gases are present. A label conforming to model No. 5.1 is not required for any concentrations within this limit.

3. The provisions described in paras 1 and 2 above are the same as those contained in the 15th revised edition of the UN Recommendations. However ADR 2009 contains also other provisions which are not included in the UN Recommendations.

   (a) NOTE 4 under 2.2.2.1.3 Reads as follows:

   "Mixtures containing more than 21% oxygen by volume shall be classified as oxidizing".

   (b) Special provision 567 reads as follows:

   "Mixtures containing more than 21% oxygen by volume shall be classified as oxidizing". SP 567 is assigned only to UN 1956, COMPRESSED GAS, N.O.S.

4. The 2011 amendments (ECE/TRANS/WP.15/204) will modify the definitions of oxidizing gases in 2.2.2.1.5, which will read as follows:

   "Gases which may, generally by providing oxygen, cause or contribute to the combustion of other material more that air does. These are pure gases or mixtures with an oxidizing power greater than 23.5% as determined by a method specified in ISO 10156:1996 or ISO 10156-2:2005".
As a consequence, special provision 292 will be deleted. These amendments correspond to the harmonization with the 16th revised edition of the UN Recommendations and the third revised edition of GHS.

5. The attention of the secretariat has been drawn to the fact that despite these changes whereby the oxidizing power greater than 23.5% has become the general reference for determining the oxidizing character of a gas or a gas mixture, NOTE 4 to 2.2.2.1.3 and Special provision 567, which are specific to RID/ADR/ADN, have not been amended accordingly, and this will result in inconsistent classification criteria within RID/ADR/ADN.

6. After informal consultations with experts of EIGA, the secretariat comes to the conclusion that the amendment to the definition of oxidizing gases should have entailed the consequential deletion of NOTE 4 to 2.2.2.1.3 and of SP 567, which seems to have been overlooked by the Joint Meeting.

7. Therefore the secretariat proposes the following amendments to RID/ADR/ADN:

2.2.2.1.3: Delete NOTE 4

Table A of Chapter 3.2, UN No. 1956: Delete "567" in column (6).

Chapter 3.3: Delete special provision 567. (Amend to read "(Deleted)").