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INLAND TRANSPORT COMMITTEE

Working Party on the Transport of Dangerous Goods

Joint Meeting of the RID Committee of Experts and the Working Party on the Transport of Dangerous Goods

Bern, 22-26 March 2010

Item 5 (b) of the provisional agenda

PROPOSALS FOR AMENDMENTS TO RID/ADR/ADN

New proposals

Classification code of UN 2031 Nitric acid

Transmitted by the Government of Belgium

Introduction

1. In the dangerous goods list of section 3.2.1, there are three entries for UN 2031 Nitric acid:

   (a) With more than 70 % acid (classification code CO1);
   (b) With at least 65 % but not more than 70 % acid (classification code CO1);
   (c) With less than 65 % acid (classification code C1).

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1 In accordance with the programme of work of the Inland Transport Committee for 2006-2010 (ECE/TRANS/166/Add.1, programme activity 02.7 (c)).

2. In the assimilation list in 4.1.1.19.6 however, the classification code of nitric acid with not more than 55 % pure acid is indicated as being CO1 instead of C1 (with nitric acid as standard liquid).

3. This difference is rather surprising, as both classification codes claim to be in accordance with the procedures and criteria of Part 2.

Difficulties

4. From the point of view of chemical compatibility of plastics packagings, the classification code CO1 is undoubtedly correct, at least at the upper concentration limit of the nitric acid. Otherwise, the standard liquid for nitric acid 55 % – which itself is one of the standard liquids – would be water according to the principle set out in 4.1.1.19.5 (d) (i) : 
   water/nitric acid 55% ; with the exception of inorganic acids with the classification code C1, which are assigned to standard liquid “water”

5. On the other hand, the UN Model Regulations impose danger labels 8 + 5.1 for nitric acid with concentrations of at least 65 %, but only danger label 8 below that threshold (it is to be noted that the compatibility verification system with standard liquids does not exist in these Model Regulations).

6. This document does not have the ambition to address the fact that the resistance against oxidation is verified by means of a substance (nitric acid 55 %) that is not deemed to be oxidizing according to the UN classification. It merely wants to eliminate the confusion amongst those who want to choose correct packagings for the carriage of mixtures containing nitric acid.

Proposal

7. In the third row for UN 2031 Nitric acid (with less than 65% nitric acid) in the dangerous goods list of section 3.2.1 :
   (a) Delete C1 in column (3b) Classification code;
   (b) Add XXX in column (6) Special provisions;
   (c) Add the following special provision in 3.3.1:

   XXX For the purpose of verifying the chemical compatibility with plastics packagings, the classification code of this substance is considered to be CO1; for all other purposes, the classification code is C1.