

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

20 June 2013

Forty- third session

Geneva, 24 – 28 June 2013

Item 5 (d) of the provisional agenda

Transport of gases: miscellaneous

Differentiation between liquefied gases and chemicals under pressure

Transmitted by the expert from Germany

Introduction

1. Special provision 362 in chapter 3.3 of the UN Model Regulations regulates what kinds of substances may be carried under the entries for “chemical under pressure”. These include liquids, pastes or powders, pressurized with a propellant which meets the definition of a compressed or liquefied gas.

2. After the introduction of the new UN numbers 3500 ff, the question has arisen of whether also mixtures containing compressed gases which are not intended for spray or propellant purposes may be carried under these entries. Mixtures of substances which are in the liquid or gaseous phase under pressure could be assigned either to the collective entries

- 3500, 3501, 3502, 3503, 3504, 3505 “CHEMICAL UNDER PRESSURE, XXXX, N.O.S.,

or to UN Nos.

- 3157, 3160, 3161, 3162, 3163, 3307, 3308, 3309, 3310 “LIQUEFIED GAS, XXXX, N.O.S.

Originally, UN Nos. 3500 ff were intended exclusively for substances which are to be expelled from the pressure receptacle by means of spraying, such as spray adhesives, and which do not meet the criteria for aerosols.

3. A clear differentiation should be made between the entries for chemicals under pressure and the entries for liquefied gases. Mixtures of liquids and compressed or liquefied gases, in which the gases are not intended for spray or propellant purposes, such as test gas mixtures, special gases, refrigerant gases etc., should continue to be carried under the entries for liquefied gases.

4. Within the framework of this matter, it was furthermore noticed that maybe also the definition of gases should be adapted with a view to mixtures of liquids and compressed or liquefied gases. Section 2.2.1.3 of the UN Model Regulations reads: “The class comprises compressed gases, liquefied gases, dissolved gases, refrigerated liquefied gases, mixtures of one or more gases with one or more vapours of substances of other classes, articles charged with a gas and aerosols.”. It would be possible to delete the reference to vapours. (Note: Sub-section 2.2.2.1.1 of ADR/RID/ADN reads: “The heading of Class 2 covers pure gases, mixtures of gases, mixtures of one or more gases with one or more other substances and articles containing such substances.”)

Proposal

5. Amend SP 362 to read as follows:

“This entry applies to liquids, pastes or powders, pressurized with a propellant which meets the definition of a gas in 2.2.1.1 and 2.2.1.2 (a) or (b). The mixtures have been pressurized with a propellant for the purpose of expelling the liquids, pastes or powders from the pressure receptacle.”.

Alternatively:

“This entry applies to liquids, pastes or powders, pressurized with a propellant which meets the definition of a gas in 2.2.1.1 and 2.2.1.2 (a) or (b). A propellant shall be deemed to be a gas that has been introduced into a pressure receptacle for the purpose of expelling substances or mixtures of substances.”.

- 6 The Sub-Committee is invited to address the question of whether 2.2.1.3 should be amended with a view to mixtures of liquids and compressed or liquefied gas.
-