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Joint Meeting of the RID Safety Committee and the
Working Party on the Transport of Dangerous Goods
(Geneva, 9-13 September 2002)

**SECTION 2.2.3, CLASSIFICATION OF MIXTURES OF FLAMMABLE LIQUIDS,
CONTAINING SMALL AMOUNTS OF DISSOLVED GASES**

Transmitted by the International Union of Railways (UIC/IUR)

The UIC/IUR wishes to draw the attention of the Joint RID/ADR Meeting to some problems with the classification of mixtures of flammable liquids, containing dissolved gases, such as condensates from natural gas, classified under UN 1268.

Such mixtures contain different types of aliphatic and aromatic hydrocarbons, including small quantities of dissolved C₂-C₄ gases. The concentration of the dissolved gases is so low, that the vapour pressure of the condensate at 50 °C does not exceed 110 kPa. The initial boiling point of the mixture is, however, because of the presence of C₂-C₄ gases, in some cases below 35 °C. This would mean such a mixture would have to be classified as a packing group I substance.

^{*}/ Circulated by the Central Office for International Carriage by Rail (OCTI) under the symbol OCTI/RID/GT/III/2002/39.

According to Table A UN 1268 PG I, all substances of PG I should however have a vapour pressure at 50 °C more than 110 kPa.

Therefore, the conclusion has been reached that it is impossible to classify this type of gas condensate according to the restructured RID/ADR.

Apart from the gas condensate, there may also be other mixtures or preparations, containing dissolved gases, where the same classification problems arise.

In view of the large volumes of gas condensate transported in railway tank wagons, road tank vehicles and by inland waterway, the UIC/IUR is of the opinion that this classification problem should be solved in one or the other of the following ways:

- 1 - A special provision comparable to SP 534 for UN 1203. Such a new special provision should allow the transport of gas condensates and similar mixtures having a vapour pressure at 50 °C of not more than 110 kPa under the conditions of substances for which special provision 640D is applicable, even if their initial boiling point is below 35 °C. This special provision should be applicable to the following entries only: UN 1267, UN 1268 and UN 3295.
 - 2 - According to some standards (ASTM D 86 or ASTM D 3710) low concentrations of dissolved gases in the determination of the (initial) boiling point of liquids may be disregarded. In this case, a definition of initial boiling point, including a reference to such standards should be included in the RID/ADR. By such a procedure gas condensates would not be classified as substances of PG I.
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