

COMMITTEE OF EXPERTS ON THE TRANSPORT OF DANGEROUS  
GOODS

(21<sup>ST</sup> Session, December 2000)

Agenda Item 2(b)

**Proposed Amendments to ST/SG/AC.10/2000/20  
Classification of ammonium nitrate emulsions**

**Transmitted by the expert from Australia**

Introduction

The Expert from Australia requests that the Committee amend the text proposed to be included in the Model Regulations and Manual of Tests and Criteria in order to adequately include gels, suspensions and oil in water emulsions in the new classification scheme and testing requirements. We believe that these products should also be regulated as dangerous goods of Class 5.1 and subject to Test Series 8 because they pose the same threats to safety as the products currently encompassed by the proposed, restrictive, definition. To do this we propose an amendment to the proper shipping name by replacing the word 'emulsions' with the word 'MIXTURE' and by including formulation details of water gels in Special Provision yyy. (All the manufacturing companies in Australia have considered this subject extensively and unanimously prefer the term "PRECURSOR" to MIXTURE but understand that this has been rejected by the working group.)

Should the amendment to the proper shipping name succeed, there would need to be consequential editorial amendments throughout the proposed text of ST/SG/AC.10/2000/20 which the Working Group may wish to check.

We also suggest an amendment to the proposed clause 18.4.1.1.2 to more clearly indicate that emulsions can be manufactured at a high temperature (the range suggested was too narrow) and are then loaded as they cool into tanks for transport.

Proposal 1

Amend the proposed proper shipping name 'ammonium nitrate emulsion' in the Dangerous Goods List of Chapter 3.2 to '*Ammonium nitrate mixture*'.

If agreed, consequential amendments will need to be made to the entire proposed text.

Proposal 2

Amend the proposed Special Provision yyy thus:

“This entry applies to non sensitised emulsions, *suspensions and gels* consisting primarily of a *mixture* of ammonium nitrate *and a fuel phase*, intended to produce a Type E blasting explosive only after further processing prior to use. The *mixture* typically has the following composition: 60-85% ammonium nitrate; 5-30% water; 2-8% oil; 0.5-4% emulsifier *or thickening agent*; 0-10% soluble flame suppressants and trace additives. Other inorganic nitrate salts may replace part of the ammonium nitrate. Formulations shall satisfactorily pass Test Series 8 in the Manual of Tests and Criteria, Part 1, Section 18.”

Proposal 3

In the proposed clause 18.4.1.1.2 amend the first sentence to read:

Ammonium nitrate mixtures are usually *manufactured at high temperatures, typically 70 –90 C, and may be loaded hot into the transport tank.*

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