



Secretariat

Distr.
GENERAL

ST/SG/AC.10/C.3/2001/34
3 September 2001

ORIGINAL : ENGLISH

**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**
(Twentieth session, 3-12 December 2001,
agenda item 8 (d))

**EXPLOSIVES, SELF-REACTIVE SUBSTANCES
AND ORGANIC PEROXIDES**

Miscellaneous proposals

Implementation of general N.O.S. entries into Class 3 and Division 4.1

Transmitted by the expert from Germany

Background

In the past the competent authority of Germany was asked to classify new substances which are wetted or are diluted with water/alcohols or are diluted with other substances or are comparable with substances which in the past were "related to self-reactive substances" (e. g. UN 3242, UN 3251). Such substances show

- properties as desensitized explosives of Classes 3 or 4.1 (the non-desensitized substance are or should be assigned to Class 1 but are diluted to be excluded from Class 1 by Test Series 6) or
- properties comparable with self-reactive substances of Class 4.1 but their self-accelerating decomposition temperature (SADT) is greater than 75 °C for a 50 kg package.

GE.01-

Examples of such substances are e. g.:

- 2,4-Dinitrophenylhydrazine, wetted with not less than 33 % water by mass
- 3-Morpholinopyridone
- Diethylazodicarboxylate mixture, desensitized, liquid, flammable, with not more than 30% Diethylazodicarboxylate by mass.

In the Model Regulations neither "**Specific N.O.S. Entries**" nor "**General N.O.S. Entries**" do exist.

German and European companies, which want to carry the above mentioned substances internationally have to ask for "**Multilateral Agreements**" according to RID/ADR or "**Exemption Permissions**" according to the IMDG Code. This proceeding implies a time consuming act and furthermore leads to not harmonized transport conditions.

In the report of the Sub-Committee of Experts on its fifteenth session (Geneva, 29 June - 9 July 1998), see ST/SG/AC.10/C.3/30, par. 181, it was stated by the expert from the Netherlands that "**N.O.S. Entries**" for desensitized explosives should be included in Class 3 and Division 4.1 to avoid the implementation of lots of individual new "**Single Entries**" in chapter 3.2 of the UN Recommendations. The expert from Germany supports this opinion entirely.

Properties

- The properties of desensitized explosives are well known. The non-desensitized substances are assigned to Class 1 or should be assigned to Class 1 on basis of explosive properties. If such an explosive substance is diluted and tests according to Test Series 6 show that no dangerous effects in packages occur the desensitized substance shall be listed in Division 4.1 or in Class 3 (see 2.1.3.5.3 Model Regulations).
- A larger number of liquid and solid substances or formulations show the following properties if tested according to the flow chart for self-reactive substances (e. g.:UN methods for test series A, test code A.1 "**Partial**" criteria, for test series E, test code E.1 "**Medium**" criteria, for test code E.2 "**Violent**" or "**Medium**" criteria, for test series C, test code C.1 "**Yes, rapidly**" criteria and if the determined SADT is 80 °C, 85 °C or higher based on the SADT results for a 50 kg package, these substances are formally not allowed to be classified as self-reactive substances. These substances are neither substances of Class 1 nor of Class 3, Divisions 4.1, 5.1 and 5.2. The only existing N.O.S. entry, UN number 1325 "**FLAMMABLE SOLID, ORGANIC, N.O.S.**", can not be used either. In the opinion of the German competent authority such substances should be classified similar to the classification procedure for self-reactive substances.

Taking into account the above mentioned considerations the expert from Germany stresses the urgent need for N.O.S. entries.

Proposals

1. It is proposed to add the following new N.O.S. entries to Chapter 3.2 - Dangerous Goods List - of the UN Model Regulations:

"UN XXXW, DESENSITIZED EXPLOSIVES, SOLID, N.O.S., 4.1, I, 28, 274,278, NONE, P406, PP26

UN XXXX, DESENSITIZED EXPLOSIVES, LIQUID, N.O.S., 3, Special provisions 274, 278, NONE, P099

UN XXXY, ENERGETIC SUBSTANCES, SOLID, N.O.S., 4.1, III, Special Provisions XXX, 132, 274, NONE, P099
UN XXXZ, ENERGETIC SUBSTANCES, LIQUID, N.O.S., 4.1, III, Special Provisions XXX, 132, 274, NONE, P099"

Special provision XXX should read as follows:

"These substances shall not be classified and transported unless authorized by the competent authority on the basis of test results according to Part II of the Manual of Tests and Criteria".

2. Consequential amendments for the UN Recommendations:

In para 2.4.2.4.1 add UN XXXW

In para 2.3.1.4 add UN XXXX

In para 2.4.2.4.2 add UN XXXY

In para 2.4.2.4.2 add UN XXXZ.
