UNITED NATIONS S



# **Secretariat**

Distr. GENERAL

ST/SG/AC.10/C.3/2002/26 5 April 2002

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 (Twenty-first session, 1-10 July 2002, agenda item 3 (d))

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

### Miscellaneous proposals

### **Amendment to Packing instruction P520**

# Transmitted by the International Council of Chemical Associations (ICCA)

# 1. Introduction

Packing instruction P520 applies to self-reactive substances and organic peroxides. This packing instruction specifies the various packagings authorized in conjunction with the maximum quantity per packaging depending on the packing method OP1-OP8. Section 4.1.7.1.4 describes the relation between the type of organic peroxide or self-reactive substance (Type B to Type F) and the packing method (OP1-OP8) to be assigned.

According to the classification flow chart for organic peroxides and self-reactive substances (see Figure 2.4.1), for exit E and F a maximum quantity per package of 400 kg/450 litres is allowed. In Packing instruction P520, this maximum is restricted to 200 kg/225 litres for OP8. On the other hand, type F products are candidates for transport in IBCs and tanks.

#### 2. Incentive

In order to be able to reduce amount of packaging waste, for solid Type F products a reusable outer packaging was developed with a maximum quantity of 400 kg. According to the classification Type F, this quantity is allowed in principle, however this is not authorized in packing instruction P520.

Testing at TNO, The Netherlands (competent authority), showed that such a packaging, as a combination packaging with plastic inner bags, is able to fulfil the UN test requirements.

### 3. Safety considerations

Intended use of such a packaging is **only for solids, type F** organic peroxides and self-reactive substances in a combination packaging (outer in combination with inner packaging). These materials typically are substances which contain 40% product on inert carrier. These type F materials do not show hazardous decomposition effects as also given by their classification as type F. They may however show burning properties.

The combination packagings proposed exclude metal packagings to avoid confinement of product.

The self-accelerating decomposition temperature (SADT) of the product to be transported should be based on the quantity and heat loss characteristics of the 400 kg packaging. This is in line with the test procedure as prescribed in section 28, test series H of the Manual of Tests and Criteria.

#### 4. Proposal

It is proposed to change note 2 in packing instruction P520, under maximum quantity per packaging (OP1-OP8) to read as follows:

<sup>2</sup> 60 kg for jerricans/100 kg for boxes, and for solids 400 kg in combination packagings with outer packagings comprising boxes (4C1, 4C2, 4D, 4F, 4G, 4H1 and 4H2) and with inner packaging of plastics or fibre with maximum net mass of 25 kg.