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## 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

Thirtieth session

Geneva, 4-12 (a.m.) December 2006

Item 2(a) (i) of the provisional agenda

### PROPOSALS OF AMENDMENTS TO THE RECOMMENDATIONS ON THE TRANSPORT OF DANGEROUS GOODS

#### Amendment to UN 3474 for inclusion of 1-HOBt Monohydrate Comments on adopted texts

#### Transmitted by the expert from the United States of America

1. The Sub-Committee at its 29<sup>th</sup> session (July, 2006) adopted a proposal from Germany to include a new entry for "1-HYDROXYBENZOTRIAZOLE, ANHYDROUS, WETTED with not less than 20% water, by mass" (see UN/SCETDG/29/INF.22 and ST/SG/AC.10/C.3/2005/29) in the Dangerous Goods List. However, the proper shipping name did not address the hydrated form of 1-HOBt because a review of the hydrated form to substantiate its inclusion in the new entry had not been undertaken. The intent of this proposal is to provide the necessary data to support inclusion of 1-hydroxybenzotriazole (1-HOBt) monohydrate in the newly adopted proper shipping name.
2. The expert from the United States of America has reviewed the physical properties and explosive test results conducted on the hydrated form of 1-HOBt. Our findings are briefly summarized as follows:

Composition of the substance:	1-hydroxybenzotriazole (1-HOBt) monohydrate
Content of water:	11.7% water (1 mole of water per mole of HOBt as an integral part of the crystalline structure)
Thermal stability:	1-HOBt monohydrate is stable (will not lose its water) at or above 45% RH (relative humidity) at ambient temperature. It takes more than 10 hours to convert the monohydrate form to the anhydrous form when monohydrate form is exposed to 60 degree C temperatures at <5% relative humidity.
Explosive tests results:	The following explosive tests were conducted on 1-HOBt Monohydrate: Time/Pressure Test (1 (c) (i) Test), BAM Friction Test (3(b) Test), Thermal Stability Test (3(c) Test), Small Scale Burning Test (3(d) Test), Stack Test (6(B), and Bonfire Test (6(c) Test). Results of these tests show that 1-HOBt Monohydrate does

not meet the definition of a Class 1 substance. These results further support the conclusion drawn by Germany in UN/SCETDG/29/INF.22 (paragraph 2).

3. Based on the above data, the expert from the United States of America believes it is proper to classify 1-HOBt Monohydrate as a Division 4.1 Desensitized Explosive substance and proposes that it be included in the proper shipping name for UN 3474.

4. **Proposal**

It is proposed that the proper shipping name for UN 3474 be amended to read as follows:

“1-HYDROXYBENZOTRIAZOLE, ANHYDROUS, WETTED with not less than 20% water, by mass **or 1-HYDROXYBENZOTRIAZOLE, MONOHYDRATE**”.

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