

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

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Item 2 (f) of the provisional agenda

Explosives and related matters: miscellaneous

Classification of Ammunition, Smoke, containing titanium tetrachloride

Transmitted by the expert from Austria

Introduction

1. There are three possible entries for Ammunition Smoke
 - UN 0015 AMMUNITION, SMOKE with or without burster, expelling charge or propelling charge, containing corrosive substances, 1.2G, 1(8)
 - UN 0016 AMMUNITION, SMOKE with or without burster, expelling charge or propelling charge, containing corrosive substances, 1.3G, 1(8)
 - UN 0303 AMMUNITION, SMOKE with or without burster, expelling charge or propelling charge, containing corrosive substances, 1.4G, 1(8)

APPENDIX B, GLOSSARY OF TERMS:

AMMUNITION, SMOKE

Ammunition containing smoke-producing substance such as chlorosulphonic acid mixture, **titanium tetrachloride** or white phosphorus; or smoke-producing pyrotechnic composition based on hexachloroethane or red phosphorus. Except when the substance is an explosive per se, the ammunition also contains one or more of the following: a propelling charge with primer and igniter charge; a fuze with burster or expelling charge. The term includes grenades, smoke but excludes SIGNALS, SMOKE which are listed separately. The term includes:

- AMMUNITION, SMOKE with or without burster, expelling charge or propelling charge;
 - AMMUNITION, SMOKE, WHITE PHOSPHORUS with burster, expelling charge or propelling charge.”
2. With the introduction of substances TOXIC BY INHALATION the classification of UN 1838 TITANIUM TETRACHLORIDE was changed from class 8 to class 6.1.
 3. While some other toxic substances in ammunition will react during the explosion, the titanium tetrachloride is released as the smoke-producing substance. Toxicity will only be reduced after reaction with humidity from the air.

4. So there is some similarity with ammunition, tear-producing (UN 0018, UN 0019, UN 0301) where subsidiary risks 6.1 and 8 are added.

Proposal

5. To add a toxicity risk to these entries for Ammunition, Smoke with titanium tetrachloride, seems to be a consequential amendment. If there is support in the Explosives Working Group we will make an official proposal for the next meeting.
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