

**ECONOMIC COMMISSION FOR EUROPE
INLAND TRANSPORT COMMITTEE
Working Party on the Transport of Dangerous Goods**

**Joint Meeting of the RID Safety Committee and the
Working Party on the Transport of Dangerous Goods**
(Geneva, 10-14 September 2001)

**HARMONIZATION WITH THE 12th REVISED EDITION
OF THE UN RECOMMENDATIONS ON THE TRANSPORT
OF DANGEROUS GOODS, MODEL REGULATIONS**

Aerosols

Submitted by the UNECE Secretariat

1. At its May session, the Joint Meeting requested an ad hoc working group to consider all documents concerning harmonization with the 12th revised edition of the UN Recommendations on the Transport of Dangerous Goods, Model Regulations. The conclusions of the working group were adopted and reflected in document TRANS/WP.15/AC.1/84, annex 2 and TRANS/WP.15/AC.1/84/Add.1 for Parts 1 to 3.
2. The amendment to the NOTE 2 to paragraph 2.2.2.1.3 proposed in the UN/ECE secretariat document TRANS/WP.15/AC.1/2001/21 was intended to reflect the new contents of special provision 63 and the new special provision 303 in the UN Model Regulations.
3. The ad hoc working group considered that new special provision 303 should be reflected in Chapter 3.3 of RID/ADR, but that special provision 63 should be reflected in the NOTE 2 to 2.2.2.1.3 or otherwise somewhere in section 2.2.2. The UNECE secretariat was invited to prepare a new proposal in this respect (see TRANS/WP.15/AC.1/84, annex 2).
4. Subsequently, the UNECE secretariat has studied this question of aerosols on the basis of the revised UN special provision 63 and of the existing provisions concerning aerosols in section 2.2.2 and table A of Chapter 3.2 of RID/ADR.
5. According to the revised UN special provision 63, toxic gases are not allowed to be used as propellant for aerosols, and corrosive or toxic liquid or solid substances of packing group I are not allowed as contents of aerosols. As a consequence, the secretariat believes that the definitions of groups T, TF, TC, TO, TFC and TOC, which imply the presence of toxic gases, are not suitable for aerosols, and that separate codes and definitions should be used for aerosols containing toxic substances. The suitability of transport category assignment (presently 1) and of special provision S7 (ADR) should also be considered, as well as the possible assignment of CE2 for RID and the suitability of hazard identification codes in column (20) of RID.
6. There is no classification code available in RID/ADR for non-toxic aerosols containing corrosive contents. Therefore new group letters C and FC are proposed for aerosols.

7. Subsidiary risks of classes 6.1 and 8 are addressed in special provision 63, but not subsidiary risk of class 5.1, even though it is not said that oxidizing gases could not be used as propellants. As a consequence, the secretariat proposes to delete the aerosol entries with a class 5.1 subsidiary risk.

8. The UN Special provision 63 indicates that aerosols may have subsidiary risks of classes 6.1 or 8, and that subsidiary risk labels may be required for air transport (implying that they would not be required for other modes of transport). Therefore the indication of the subsidiary risk label has been placed between square brackets in this document.

9. Proposal

2.2.1.3 In the first line, insert “(except aerosols)” after “articles”.

Amend NOTE 2 to read as follows:

“NOTE 2: Aerosols are assigned to one of the following groups according to their hazardous properties, as follows:

A: asphyxiant;
F: flammable;
C: corrosive;
FT: flammable, toxic;
FC: flammable, corrosive;
TC: toxic, corrosive;
FTC: flammable, toxic, corrosive”.

2.2.1.5 In the first line, insert “(except aerosols)” after “articles”.

Add the following new paragraph 2.2.1.6.

“2.2.1.6 Aerosols

Classification of aerosols (UN No. 1950) depend on the nature of the contents of the aerosol dispenser.

NOTE: Gases which meet the definition of toxic gases according to 2.2.2.1.5 shall not be used as a propellant in an aerosol dispenser. Aerosols with contents meeting the criteria for packing group I for toxicity or corrosivity shall not be accepted for carriage (see also 2.2.2.2).

The following provisions shall apply:

- (a) Assignment to group A shall apply when the contents do not meet the criteria for any other group according to sub-paragraphs (b) to (h) below;
- (b) Assignment to group F shall apply if the contents include more than 45% by mass, or more than 250 g of flammable components. Flammable components are gases which are flammable in air at normal pressure or substances or preparations in liquid form which have a flash point less than or equal to 100 °C;
- (c) Assignment to group T shall apply when the contents, other than the propellant of aerosol dispensers to be ejected, are classified as class 6.1, packing groups II or III;

- (d) Assignment to group C shall apply when the contents, other than the propellant of aerosol dispensers to be ejected, meet the criteria for Class 8, packing groups II or III;
- (e) Assignment to group TC shall apply when both the criteria for groups T and C are met;
- (f) Assignment to group FT shall apply when both the criteria for groups F and T are met;
- (g) Assignment to group FC shall apply when both the criteria for groups F and C are met;
- (h) Assignment to group FTC shall apply when the criteria for groups F, T and C are met.

2.2.2.2.2 Add:

- “- Aerosols where gases which are toxic according to 2.2.2.1.5 are used as propellants;
- Aerosols with contents meeting the criteria for packing group I for toxicity or corrosivity (see 2.2.61 and 2.2.8).”.

Table A of Chapter 3.2

UN 1950: Delete the entries with classification codes 5O, 5TO and 5TOC.

Classification code 5A: Add: “, non-flammable” in column (2);

5F: Add: “, flammable” in column (2);

5T: Add: “, toxic” in column (2)
Replace “2.3” by “2.2[+6.1]” in column (5);

5TC: Add: “toxic, corrosive” in column (2)
Replace “2.3 + 8” by “2.2 [+6.1 + 8]” in column (5);

5TF: Amend the classification code to read 5 FT,
Add: “,flammable, toxic” in column (2);

Deplace “2.3+2.1” by “2.1[+6.1]”. in column (5);

5TFC Amend the classification code to read 5 FTC;

Add: “flammable, toxic, corrosive” in column (2)
Replace “2.3+2.1+8” by “2.1[+6.1 + 8]” in column (5).

Add the following two new entries for UN 1950:

(1)	(2)	(3a)	(3b)	(5)	(6)	(7)	(8)	(9b)	(15)	(18)	19 (ADR)	19 (RID)	20 (RID)
1950	AEROSOLS, corrosive	2	5C	2.2+[8]	190 625	LQ2	P204	MP9	3	CV9/CW9 CV12/CW12		CE2	[28]
1950	AEROSOLS, flammable, corrosive	2	5FC	2.1+[8]	190 625	LQ2	P204	MP9	2	CV9/CW9 CV12/CW12	S2	CE2	[238]

Consequential amendment

In the table of 1.1.3.6.3,

for category 1, under Class 2, add: “aerosols: groups T, FT, TC, FTC”.

[NOTE: The Joint Meeting may wish to consider whether these substances should be assigned to transport category 2 rather than 1 as presently, since the aerosols contain toxic liquids/solids rather than toxic gases].

For category 2, under Class 2, add “aerosols: groups F, FC”.

For category 3, under Class 2, add: “aerosols: groups A, C”.

(See File Excel TableA_aerosols.xls= 01sept18Beng.xls)