# Committee of Experts on the Transport of Dangerous Goods and on the Globally Harmonized System of Classification and Labelling of Chemicals <br> Sub-Committee of Experts on the Transport of Dangerous Goods <br> Report of the Sub-Committee of Experts on the Transport of Dangerous Goods on its fiftieth session 

held in Geneva from 28 November to 6 December 2016
Addendum
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## Annex II

## Corrections to the sixth revised edition of the Recommendations on the Transport of Dangerous Goods, Manual of Tests and Criteria (ST/SG/AC.10/11/Rev.6)

1. Section 1, Table 1.2, for Test series 3, under "Test code"

For 3 (c) read 3 (c) (i)
(Reference document: informal document INF.36)
2. Table of contents of Part I, for Test 3 (c) (ii)

For 13.6.1 read 13.6.2
(Reference document: informal document INF.36)
3. Section 10, Figure 10.3

Replace the vertical line leading to box 19 by a downward arrow.
(Reference document: informal document INF.36)
4. Section 10, Figure 10.8, item 6 (Box 32)

For Is there nevertheless a small hazard in the event of ignition or initiation?
read Would the hazard hinder fire-fighting in the immediate vicinity?
(Reference document: informal document INF.36)
5. Section 11, 11.5.1.2.2, fourth sentence

For the existing text, substitute
Calibration involves heating a tube (fitted with a 1.5 mm orifice plate) filled with $27 \mathrm{~cm}^{3}$ of dibutyl phthalate or silicone oil of apparent density $0.96 \pm 0.02$ at $20^{\circ} \mathrm{C}$ and heat capacity $1.46 \pm 0.02 \mathrm{~J} / \mathrm{g} . \mathrm{K}$ at $25^{\circ} \mathrm{C}$.
(Reference document: informal document INF.59, annex 3, amendment 1)
6. Section 12, 12.5.1.2.2, fourth sentence

For the existing text, substitute
Calibration involves heating a tube (fitted with a 1.5 mm orifice plate) filled with $27 \mathrm{~cm}^{3}$ of dibutyl phthalate or silicone oil of apparent density $0.96 \pm 0.02$ at $20^{\circ} \mathrm{C}$ and heat capacity $1.46 \pm 0.02 \mathrm{~J} / \mathrm{g} . \mathrm{K}$ at $25^{\circ} \mathrm{C}$.
(Reference document: informal document INF.59, annex 3, amendment 2)
7. Sub-section 13.4, table under paragraph 13.4.6.5.2, heading of the second column

For in assembly 2 read in assembly 3
(Reference document: informal document INF.36)
8. Sub-section 13.5, paragraph 13.5.1.3.4, paragraph number and heading

For 13.5.1.3.4 Test criteria and method of assessing results
read 13.5.1.4 Test criteria and method of assessing results
(Reference document: informal document INF.36)
9. Sub-section 13.6, paragraph 13.6.1.3.2, third sentence

For procedure given in should read procedure given in 13.6.1.3.3 should
(Reference document: informal document INF.36)
10. Section 16.7, paragraph 16.7.1.4 (b)

For $80 \pm 3 \mathrm{~g} / \mathrm{m}^{2}$ read $80 \pm 10 \mathrm{~g} / \mathrm{m}^{2}$
(For the English version, correction already included in ST/SG/AC.10/11/Rev.6/Corr.1)
(Reference document: informal document INF.36)
11. Section 17, table 17.1, third column, in the section number for 7 (k)

For 17.13.2 read 17.13.1
(Reference document: informal document INF.36)
12. Sub-section 18.6, paragraph 18.6.1.1

For of a candidate ammonium nitrate emulsion or suspension or gel, intermediate for blasting explosives
read of a candidate for "ammonium nitrate emulsion, suspension or gel, intermediate for blasting explosives"
(Reference document: informal document INF.36)
13. Section 18, 18.6.1.2.2, fourth sentence

For the existing text, substitute
Calibration involves heating a tube (fitted with a 1.5 mm orifice plate) filled with $27 \mathrm{~cm}^{3}$ of dibutyl phthalate or equivalent silicone oil of apparent density $0.96 \pm 0.02$ at $20^{\circ} \mathrm{C}$ and heat capacity $1.46 \pm 0.02 \mathrm{~J} / \mathrm{g} . \mathrm{K}$ at $25^{\circ} \mathrm{C}$.
(Reference document: informal document INF.59, annex 3, amendment 3)
14. Section 18, 18.6.1.2.3, last but one sentence

For any draughts does read any draught does
(Reference document: informal document INF.36)
15. Section 20, paragraph 20.2.6

For see section 32.5.2 read see section 33.3
(Reference document: informal document INF.36)
16. Section 20, figure 20.1 (b)

For 12.1 Significative read 12.1 Not low
(Reference document: informal document INF.36)
17. Section 25, 25.4.1.2.2, fourth sentence

For the existing text, substitute
Calibration involves heating a tube (fitted with a 1.5 mm orifice plate) filled with $27 \mathrm{~cm}^{3}$ of dibutyl phthalate or equivalent silicone oil of apparent density $0.96 \pm 0.02$ at $20^{\circ} \mathrm{C}$ and heat capacity $1.46 \pm 0.02 \mathrm{~J} / \mathrm{g} . \mathrm{K}$ at $25^{\circ} \mathrm{C}$.
(Reference document: informal document INF.59, annex 3, amendment 4)
18. Section 25, paragraph 25.4.1.3.5, at the end of the first sentence

Delete mm
(Reference document: informal document INF.36)
19. Section 31, paragraph 31.1.3, definition of "aerosol"

For made of metal glass read made of metal, glass
(Reference document: informal document INF.36)
20. Section 33, paragraph 33.2.1.4.4.1

For 33.2.1.3.4.2 read 33.2.1.4.3.2
(Reference document: informal document INF.36)
21. Section 35, paragraph 35.4.3.2 (b), in the second sentence

For 35.3.3.2 (a) read 34.3.3.2 (a)
(Reference document: informal document INF.36)
22. Section 38, paragraph 38.3.2.3, definition of mass loss

For Table 38.3.2.2 below read Table 38.3.1 below
(Reference document: informal document INF.36)
23. Section 38, paragraph 38.3.3 (c)

In the French text, delete the last paragraph («Dans le cas des piles prismatiques, ...»)
(Reference document: informal document INF.36)

## 24. Section 38.3, paragraph 38.3.4.4.2, Figure 38.3.4.2

Replace the existing figure with the following (the legend of the axis remains unchanged)

(For the English version, correction already included in ST/SG/AC.10/11/Rev.6/Corr.1)
(Reference document: informal document INF.36)
25. Section 51, paragraph 51.4.4.2 (g), in the formula

For $\mathrm{A}_{10 \mathrm{r}}$ read $\mathrm{A}_{10 \mathrm{t}}$
(Reference document: informal document INF.36)
26. Section 51, paragraph 51.4.6, in the last formula

For $\mathrm{A}_{\mathrm{t}}$ read $\mathrm{A}_{\mathrm{c}}$
(Reference document: informal document INF.36)
27. Appendice 8, table, in the third row, under the heading "Case"

For calibration tests ${ }^{\alpha}$ read calibration tests*
(Reference document: informal document INF.36)

## Annex III

## Amendments to the Guiding Principles of the Model Regulations

## Chapter 3.5

Replace the table, table notes and sentence after the table by the following:
"Methodology for determining excepted quantities

| Class/Division | Packing Group | Maximum net quantity per inner packaging (in grammes for solids and ml for liquids and gases) | Maximum net quantity per outer packaging (in grammes for solids and ml for liquids and gases, or sum of grammes and ml in the case of mixed packing) | E-Code |
| :---: | :---: | :---: | :---: | :---: |
| 1 |  | Not permitted |  | E0 |
| 2.1 |  | Not permitted |  | E0 |
| 2.2 without subsidiary hazard ${ }^{\text {a }}$ |  | $30 \mathrm{~g} / 30 \mathrm{ml}$ | $1000 \mathrm{~g} / 1000 \mathrm{ml}$ | E1 |
| 2.2 with a subsidiary hazard |  | Not permitted |  | E0 |
| 2.3 |  | Not permitted |  | E0 |
| 3 without a subsidiary hazard ${ }^{\text {b }}$ | I | $30 \mathrm{~g} / 30 \mathrm{ml}$ | $300 \mathrm{~g} / 300 \mathrm{ml}$ | E3 |
|  | II | $30 \mathrm{~g} / 30 \mathrm{ml}$ | $500 \mathrm{~g} / 500 \mathrm{ml}$ | E2 |
|  | III | $30 \mathrm{~g} / 30 \mathrm{ml}$ | $1000 \mathrm{~g} / 1000 \mathrm{ml}$ | E1 |
| 3 with a subsidiary hazard $^{\mathrm{c}}$ |  | Not permitted |  | E0 |
|  | II | $30 \mathrm{~g} / 30 \mathrm{ml}$ | $500 \mathrm{~g} / 500 \mathrm{ml}$ | E2 |
|  | III | $30 \mathrm{~g} / 30 \mathrm{ml}$ | $1000 \mathrm{~g} / 1000 \mathrm{ml}$ | E1 |
| $4.1{ }^{\text {d }}$ | I | Not permitted |  | E0 |
|  | II | $30 \mathrm{~g} / 30 \mathrm{ml}$ | $500 \mathrm{~g} / 500 \mathrm{ml}$ | E2 |
|  | III | $30 \mathrm{~g} / 30 \mathrm{ml}$ | $1000 \mathrm{~g} / 1000 \mathrm{ml}$ | E1 |
| 4.2 | I | Not permitted |  | E0 |
|  | II | $30 \mathrm{~g} / 30 \mathrm{ml}$ | $500 \mathrm{~g} / 500 \mathrm{ml}$ | E2 |
|  | III | $30 \mathrm{~g} / 30 \mathrm{ml}$ | $1000 \mathrm{~g} / 1000 \mathrm{ml}$ | E1 |
| 4.3 | I | Not permitted |  | E0 |
|  | II | $30 \mathrm{~g} / 30 \mathrm{ml}$ | $500 \mathrm{~g} / 500 \mathrm{ml}$ | E2 |
|  | III | $30 \mathrm{~g} / 30 \mathrm{ml}$ | $1000 \mathrm{~g} / 1000 \mathrm{ml}$ | E1 |
| 5.1 | I | Not permitted |  | E0 |
|  | II | $30 \mathrm{~g} / 30 \mathrm{ml}$ | $500 \mathrm{~g} / 500 \mathrm{ml}$ | E2 |
|  | III | $30 \mathrm{~g} / 30 \mathrm{ml}$ | $1000 \mathrm{~g} / 1000 \mathrm{ml}$ | E1 |
| $5.2^{\text {e }}$ |  | Not permitted |  | E0 |
| 6.1 Substances which are toxic by inhalation ${ }^{\mathrm{k}}$ | I | Not permitted |  | E0 |
| $6.1{ }^{\text {f,g }}$ | I | $1 \mathrm{~g} / 1 \mathrm{ml}$ | $300 \mathrm{~g} / 300 \mathrm{ml}$ | E5 |
|  | II | $1 \mathrm{~g} / 1 \mathrm{ml}$ | $500 \mathrm{~g} / 500 \mathrm{ml}$ | E4 |
|  | III | $30 \mathrm{~g} / 30 \mathrm{ml}$ | $1000 \mathrm{~g} / 1000 \mathrm{ml}$ | E1 |
| 6.2 |  | Not permitted |  | E0 |
| 7 |  | Not permitted |  | E0 |
| $88^{\text {h, i }}$ | I | Not permitted |  | E0 |


| Class/Division | Packing <br> Group | Maximum net quantity per inner <br> packaging (in grammes for solids and ml <br> for liquids and gases) | Maximum net quantity per outer <br> packaging (in grammes for solids <br> and ml for liquids and gases, or <br> sum of grammes and ml in the case <br> of mixed packing) | E-Code |
| :--- | :--- | :--- | :--- | :--- |
|  |  |  | $500 \mathrm{~g} / 500 \mathrm{ml}$ | E2 |
|  | II | $30 \mathrm{~g} / 30 \mathrm{ml}$ | $1000 \mathrm{~g} / 1000 \mathrm{ml}$ | E1 |
|  | $30 \mathrm{~g} / 30 \mathrm{ml}$ | $500 \mathrm{~g} / 500 \mathrm{ml}$ | E 2 |  |
|  | II | $30 \mathrm{~g} / 30 \mathrm{ml}$ | $1000 \mathrm{~g} / 1000 \mathrm{ml}$ | E1 |

${ }^{\text {a }}$ For gases, the volume indicated for inner packagings refers to the water capacity of the inner receptacle and the volume indicated for outer packagings refers to the combined water capacity of all inner packagings within a single outer package;
b Desensitized explosives and UN 3256 shall not be transported as excepted quantities;
c Chlorosilanes (UN Nos. 1162, 1196, 1250, 1298, 1305, 2985) shall not be transported as excepted quantities.
d Self-reactive substances, polymerizing substances, desensitized explosives, UN Nos. 2304, 2448, 3176 (molten substances), 3360 and 3527 shall not be transported as excepted quantities;
e Division 5.2 dangerous goods shall ONLY be transported as excepted quantities if in UN 3316, Chemical Kit or First Aid Kit;
f UN Nos. 1600, 2312 and 3250 (molten substances) shall not be transported as excepted quantities;
g Chlorosilanes (UN Nos. 3361, 3362) shall not be transported as excepted quantities;
h UN Nos. 2215 (molten), 2576, 2803 and 2809 shall not be transported as excepted quantities;
i Chlorosilanes (UN Nos. 1724, 1728, 1747, 1753, 1762, 1763, 1766, 1767, 1769, 1771, 1781, 1784, 1799, 1800, 1801, 1804, 1816, 1818, 2434, 2435, 2437, 2986, 2987) shall not be transported as excepted quantities.
j Code E1 applies for UN Nos. 3334 and 3335. UN Nos. 1845, 2807, 3245, 3257 and 3258 shall not be transported as excepted quantities;
k These are substances which are assigned Special Provision 354 in column (6) of the Dangerous Goods List and "TOXIC BY INHALATION" N.O.S entries.

The meaning of the Codes in the Table above is explained in 3.5.1 of the Model Regulations.".
(Reference document: ST/SG/AC.10/C.3/2016/78).

## Annex IV

## Corrections to the 19th revised edition of the United Nations Recommendations on the Transport of Dangerous Goods, Model Regulations (ST/SG/AC.10/1/Rev.19)

(Reference document: Informal document INF.28)

1. Chapter 2.7, 2.7.2.3.2 (a) (ii) and 2.7.2.3.2 (b) (ii), at the end of sub-paragraphs (ii) For or read and
2. Chapter 3.2, Dangerous Goods List, for UN 2908, in Column (6)

Insert 368
3. Chapter 3.2, Dangerous Goods List, for UN 2913, in Column (6) Insert 325
4. Chapter 3.2, Dangerous Goods List, for UN 2913, in Column (6)

Delete 336
5. Chapter 3.2, Dangerous Goods List, for UN 3326, in Column (6) Insert 326
6. Chapter 3.2, Dangerous Goods List, for UN 3326, in Column (6)

Delete 336
7. Chapter 3.3, Special Provision 369, second paragraph, at the end For 2.7.2.3.6 read 2.7.2.3.5
8. Chapter 4.1, Packing Instruction P603, in the Special packing provision Delete and 6.4.11.2
9. Chapter 6.4, 6.4.2.11, in the fourth line

For 4.1.9.1.10 and 4.1.9.1.11 read 4.1.9.1.11 and 4.1.9.1.12
10. Chapter 6.4, 6.4.23.19

For under 6.4.22.2, 6.4.22.3, 6.4.22.4, 6.4.24.2 and 6.4.24.3 read under 6.4.22.2, 6.4.22.3, 6.4.22.4 and 6.4.24.2

