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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

Thirty-sixth session  
Geneva, 30 November – 9 December 2009  
Item 3 of the provisional agenda

**LISTING, CLASSIFICATION AND PACKING**

Excepted Quantity limits for chlorosilanes

Transmitted by the International Council of Chemical Associations (ICCA)<sup>1</sup>

**Introduction**

1. At the thirtieth session of the Sub-Committee (December 2006), a proposal of ICCA (ST/SG/AC.10/C.3/2006/11) to revise the provisions of chlorosilanes was adopted. One of the proposals was to prohibit the carriage of chlorosilanes as limited quantities. During this same biennium the provisions for Excepted Quantities had been adopted and the chlorosilanes were assigned excepted quantity limits in accordance with the Guiding Principles.

2. As can be seen in the list of chlorosilanes in the annex to this document, the chlorosilanes of division 4.3 have been assigned to E0, whereas these of classes 3 and 8 have been assigned to E2 and these of division 6.1 to E4. From this same table, it can be noted that already no chlorosilanes can be transported as limited quantity.

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<sup>1</sup> In accordance with the programme of work of the Sub-Committee for 2009-2010 approved by the Committee at its fourth session (refer to ST/SG/AC.10/C.3/68, para. 118 (b) and ST/SG/AC.10/36, para. 14).

3. Manufacturers of chlorosilanes do not ship these products as excepted quantities as they are concerned about the less demanding requirements for the packagings and about the fact that often less attention is paid to shipments with limited quantities than to shipments with regular packagings. In line with the objectives and the reasons provided in ST/SG/AC.10/C.3/2006/11 the chlorosilanes manufacturers see no reason why these substances should be allowed for transport as excepted quantity and make this proposal in order to ensure that this practice should be legally prohibited. The industry is indeed convinced that no risks should be taken with these critical substances, particularly because of the reaction with water or humidity in the air in case of a leakage.

### **Proposal**

4. ICCA therefore proposes to assign E0 in column 7b of the Dangerous Goods List for the following UN numbers: 1162, 1196, 1250, 1298, 1305, 1724, 1728, 1747, 1753, 1762, 1763, 1766, 1767, 1769, 1771, 1781, 1784, 1799, 1800, 1801, 1804, 1816, 1818, 2434, 2435, 2437, 2985, 2986, 2987, 3361 and 3362.

The affected entries have been highlighted in the Table in the annex.

5. If the proposal were adopted, the Guiding Principles for Chapter 3.5, excepted quantities would need to be amended accordingly. Similar to existing exceptions, use should be made of a footnote as follows:

- For Class 3 with subsidiary risk:
  - “Chlorosilanes (UN Nos. 1162, 1196, 1250, 1298, 1305, 2985) shall not be transported as excepted quantities.”
- For Class 8:
  - “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.”
- For Class 6.1:
  - “Chlorosilanes (UN Nos. 3361, 3362) shall not be transported as excepted quantities”.

**Annex**

## List of chlorosilanes

(entries in column 7b, shaded in orange, are proposed to be amended into E0)

UN No.	Name and description	Class or division	Subsidiary risk	UN packing group	Limited and excepted quantities	
					(7a)	(7b)
(1)	(2)	(3)	(4)	(5)	(7a)	(7b)
1162	DIMETHYLDICHLOROSILANE	3	8	II	0	E2
1183	ETHYLDICHLOROSILANE	4.3	3 8	I	0	E0
1196	ETHYLTRICHLOROSILANE	3	8	II	0	E2
1242	METHYLDICHLOROSILANE	4.3	3 8	I	0	E0
1250	METHYLTRICHLOROSILANE	3	8	II	0	E2
1295	TRICHLOROSILANE	4.3	3 8	I	0	E0
1298	TRIMETHYLCHLOROSILANE	3	8	II	0	E2
1305	VINYLTRICHLOROSILANE	3	8	II	0	E2
1724	ALLYLTRICHLOROSILANE, STABILIZED	8	3	II	0	E2
1728	AMYLTRICHLOROSILANE	8		II	0	E2
1747	BUTYLTRICHLOROSILANE	8	3	II	0	E2
1753	CHLOROPHENYLTRICHLORO- SILANE	8		II	0	E2
1762	CYCLOHEXENYL- TRICHLOROSILANE	8		II	0	E2
1763	CYCLOHEXYL- TRICHLOROSILANE	8		II	0	E2
1766	DICHLOROPHENYL- TRICHLOROSILANE	8		II	0	E2
1767	DIETHYLDICHLOROSILANE	8	3	II	0	E2
1769	DIPHENYLDICHLOROSILANE	8		II	0	E2
1771	DODECYLTRICHLOROSILANE	8		II	0	E2
1781	HEXADECYL- TRICHLOROSILANE	8		II	0	E2

UN No.	Name and description	Class or division	Subsidiary risk	UN packing group	Limited and excepted quantities	
					(7a)	(7b)
(1)	(2)	(3)	(4)	(5)	(7a)	(7b)
1784	HEXYLTRICHLOROSILANE	8		II	0	E2
1799	NONYLTRICHLOROSILANE	8		II	0	E2
1800	OCTADECYLTRICHLOROSILANE	8		II	0	E2
1801	OCTYLTRICHLOROSILANE	8		II	0	E2
1804	PHENYLTRICHLOROSILANE	8		II	0	E2
1816	PROPYLTRICHLOROSILANE	8	3	II	0	E2
1818	SILICON TETRACHLORIDE	8		II	0	E2
2434	DIBENZYL-DICHLOROSILANE	8		II	0	E2
2435	ETHYLPHENYL-DICHLOROSILANE	8		II	0	E2
2437	METHYLPHENYL-DICHLOROSILANE	8		II	0	E2
2985	CHLOROSILANES, FLAMMABLE, CORROSIVE, N.O.S.	3	8	II	0	E2
2986	CHLOROSILANES, CORROSIVE, FLAMMABLE, N.O.S.	8	3	II	0	E2
2987	CHLOROSILANES, CORROSIVE, N.O.S.	8		II	0	E2
2988	CHLOROSILANES, WATER-REACTIVE, FLAMMABLE, CORROSIVE, N.O.S.	4.3	3 8	I	0	E0
3361	CHLOROSILANES, TOXIC, CORROSIVE, N.O.S.	6.1	8	II	0	E4
3362	CHLOROSILANES, TOXIC, CORROSIVE, FLAMMABLE, N.O.S.	6.1	3 8	II	0	E4