



**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****Forty-third session**

Geneva, 24–28 June 2013

Item 3 (c) of the provisional agenda

Listing, classification and packing: miscellaneous**New organic peroxide formulations be listed in 2.5.3.2.4 and
IBC 520****Transmitted by the International Council of Chemical Association
(ICCA)¹****Introduction**

1. Since several new peroxides and formulations have become commercially available, there is a need to update, 2.5.3.2.4 and IBC 520. A list of new products, proposed classification, the accompanying competent authority approval references and a summary of the supporting test data are given in the annex to this proposal.

Proposals

2. ICCA proposes to include two amended entries and a correction in 2.5.3.2.4, list of currently assigned organic peroxides, as indicated in paragraph 3 below. Further, ICCA proposes to include two changes in packaging IBC520, as indicated in paragraph 4 below. All changes indicated in gray shading.

¹ In accordance with the programme of work of the Sub-Committee for 2013-2014 approved by the Committee at its sixth session (refer to ST/SG/AC.10/C.3/84, para. 86 and ST/SG/AC.10/40, para. 14).

3. Proposed amendments to 2.5.3.2.4 List of currently assigned organic peroxides:

<i>ORGANIC PEROXIDE</i>	<i>Concentration (%)</i>	<i>Diluent type A (%)</i>	<i>Diluent type B 1 (%)</i>	<i>Inert solid (%)</i>	<i>Water</i>	<i>Packing Method</i>	<i>Control temperature (°C)</i>	<i>Emergency temperature (°C)</i>	<i>Number (Generic entry)</i>	<i>Subsidiary risks and remarks</i>
CORRECT:										
DIBENZOYL PEROXIDE INTO	>51 - 100			≤ 48		OP2			3102	3)
DIBENZOYL PEROXIDE Remark: typing error since 8th revision	>52 - 100			≤ 48		OP2			3102	3)
CHANGE:										
tert-BUTYL CUMYL PEROXIDE INTO	>42 - 100					OP8			3107	
tert-BUTYL CUMYL PEROXIDE	>42 - 100					OP8			3109	
CHANGE:										
DICETYL PEROXYDICARBONATE INTO	≤ 100					OP7	+30	+35	3116	
DICETYL PEROXYDICARBONATE	≤ 100					OP8	+30	+35	3120	
CHANGE ² :										
tert-BUTYL PEROXY-3,5,5-TRIMETHYLHEXANOATE INTO	>32-100 ≤ 32		≥ 68			OP7 OP8			3105 3109	
tert-BUTYL PEROXY-3,5,5-TRIMETHYLHEXANOATE	>37-100 ≤ 37		≥ 63			OP7 OP8			3105 3109	

² This change is proposed because in packing instruction IBC520, this product with a concentration of ≤ 37% is already listed as UN 3109

4. Proposed amendments to packaging instruction IBC520

<i>UN No.</i>	<i>Organic peroxide</i>	<i>Type of IBC</i>	<i>Maximum quantity (litres)</i>	<i>Control temperature</i>	<i>Emergency Temperature</i>
3109	ORGANIC PEROXIDE TYPE F, LIQUID				
	ADD NEW ENTRY:				
	tert-Butyl cumyl peroxide	31HA1	1000		
3119	ORGANIC PEROXIDE TYPE F, LIQUID, TEMPERATURE CONTROLLED				
	ADD NEW ENTRY:				
	1,1,3,3-Tetramethylbutyl peroxy-2-ethylhexanoate, not more than 67%, in diluent type A	31HA1	1000	+15 °C	+20 °C
	ADD TO EXISTING ENTRY:				
	Di-(2-ethylhexyl) peroxydicarbonate, not more than 62%, stable dispersion, in water	31HA1	1000	-20 °C	-10 °C

Annex: test results of new organic peroxides and formulations to be added/amended (2.5.3.2.4 or IBC520)

(English only)

<i>No</i>	<i>Product</i>	<i>packaging</i>	<i>UN</i>	<i>Detonation</i>	<i>P/T / C.1</i>	<i>Deflagration / C.2</i>	<i>Koenen/ E.1</i>	<i>DPVT/ E.2</i>	<i>(mod) Trauzl F.3 or F.4</i>	<i>SADT (H.3 or H.4)</i>	<i>Competent Authority approval number</i>
1	tert-Butyl cumyl peroxide, ≤100%	OP8	3109	Test A.1 No propagation	<2170kPa , No	0.05 mm/s, No	1.0 mm Low	1.0 mm (10g), Low	F.4 4.5 ml, Low	H.3 70 °C	NL TNO 12EM/327
2	Dicetyl peroxydicarbonate, ≤100%	OP8	3120	Test A.1 No propagation	<2170kPa , No	0.0 mm/s, No	< 1mm ("O"), No	<1.0 mm (10g), Low	n.a.	H.4 40 °C (400ml)	NL TNO 12EM/562
3	Di-(2-ethylhexyl) peroxydicarbonate, not more than 62%, stable dispersion, in water	31HA1	3119	Test A.1 No propagation	<2170kPa , No	0.0 mm/s, No	<1.0mm ("O"),No	1.0 mm (50g), Low	F.4 0.4 ml, Low	H.3 0 °C	NL TNO 08DV3/2133
4	1,1,3,3-Tetramethylbutyl peroxy-2-ethylhexanoate, not more than 67%, in diluent type A	31HA1	3119	Test A.6 No propagation (90%)	<2170kPa , No (94%)	0.33 mm/s, No (70%)	<1 mm ("A"), Low (70%)	< 3.5 mm, Low (70%)	F.4 4 ml, Low (70%)	H.3 +30°C (65%)	NL TNO 11 HPE/612