United Nations ST/SG/AC.10/C.3/2010/53

Secretariat

Distr.: General
17 September 2010

Original: English

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-eighth session
Geneva, 29 November–7 December 2010
Item 4 of the provisional agenda
Listing, classification and packing

Organic peroxides - new formulations to be listed in 2.5.3.2.4 and IBC520

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 the list in 2.5.3.2.4 and packing instruction IBC520. 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 document.

Proposals

2. ICCA proposes to include three new or amended entries in 2.5.3.2.4, list of currently assigned organic peroxides, as indicated in Table 2.1. Further, ICCA proposes to include a number of new entries or changes in packing instruction IBC520, as indicated in Table 2.2.

[1] 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).

Table 2.1

Proposed amendments to 2.5.3.2.4 List of currently assigned organic peroxides

ORGANIC PEROXIDE	*Concen-tration (%)*	*Diluent type A (%)*	*Diluent type B (%)*	*Inert solid (%)*	*Water*	*Packing Method*	*Control temperat-ure (°C)*	*Emergency temperature (°C)*	*Number (Generic entry)*	*Subsidiary risks and remarks*
ADD NEW ENTRY:										
([3R-(3R,5aS,6S,8aS,9R,10R,12S,12aR**)] -Decahydro-10-methoxy-3,6,9-trimethyl-3,12-epoxy-12H-pyrano [4,3-j]-1,2-benzodioxepin)	≤100					OP7			3106	
ADD TO EXISTING ENTRY::										
3,6,9-TRIETHYL-3,6,9-TRIMETHYL-1,4,7 TRIPEROXONANE	≤17	≥18		≥65		OP8			3110	
CHANGE:										
DI ISOPROPYL PEROXYDICARBONATE	**Change: ≤28 to: ≤32**	**Change: ≥72 to: ≥68**				OP7	-15	-5	3115	

Table 2.2
Proposed amendments to packing instruction IBC520

UN No.	*Organic peroxide*	*Type of IBC*	*Maximum quantity (litres)*	*Control temperature*	*Emergency Temperature*
3119	**ORGANIC PEROXIDE TYPE F, LIQUID, TEMPERATURE CONTROLLED**				
	ADD NEW ENTRIES:				
	Diisobutyryl peroxide, not more than 28% as a stable dispersion in water	31HA1 31A	1000 1250	-20 ºC -20 ºC	-10 ºC -10 ºC
	Diisobutyryl peroxide, not more than 42% as a stable dispersion in water	31HA1 31A	1000 1250	-25 ºC -25 ºC	-15 ºC -15 ºC
	ADD TO EXISTING ENTRY:				
	1,1,3,3-Tetramethylbutyl peroxyneodecanoate, not more than 52%, stable dispersion, in water	31HA1	1000	-5 ºC	+5 ºC
	CHANGE:				
	Di-(3,5,5-trimethylhexanoyl) peroxide, not more than **38**% in diluent type A	31HA1 31A	1000 1250	+10 ºC +10 ºC	+15 ºC +15 ºC
	INTO:				
	Di-(3,5,5-trimethylhexanoyl) peroxide, not more than **52**% in diluent type A	31HA1 31A	1000 1250	+10 ºC +10 ºC	+15 ºC +15 ºC

Annex

Test results of new organic peroxides and formulations to be added/amended [English only]

No	*Product*	*Packaging*	*UN No.*	*Detonation*	*P/T/C.1*	*Deflagration/ C.2*	*Koenen/ E.1*	*DPVT/ E.2*	*(mod) Trauzl F.3/F.4 or High Pressure Autoclave (F.5)*	*SADT (H.3 or H.4)*	*Competent Authority approval number*
1	([3R-(3R,5aS,6S,8aS,9R,10R,12S,12aR**)] -Decahydro-10-methoxy-3,6,9-trimethyl-3,12-epoxy-12H-pyrano [4,3-j]-1,2-benzodioxepin), ≤100	OP7	3106	Test A.1 No propagation	<2170kPa No	Yes Slowly	<1.0mm ("0"), No	3.5 mm(10g), Medium	n.a.	H.4 > 60 °C (400ml)	Swiss Federal Inspectorate of Dangerous Goods, Cert. No. 4'205'570
2	3,6,9-TRIETHYL-3,6,9-TRIMETHYL-1,4,7 TRIPEROXONANE, ≤17%	OP8	3110	Test A.6 No propagation	<2170kPa No	0,06 mm/s, No	<1.0mm ("0"),No	<1.0 mm (50g), No	F.4 6.4 ml, Low	H.4 > 90 °C (400ml)	NL TNO 04D2/1823
3	DI ISOPROPYL PEROXYDICARBONATE, ≤32%	OP7	3115	Test A.6 No propagation	150 ms, Yes slowly	0 mm/s, No	1.5mm ("F"), Medium	4.0 mm, Medium	n.a.	H.4 +5/+10°C (400ml)	NL TNO 07DV3/1297Rev.1
4	Diisobutyryl peroxide, not more than 28% as a stable dispersion in water	31A, 31HA1	3119	Test A.6, No propagation	<2170kPa No	<0.02 mm/s, No	<1.0 mm, ("A"), Low	1.0 mm (50g), Low	F.4 1.7 ml, No	H.3, 0 °C, H.4 0 °C (800ml)	NL IVW IMO/09-3432 (31A), NL TNO 08/DV3/2132 (31HA1)
5	Diisobutyryl peroxide, not more than 42% as a stable dispersion in water	31A, 31HA1	3119	Test A.6, No propagation	<2170kPa No	0.02 mm/s, No	<1.0 mm, ("A"), Low	1.0 mm (10g), Low	F.4 4.6 ml, Low	H.4 -5 °C (800ml)	NL TNO 09DV3/3700 (31HA1), NL TNO 09DV3/2640 (31A)
6	1,1,3,3-Tetramethylbutyl peroxyneodecanoate, not more than 52%, stable dispersion, in water	31HA1	3119	Test A.1 (cavitated), No propagation	<2170kPa No	0.029 mm/s, No	<1.0mm ("0"), No	< 1.0mm (50g), No	F.5 F=6.3 J/g, Low	H.3 +15°C	NL 09DV3/2723 (31HA1)
7	Di-(3,5,5-trimethylhexanoyl) peroxide, not more than 52% in diluent type A	31A, 31HA1	3119	Test A.6, No propagation	415 ms, Yes Slowly	<0.35 mm/s, No	<1.0 mm, ("A"), Low	2.5 mm (10g), Low	F.3 21 m/10g, Low	H.4 (800 ml) +25°C	NL TNO 08/DV3/2131 (31HA1), NL TNO 07/DV3/1298 (31A)