

5.3.3.3 Test methods for determining the SADT are given in the UN *Manual of Tests and Criteria*, Part III, section 28. The test selected must be conducted in a manner which is representative of the package to be transported.

5.3.3.4 Test methods for determining the flammability are given in the UN *Manual of Tests and Criteria*, Part III, subsection 32.4.

5.3.4 Desensitization of organic peroxides

5.3.4.1 In order to ensure safety during transport, organic peroxides are, in many cases, desensitized by organic liquids or solids, inorganic solids or water. Where a percentage of a substance is stipulated, this refers to the percentage by mass, rounded to the nearest whole number. In general, desensitization should be such that in case of spillage or fire, the organic peroxide may not concentrate to a dangerous extent.

5.3.4.2 Unless otherwise stated for the individual organic peroxide formulation, the following definitions apply for diluents used for desensitization:

- Diluents type A* are organic liquids which are compatible with the organic peroxide and which have a boiling point of not less than 150°C. Type A diluents may be used for desensitizing all organic peroxides;
- Diluents type B* are organic liquids which are compatible with the organic peroxide and which have a boiling point of less than 150°C but not less than 60°C and a flash point of not less than 5°C. Type B diluents may be used for desensitization of all organic peroxides provided that the boiling point of the liquid is at least 60°C higher than the SADT in a 50 kg package.

5.3.4.3 Diluents, other than type A or type B, may be added to organic peroxide formulations as listed in Table 2-7 provided that they are compatible. However, replacement of all or part of a type A or type B diluent by another diluent with differing properties requires that the organic peroxide formulation be reassessed in accordance with the normal acceptance procedure for Division 5.2.

5.3.4.4 Water may only be used for the desensitization of organic peroxides which are shown in Table 2-7 or in the statement of approval according to 5.3.2.4 with the approval of the appropriate authority of the State of Manufacture or when the organic peroxide formulation is specified as being with water or as a stable dispersion in water.

5.3.4.5 Organic and inorganic solids may be used for desensitization of organic peroxides provided that they are compatible.

5.3.4.6 Compatible liquids and solids are those which have no detrimental influence on the thermal stability and hazard type of the organic peroxide formulation.

Table 2-7. List of currently assigned organic peroxides in packagings

Note.— Peroxides to be transported must fulfil the classification and the control and emergency temperatures (derived from the self-accelerating decomposition temperature (SADT)) as listed.

Organic peroxide	Concentration (per cent)	Diluent type A (per cent)	Diluent type B (per cent) (Note 1)	Inert solid (per cent)	Water (per cent)	Control tempera- ture (°C)	Emergency tempera- ture (°C)	UN generic entry	Sub- sidiary hazards and notes
Acetyl acetone peroxide	≤42	≥48			≥8			3105	2
Acetyl acetone peroxide	≤35	≥57			≥8			3107	32
Acetyl acetone peroxide	≤32 as a paste							3106	20
Acetyl cyclohexanesulphonyl peroxide	≤82				≥12	-10	0	FORBIDDEN	3
Acetyl cyclohexanesulphonyl peroxide	≤32		≥68			-10	0	3115	
tert-Amyl hydroperoxide	≤88	≥6			≥6			3107	
tert-Amyl peroxyacetate	≤62	≥38						3105	
tert-Amyl peroxybenzoate	≤100							3103	
tert-Amyl peroxy-2-ethylhexanoate	≤100					+20	+25	3115	
tert-Amyl peroxy-2-ethylhexyl carbonate	≤100							3105	
tert-Amylperoxy isopropyl carbonate	≤77	≥23						3103	
tert-Amyl peroxyneodecanoate	≤77		≥23			0	+10	3115	

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Organic peroxide	Concentration (per cent)	Diluent type A (per cent)	Diluent type B (per cent) (Note 1)	Inert solid (per cent)	Water (per cent)	Control tempera- ture (°C)	Emergency tempera- ture (°C)	UN generic entry	Sub- sidiary hazards and notes
tert-Amyl peroxyneodecanoate	≤47	≥53				0	+10	3119	
tert-Amyl peroxy-pivalate	≤77		≥23			+10	+15	3113	
tert-Amylperoxy-3,5,5-trimethylhexanoate	≤100							3105	
tert-Butyl cumyl peroxide	>42-100							3109	
tert-Butyl cumyl peroxide	≤52			≥48				3108	
n-Butyl-4,4-di-(tert-butylperoxy) valerate	>52-100							3103	
n-Butyl-4,4-di-(tert-butylperoxy) valerate	≤52			≥48				3108	
tert-Butyl hydroperoxide	>79-90				≥10			3103	13
tert-Butyl hydroperoxide	≤80	≥20						3105	4,13
tert-Butyl hydroperoxide	≤79				>14			3107	13,23
tert-Butyl hydroperoxide	≤72				≥28			3109	13
tert-Butyl hydroperoxide + Di-tert-butylperoxide	<82 + >9				≥7			3103	13
tert-Butyl monoperoxymaleate	>52-100							FORBIDDEN	3
tert-Butyl monoperoxymaleate	≤52	≥48						3103	
tert-Butyl monoperoxymaleate	≤52			≥48				3108	
tert-Butyl monoperoxymaleate	≤52 as a paste							3108	
tert-Butyl peroxyacetate	>52-77	≥23						FORBIDDEN	3
tert-Butyl peroxyacetate	>32-52	≥48						3103	
tert-Butyl peroxyacetate	≤32		≥68					3109	
tert-Butyl peroxybenzoate	>77-100							3103	
tert-Butyl peroxybenzoate	>52-77	≥23						3105	
tert-Butyl peroxybenzoate	≤52			≥48				3106	
+ tert-Butyl peroxybenzoate	≤32	≥68						3109	
tert-Butyl peroxybutyl fumarate	≤52	≥48						3105	
tert-Butyl peroxy-crotonate	≤77	≥23						3105	
tert-Butyl peroxydiethylacetate	≤100					+20	+25	3113	
tert-Butyl peroxy-2-ethylhexanoate	>52-100					+20	+25	3113	
tert-Butyl peroxy-2-ethylhexanoate	>32-52		≥48			+30	+35	3117	
tert-Butyl peroxy-2-ethylhexanoate	≤52			≥48		+20	+25	3118	
tert-Butyl peroxy-2-ethylhexanoate	≤32		≥68			+40	+45	3119	
tert-Butyl peroxy-2-ethylhexanoate + 2,2-Di-(tert-butylperoxy) butane	≤12 + ≤14	≥14		≥60				3106	
tert-Butyl peroxy-2-ethylhexanoate + 2,2-Di-(tert-butylperoxy) butane	≤31 + ≤36	≥14	≥33			+35	+40	3115	
tert-Butyl peroxy-2-ethylhexylcarbonate	≤100							3105	
tert-Butyl peroxyisobutyrate	>52-77		≥23			+15	+20	FORBIDDEN	3
tert-Butyl peroxyisobutyrate	≤52		≥48			+15	+20	3115	
tert-Butylperoxy isopropylcarbonate	≤77	≥23						3103	
1-(2-tert-Butylperoxy isopropyl)-3-isopropenylbenzene	≤77	≥23						3105	
tert-Butylperoxy isopropylcarbonate	≤62		≥38					3105	

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Organic peroxide	Concentration (per cent)	Diluent type A (per cent)	Diluent type B (per cent) (Note 1)	Inert solid (per cent)	Water (per cent)	Control tempera- ture (°C)	Emergency tempera- ture (°C)	UN generic entry	Sub- sidiary hazards and notes
1-(2-tert-Butylperoxy isopropyl)-3-isopropenylbenzene	≤42			≥58				3108	
tert-Butyl peroxy-2-methylbenzoate	≤100							3103	
tert-Butyl peroxyneodecanoate	>77-100					-5	+5	3115	
tert-Butyl peroxyneodecanoate	≤77		≥23			0	+10	3115	
tert-Butyl peroxyneodecanoate	≤52 as a stable dispersion in water					0	+10	3119	
tert-Butyl peroxyneodecanoate	≤42 as a stable dispersion in water (frozen)					0	+10	3118	
tert-Butyl peroxyneodecanoate	≤32	≥68				0	+10	3119	
tert-Butyl peroxyneohexanoate	≤77	≥23				0	+10	3115	
tert-Butyl peroxyneohexanoate	≤42 as a stable dispersion in water					0	+10	3117	
tert-Butyl peroxyneopentanoate	>67-77	≥23				0	+10	3113	
tert-Butyl peroxyneopentanoate	>27-67		≥33			0	+10	3115	
tert-Butyl peroxyneopentanoate	≤27		≥73			+30	+35	3119	
tert-Butylperoxy stearylcarbonate	≤100							3106	
tert-Butyl peroxy-3,5,5-trimethylhexanoate	>37-100							3105	
tert-Butyl peroxy-3,5,5-trimethylhexanoate	≤42			≥58				3106	
tert-Butyl peroxy-3,5,5-trimethylhexanoate	≤37		≥63					3109	
3-Chloroperoxybenzoic acid	>57-86			≥14				FORBIDDEN	3
3-Chloroperoxybenzoic acid	≤57			≥3	≥40			3106	
3-Chloroperoxybenzoic acid	≤77			≥6	≥17			3106	
Cumyl hydroperoxide	>90-98	≤10						3107	13
Cumyl hydroperoxide	≤90	≤10						3109	13,18
Cumyl peroxyneodecanoate	≤77		≥23			-10	0	3115	
Cumyl peroxyneodecanoate	≤87	≥13				-10	0	3115	
Cumyl peroxyneodecanoate	≤52 as a stable dispersion in water					-10	0	3119	
Cumyl peroxyneohexanoate	≤77	≥23				-10	0	3115	
Cumyl peroxyneopentanoate	≤77		≥23			-5	+5	3115	
Cyclohexanone peroxide(s)	≤91				≥9			3104	13
Cyclohexanone peroxide(s)	≤72	≥28						3105	5
Cyclohexanone peroxide(s)	≤72 as a paste							3106	5,20
Cyclohexanone peroxide(s)	≤32			≥68				Exempt	29
([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							3106	
Diacetone alcohol peroxides	≤57		≥26		≥8	+40	+45	3115	6
Diacetyl peroxide	≤27		≥73			+20	+25	3115	7,13

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Organic peroxide	Concentration (per cent)	Diluent type A (per cent)	Diluent type B (per cent) (Note 1)	Inert solid (per cent)	Water (per cent)	Control tempera- ture (°C)	Emergency tempera- ture (°C)	UN generic entry	Sub- sidiary hazards and notes
Di-tert-amyl peroxide	≤100							3107	
1,1-Di-(tert-amylperoxy) cyclohexane	≤82	≥18						3103	
Dibenzoyl peroxide	>52-100			≤48				FORBIDDEN	3
Dibenzoyl peroxide	>77-94				≥6			FORBIDDEN	3
Dibenzoyl peroxide	≤77				≥23			3104	
Dibenzoyl peroxide	≤62			≥28	≥10			3106	
Dibenzoyl peroxide	>52-62 as a paste							3106	20
Dibenzoyl peroxide	>35-52			≥48				3106	
Dibenzoyl peroxide	>36-42	≥18			≤40			3107	
Dibenzoyl peroxide	≤56.5 as a paste				≥15			3108	
Dibenzoyl peroxide	≤52 as a paste							3108	20
Dibenzoyl peroxide	≤42 as a stable dispersion in water							3109	
+ Dibenzoyl peroxide	≤42	≥38			≥13			3109	
Dibenzoyl peroxide	≤35			≥65				Exempt	29
Di-(4-tert-butylcyclohexyl) peroxydicarbonate	≤100					+30	+35	3114	
Di-(4-tert-butylcyclohexyl) peroxydicarbonate	≤42 as a paste					+35	+40	3118	
Di-(4-tert-butylcyclohexyl) peroxydicarbonate	≤42 as a stable dispersion in water					+30	+35	3119	
Di-tert-butyl peroxide	>52-100							3107	
Di-tert-butyl peroxide	≤52	≥48						3109	25
Di-tert-butyl peroxyazolate	≤52	≥48						3105	
2,2-Di-(tert-amylperoxy)butane	≤57	≥43						3105	
2,2-Di-(tert-butylperoxy)butane	≤52	≥48						3103	
1,6-Di-(tert-butylperoxycarbonyloxy) hexane	≤72	≥28						3103	
1,1-Di-(tert-butylperoxy)cyclohexane	>80-100							FORBIDDEN	3
1,1-Di-(tert-butylperoxy)cyclohexane	>52-80	≥20						3103	
1,1-Di-(tert-butylperoxy)cyclohexane	≤72		≥28					3103	30
1,1-Di-(tert-butylperoxy)cyclohexane	>42-52	≥48						3105	
1,1-Di-(tert-butylperoxy)cyclohexane	≤42	≥13		≥45				3106	
1,1-Di-(tert-butylperoxy)cyclohexane	≤42	≥58						3109	
1,1-Di-(tert-butylperoxy)cyclohexane	≤27	≥25						3107	21
1,1-Di-(tert-butylperoxy)cyclohexane	≤13	≥13	≥74					3109	
1,1-Di-(tert-butylperoxy)cyclohexane + tert- butyl peroxy-2-ethylhexanoate	≤43+≤16	≥41						3105	
1,1-Di-(tert-butylperoxy)-3,3,5- trimethylcyclohexane	≤90		≥10					3103	30
Di-n-butyl peroxydicarbonate	>27-52		≥48			-15	-5	3115	

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<i>Organic peroxide</i>	<i>Concentration (per cent)</i>	<i>Diluent type A (per cent)</i>	<i>Diluent type B (per cent) (Note 1)</i>	<i>Inert solid (per cent)</i>	<i>Water (per cent)</i>	<i>Control tempera- ture (°C)</i>	<i>Emergency tempera- ture (°C)</i>	<i>UN generic entry</i>	<i>Sub- sidiary hazards and notes</i>
Di-n-butyl peroxydicarbonate	≤42 as a stable dispersion in water (frozen)					-15	-5	3118	
Di-n-butyl peroxydicarbonate	≤27		≥73			-10	0	3117	
Di-sec-butyl peroxydicarbonate	>52-100					-20	-10	3113	
Di-sec-butyl peroxydicarbonate	≤52		≥48			-15	-5	3115	
Di-(tert-butylperoxyisopropyl) benzene(s)	>42-100			≤57				3106	
Di-(tert-butylperoxyisopropyl) benzene(s)	≤42			≥58				Exempt	29
Di-(tert-butylperoxy)phthalate	>42-52	≥48						3105	
Di-(tert-butylperoxy)phthalate	≤52 as a paste							3106	20
Di-(tert-butylperoxy)phthalate	≤42	≥58						3107	
2,2-Di-(tert-butylperoxy)propane	≤52	≥48						3105	
2,2-Di-(tert-butylperoxy)propane	≤42	≥13		≥45				3106	
1,1-Di-(tert-butylperoxy)-3,3,5-trimethylcyclohexane	>90-100							FORBIDDEN	3
1,1-Di-(tert-butylperoxy)-3,3,5-trimethylcyclohexane	>57-90	≥10						3103	
1,1-Di-(tert-butylperoxy)-3,3,5-trimethylcyclohexane	≤77		≥23					3103	
1,1-Di-(tert-butylperoxy)-3,3,5-trimethylcyclohexane	≤57			≥43				3110	
1,1-Di-(tert-butylperoxy)-3,3,5-trimethylcyclohexane	≤57	≥43						3107	
1,1-Di-(tert-butylperoxy)-3,3,5-trimethylcyclohexane	≤32	≥26	≥42					3107	
Dicetyl peroxydicarbonate	≤100					+30	+35	3120	
Dicetyl peroxydicarbonate	≤42 as a stable dispersion in water					+30	+35	3119	
Di-4-chlorobenzoyl peroxide	≤77				≥23			FORBIDDEN	3
Di-4-chlorobenzoyl peroxide	≤52 as a paste							3106	20
Di-4-chlorobenzoyl peroxide	≤32			≥68				Exempt	29
Dicumyl peroxide	>52-100							3110	12
Dicumyl peroxide	≤52			≥48				Exempt	29
Dicyclohexyl peroxydicarbonate	>91-100					+10	+15	FORBIDDEN	3
Dicyclohexyl peroxydicarbonate	≤91				≥9	+10	+15	3114	
Dicyclohexyl peroxydicarbonate	≤42 as a stable dispersion in water					+15	+20	3119	
Didecanoyl peroxide	≤100					+30	+35	3114	
2,2-Di-(4,4-di(tert-butylperoxy)cyclohexyl) propane	≤42			≥58				3106	
2,2-Di-(4,4-Di-(tert-butylperoxy)cyclohexyl) propane	≤22		≥78					3107	

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Organic peroxide	Concentration (per cent)	Diluent type A (per cent)	Diluent type B (per cent) (Note 1)	Inert solid (per cent)	Water (per cent)	Control tempera- ture (°C)	Emergency tempera- ture (°C)	UN generic entry	Sub- sidiary hazards and notes
Di-2,4-dichlorobenzoyl peroxide	≤77				≥23			FORBIDDEN	3
≠ Di-2,4-dichlorobenzoyl peroxide	≤52 as a paste with silicon oil							3104	
Di-2,4-dichlorobenzoyl peroxide	≤52 as a paste					+20	+25	3118	
Di-(2-ethoxyethyl) peroxydicarbonate	≤52		≥48			-10	0	3115	
Di-(2-ethylhexyl)peroxydicarbonate	>77-100					-20	-10	3113	
Di-(2-ethylhexyl)peroxydicarbonate	≤77		≥23			-15	-5	3115	
Di-(2-ethylhexyl)peroxydicarbonate	≤62 as a stable dispersion in water					-15	-5	3119	
Di-(2-ethylhexyl)peroxydicarbonate	≤52 as a stable dispersion in water (frozen)					-15	-5	3120	
2,2-Dihydroperoxypropane	≤27			≥73				FORBIDDEN	3
Di-(1-hydroxycyclohexyl)peroxide	≤100							3106	
Diisobutyl peroxide	>32-52		≥48			-20	-10	FORBIDDEN	3
Diisobutyl peroxide	≤42 as a stable dispersion in water					-20	-10	3119	
Diisobutyl peroxide	≤32		≥68			-20	-10	3115	
Diisopropylbenzene dihydroperoxide	≤82	≥5			≥5			3106	24
Diisopropyl peroxydicarbonate	>52-100					-15	-5	FORBIDDEN	3
Diisopropyl peroxydicarbonate	≤52		≥48			-20	-10	3115	
Diisopropyl peroxydicarbonate	≤32	≥68				-15	-5	3115	
Dilauroyl peroxide	≤100							3106	
Dilauroyl peroxide	≤42 as a stable dispersion in water							3109	
Di-(3-methoxybutyl) peroxydicarbonate	≤52		≥48			-5	5	3115	
Di-(2-methylbenzoyl) peroxide	≤87				≥13	+30	+35	FORBIDDEN	3
Di-(3-methylbenzoyl) peroxide + Benzoyl (3-methylbenzoyl) peroxide + dibenzoyl peroxide	≤20+≤18+≤4		≥58			35	40	3115	
Di-(4-methylbenzoyl) peroxide	≤52 as a paste with silicon oil							3106	
2,5-Dimethyl-2,5-di-(benzoylperoxy)hexane	>82-100							FORBIDDEN	3
2,5-Dimethyl-2,5-di-(benzoylperoxy)hexane	≤82			≥18				3106	
2,5-Dimethyl-2,5-di-(benzoylperoxy)hexane	≤82				≥18			3104	
2,5-Dimethyl-2,5-di-(tert-butylperoxy)hexane	>90-100							3103	
2,5-Dimethyl-2,5-di-(tert-butylperoxy)hexane	>52-90	≥10						3105	
2,5-Dimethyl-2,5-di-(tert-butylperoxy)hexane	≤77			≥23				3108	
2,5-Dimethyl-2,5-di-(tert-butylperoxy)hexane	≤52	≥48						3109	
2,5-Dimethyl-2,5-di-(tert-butylperoxy)hexane	≤47 as a paste							3108	
+ 2,5-Dimethyl-2,5-di-(tert-butylperoxy)hexane	≤22			≥78				Exempt	29

Organic peroxide	Concentration (per cent)	Diluent type A (per cent)	Diluent type B (per cent) (Note 1)	Inert solid (per cent)	Water (per cent)	Control tempera- ture (°C)	Emergency tempera- ture (°C)	UN generic entry	Sub- sidiary hazards and notes
2,5-Dimethyl-2,5-di-(tert-butylperoxy)hexyne-3	>86-100							FORBIDDEN	3
2,5-Dimethyl-2,5-di-(tert-butylperoxy)hexyne-3	>52-86	≥14						3103	26
2,5-Dimethyl-2,5-di-(tert-butylperoxy)hexyne-3	≤52			≥48				3106	
2,5-Dimethyl-2,5-di-(2-ethylhexanoylperoxy)hexane	≤100					+20	+25	3113	
2,5-Dimethyl-2,5-dihydroperoxyhexane	≤82				≥18			3104	
2,5-Dimethyl-2,5-di-(3,5,5-trimethylhexanoylperoxy)hexane	≤77	≥23						3105	
1,1-Dimethyl-3-hydroxybutyl peroxyneohexanoate	≤52	≥48				0	+10	3117	
Dimyristyl peroxydicarbonate	≤100					+20	+25	3116	
Dimyristyl peroxydicarbonate	≤42 as a stable dispersion in water					+20	+25	3119	
Di-(2-neodecanoylperoxyisopropyl) benzene	≤52	≥48				-10	0	3115	
Di-n-nonanoyl peroxide	≤100					0	+10	3116	
Di-n-octanoyl peroxide	≤100					+10	+15	3114	
Di-(2-phenoxyethyl)peroxydicarbonate	>85-100							FORBIDDEN	3
Di-(2-phenoxyethyl)peroxydicarbonate	≤85				≥15			3106	
Dipropionyl peroxide	≤27		≥73			+15	+20	3117	
Di-n-propyl peroxydicarbonate	≤100					-25	-15	3113	
Di-n-propyl peroxydicarbonate	≤77	≥23				-20	-10	3113	
Disuccinic acid peroxide	>72-100							FORBIDDEN	3,17
Disuccinic acid peroxide	≤72				≥28	+10	+15	3116	
Di-(3,5,5-trimethylhexanoyl) peroxide	>52-82	≥18				0	+10	3115	
Di-(3,5,5-trimethylhexanoyl) peroxide	≤52 as a stable dispersion in water					+10	+15	3119	
Di-(3,5,5-trimethylhexanoyl) peroxide	≤38	≥62				+20	+25	3119	
Ethyl 3,3-di-(tert-amylperoxy)butyrate	≤67	≥33						3105	
Ethyl 3,3-di-(tert-butylperoxy)butyrate	>77-100							3103	
Ethyl 3,3-di-(tert-butylperoxy)butyrate	≤77	≥23						3105	
Ethyl 3,3-di-(tert-butylperoxy)butyrate	≤52			≥48				3106	
1-(2-Ethylhexanoylperoxy)-1,3-dimethylbutyl peroxyneohexanoate	≤52	≥45	≥10			-20	-10	3115	
tert-Hexyl Peroxyneodecanoate	≤71	≥29				0	+10	3115	
tert-Hexyl Peroxyneohexanoate	≤72		≥28			+10	+15	3115	
tert-Hexyl Peroxyneohexanoate	≤52 as a stable dispersion in water					+15	+20	3117	
3-Hydroxy-1,1-dimethylbutyl peroxyneodecanoate	≤77	≥23				-5	+5	3115	
3-Hydroxy-1,1-dimethylbutyl peroxyneodecanoate	≤52 as a stable dispersion in water					-5	+5	3119	

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Organic peroxide	Concentration (per cent)	Diluent type A (per cent)	Diluent type B (per cent) (Note 1)	Inert solid (per cent)	Water (per cent)	Control tempera- ture (°C)	Emergency tempera- ture (°C)	UN generic entry	Sub- sidiary hazards and notes
3-Hydroxy-1,1-dimethylbutyl peroxyneodecanoate	≤52	≥48				-5	+5	3117	
Isopropyl sec-butyl peroxydicarbonate +di-sec- butyl peroxydicarbonate +di-isopropyl peroxydicarbonate	≤32 + ≤15-18 + ≤12-15	≥38				-20	-10	3115	
Isopropyl sec-butyl peroxydicarbonate +di-sec- butyl peroxydicarbonate +di-isopropyl peroxydicarbonate	≤52 + ≤28 + ≤22					-20	-10	FORBIDDEN	3
Isopropylcumyl hydroperoxide	≤72	≥28						3109	13
p-Menthyl hydroperoxide	>72-100							3105	13
p-Menthyl hydroperoxide	≤72	≥28						3109	27
Methylcyclohexanone peroxide(s)	≤67		≥33			+35	+40	3115	
+ Methyl ethyl ketone peroxide(s)	See remark 33	≥41			≥9			3105	33 34
Methyl ethyl ketone peroxide(s)	see remark 8)	≥48						FORBIDDEN	3,8,13
Methyl ethyl ketone peroxide(s)	see remark 9)	≥55						3105	9
Methyl ethyl ketone peroxide(s)	see remark 10)	≥60						3107	10
Methyl isobutyl ketone peroxide(s)	≤62	≥19						3105	22
Methyl isopropyl ketone peroxide(s)	see remark 31)	≥70						3109	31
Organic peroxide, liquid, sample								3103	11
Organic peroxide, liquid, sample, temperature controlled								3113	11
Organic peroxide, solid, sample								3104	11
Organic peroxide, solid, sample, temperature controlled								3114	11
3,3,5,7,7-pentamethyl-1,2,4-trioxepane	≤100							3107	
Peroxyacetic acid, type D, stabilized	≤43							3105	13,14, 19
Peroxyacetic acid, type E, stabilized	≤43							3107	13,15, 19
Peroxyacetic acid, type F, stabilized	≤43							3109	13,16, 19
Peroxylauric acid	≤100					+35	+40	3118	
1-Phenylethyl hydroperoxide	≤38		≥62					3109	
Pinanyl hydroperoxide	>56-100							3105	13
Pinanyl hydroperoxide	≤56	≥44						3109	
Polyether poly-tert-butylperoxycarbonate	≤52		≥23					3107	
1,1,3,3-Tetramethylbutyl hydroperoxide	≤100							3105	
1,1,3,3-Tetramethylbutylperoxy-2 ethylhexanoate	≤100					+15	+20	3115	
1,1,3,3-Tetramethylbutyl peroxyneodecanoate	≤72		≥28			-5	+5	3115	
1,1,3,3-Tetramethylbutyl peroxyneodecanoate	≤52 as a stable dispersion in water					-5	+5	3119	
1,1,3,3-Tetramethylbutyl peroxy-pivalate	≤77	≥23				0	+10	3115	

<i>Organic peroxide</i>	<i>Concentration (per cent)</i>	<i>Diluent type A (per cent)</i>	<i>Diluent type B (per cent) (Note 1)</i>	<i>Inert solid (per cent)</i>	<i>Water (per cent)</i>	<i>Control tempera- ture (°C)</i>	<i>Emergency tempera- ture (°C)</i>	<i>UN generic entry</i>	<i>Sub- sidiary hazards and notes</i>
3,6,9-Triethyl-3,6,9-trimethyl-1,4,7 triperioxonane	≤17	≥18		≥65				3110	
3,6,9-Triethyl-3,6,9-trimethyl-1,4,7- triperioxonane	≤42	≥58						3105	28
3,6,9-Triethyl-3,6,9-trimethyl-1,4,7 triperioxonane	≤27	≥83						3109	

Notes:

1. Diluent type B may always be replaced by diluent type A. Boiling point diluent type B should be at least 60°C higher than the SADT of the organic peroxide.
2. Available oxygen ≤4.7 per cent.
3. "EXPLOSIVE" subsidiary hazard label required and consequently forbidden for transport by air under any circumstance.
4. Diluent may be replaced by Di-tert-butyl peroxide.
5. Available oxygen ≤9 per cent.
6. With ≤9 per cent hydrogen peroxide; available oxygen ≤10 per cent.
7. Only non-metallic packagings allowed.
8. Available oxygen >10 per cent and ≤10.7 per cent, with or without water.
9. Available oxygen ≤10 per cent, with or without water.
10. Available oxygen ≤8.2 per cent, with or without water.
11. See 5.3.2.5.
12. Not used.
13. "CORROSIVE" subsidiary hazard label required (see Figure 5-24).
14. Peroxyacetic acid formulations which fulfil the criteria of 5.3.2.4.
15. Peroxyacetic acid formulations which fulfil the criteria of 5.3.2.4.
16. Peroxyacetic acid formulations which fulfil the criteria of 5.3.2.4.
17. Addition of water to this organic peroxide will decrease its thermal stability.
18. No "CORROSIVE" subsidiary hazard label required for concentrations below 80 per cent.
19. Mixtures with hydrogen peroxide, water and acid(s).
20. With diluent type A, with or without water.
21. With ≥25 per cent diluent type A by mass, and in addition ethylbenzene.
22. With ≥19 per cent diluent type A by mass, and in addition methyl isobutyl ketone.
23. With <6 per cent di-tert-butyl peroxide.
24. With ≤8 per cent 1-isopropylhydroperoxy-4-isopropylhydroxybenzene.
25. Diluent type B with boiling point >110°C.
26. With <0.5 per cent hydroperoxides content.
27. For concentrations more than 56 per cent, "CORROSIVE" subsidiary hazard label required (see Figure 5-24).
28. Available active oxygen ≤7.6 per cent in diluent type A having a 95 per cent boil-off point in the range of 200-260°C.
29. Not subject to the requirements of these Instructions for Division 5.2.
30. Diluent type B with boiling point >130°C.
31. Active oxygen ≤6.7 per cent.
32. Active oxygen ≤4.15 per cent.
- + 33. Available oxygen ≤10 per cent.
- + 34. Sum of diluent type A and water ≥55 per cent and in addition methyl ethyl ketone.