

DANGEROUS GOODS PANEL (DGP)

TWENTIETH MEETING

Montréal, 24 October to 4 November 2005

Agenda Item 1: Development of proposals, if necessary, for amendments to Annex 18 — The Safe Transport of Dangerous Goods by Air

EXCEPTIONS OF DANGEROUS GOODS BY CONCENTRATION

(Presented by H. Okayama)

1. **INTRODUCTION**

1.1 In Table 3-1 Dangerous Goods List of the Technical Instructions, we find that there are some dangerous goods that have exceptions of "Not subject to these Instructions" or "Not restricted", depending on its concentration; by volume or percentage, and others that have no such exceptions described so that we are not sure whether these become "Not subject to these Instructions" when quite low content in dangerous goods. You will see the above-conditioned dangerous goods which are summarized in the following table.

Exceptions of Dangerous Goods by Concentration

(1) Group A

NBR	UN NBR	Proper Shipping Name	Provision of exceptions	Remarks
1	UN 3065 UN 3065	Alcoholic beverages Alcoholic beverages	A58 Not restricted, if containing not more than 24% alcohol by volume. A 9 Not restricted, if containing not more than 70% alcohol by	
			volume when packed in receptacles of 5L or less.	
2	UN 1170	Ethanol solution	A58 Not restricted, if containing not more than 24% alcohol by volume	

3	UN 1403	Calcium cyanamide	A71 Not restricted, if containing	
		-	not more than 0.1% calcium	
			carbide.	
4	UN 1408	Ferrosilicon	A10 Not restricted, if containing	
			30% or not less than 90%	
			silicon.	
5	UN 1869	Magnesium alloys	A15 Not restricted, if containing	
			not more than 50% magne-	
			sium.	
6	UN 1323	Ferrocerium	A42 Not restricted, if stabilized	
			against corrosion with a	
			minimum iron content of 10%.	

(2) Group B

1	UN 1789	Hydrochloric acid	A3 Not restricted, when tested it does not meet the established defining criteria for the class or division listed in column 3, or any other class or division.
2	UN 1824	Sodium hydroxide solution	A3 Ditto
3	UN 1814	Potassium hydroxide solution	A3 Ditto
4	UN 1791	Hypochlorite solution	A3 Ditto
5	UN 1908	Chlorite solution	A3 Ditto

(3) Group C

1	UN 2031	Nitric acid, with 20% or	Not conditional	
		less nitric acid		
	UN 2031	Nitric acid, with more		
		than 70% nitric acid		
2	UN 1830	Sulphuric acid, with	Not conditional	
		more than 51% acid		
	UN 2796	Sulphuric acid, with not		
		more than 51% acid		
3	UN 1805	Phosphoric acid, solid	Not conditional	
4	UN 1790	Hydrofluoric acid, more	Not conditional	
		than 60% strength		
	UN 1790	Hydrofluoric acid, not		
		more than 60% strength		
5	UN 1779	Formic acid	Not conditional	

(4) Group D

1	UN 2984	Hydrogen peroxide,	(Class 5.1 OxidizerPGIII)	★What about "less
		aqueous solution with		than 8% hydrogen
		not less than 8% but		peroxide "?
		less than 20% hydrogen		To be excluded from
		peroxide (stabilized as		Dangerous Goods or
		necessary)		not?

	UN 2014 UN 2014	Hydrogen peroxide, aqueous solution with not less than 20% but not more than 40% hydrogen peroxide(sta- bilized as necessary) Hydrogen peroxide, Aqueous solution with more than 40% but not more than 60% hydro- gen peroxide(stabilized as necessary)	(Class 5.1 & 8 PGII) (Class 5.1 & 8 Forbidden, Forbidden)	
	UN 2015	Hydrogen peroxide, aqueous solution, stabilized with more than 60% hydrogen peroxide	(Class 5.1 & 8 Forbidden, Forbidden)	
2	UN 2790	Acetic acid solution, More than 10% but less than 50% acid, by mass	(Class 8 PGIII)	★ What about "10% or Less?To be
	UN 2790	Acetic acid solution, Not less than 50% but not more than 80% acid by mass	(Class 8 PGII)	excluded from DG or not?
	UN 2789	Acetic acid solution, More than 80% acid, by mass	(Class 8 & 3 PGIII)	
3	UN 2672	Ammonia solution, relative density between 0.880 and 0.957 at 15 °C in water, with more than 10% but not more than 35% ammonia	(Class 8 PGIII)	★ What about "10% or less?To be excluded from DG or not?
	UN 2073 UN 3318	Ammonia solution, relative density less than 0.880 at 15°C in water, with more than 35% but not more than 50% ammonia Ammonia solution,	(Class 2.2 Forbidden 200/150k)	
	01(3316	relative density less than 0.880 at 15 °C in water, with more than 50% ammonia	(Class 2.3 & 8 Forbidden 200/25k)	
4	UN 2209	Formaldehyde solution with not less than 25% formaldehyde	(Class 8 PGIII)	★ What about 25% or less?—To be excluded from DG or not?
5	UN 2270	Ethylamine, aqueous solution with not less than 50% but not more than 70% ethylamine	(Class3 & 8 PGII)	★ What about less than 50% or more than 70% ethylamine? To be excluded from DG or not?

6	UN 2880	Calcium hypochlorite, hydrated with not less than 5.5% but not more than 16% water	(Class 5.1 PGII & III)	★ What about less than 5.5% water or more than 16% water?To be excluded from DG or not?
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The above Group A is very clear and has no questions.

The above Group B has basically no exceptions but a test needed to be excluded from Dangerous Goods.

The above Group C has absolutely no exceptions, including the cases even if it has 1% or 0.1% in concentration.

The above Group D has no provision of an exception in the Dangerous Goods List that leaves the users skeptical on deciding whether it is Dangerous Goods or not until they consult with Dangerous Goods specialists or some chemists. We think the users obviously feel this phenomenon not user-friendly for passenger handling staff at the reservation centres and check-in counters as well as cargo acceptance staff. Especially in the fields of reservation centres and check-in counters, it is always required for them to make a judgement within a certain time whether the proposed material intended to be carried in the aircraft by a passenger is Dangerous Goods or not. This sort of chemical goods would be apt to be allowed to bring in the aircraft as usual baggage unless they are identified as Dangerous Goods. On the other hand passengers are likely to have intentions to take these chemical goods with them as usual baggage for the purpose of their own work of study or business.

2. **PROPOSAL**

2.1 It is urgently requested to make clear on the above ★ marked questions at each item of Group D and provide concrete description as for example, "Not subject to the Instructions" or "Not restricted", on the blue pages or by way of special provisions as the above Group A cases, in order to persuade positively passenger handling staff and security screening staff as well as cargo acceptance staff. It is not a persuasive situation if it is left as it is.