

## 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

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Allocation of substances and articles to Packing Instruction P099

Comments on ST/SG/AC.10/C.3/2006/70

Transmitted by the International Air Transport Association (IATA)

### **Background**

The issues raised by the Expert from Australia with respect to the implementation and requirements application to Packing Instruction P099 very valid. However, in reviewing the assignment of substances and articles to P099 and also as part of the review of the air-mode packing instructions it was identified that there is a lack of consistency across the modal regulations with respect to the assignment of P099, or equivalent.

Appendix A to this INF paper lists by UN number the substances and articles assigned to P099 in the 14<sup>th</sup> edition of the UN Model Regulations and then lists the packing instructions assigned to those UN numbers in ADR, the ICAO Technical Instructions and IMDG Code.

Appendix A identifies that there are a number substances and articles that are permitted for transport by road and/or air in packagings other than those specifically approved by a competent authority as would be required by P099, e.g. UN 1222 – Isopropyl nitrate, UN 3095 – Corrosive solid, self-heating, n.o.s., etc.

In addition a column headed “49 CFR” has been included in the table to identify that the majority of substances are permitted in US domestic road/rail transport without approval from the competent authority.

Having this relaxation for the packaging requirement for some modes of transport creates a potential for multi-modal disharmony. In general terms, the provisions contained within the UN Model Regulations should be taken as a minimum standard. So while some modes, or States, may impose additional restrictions or requirements, the modal or State regulations should not provide for a lesser standard than that contained in the Model Regulations.

### **Proposal**

The Subcommittee is invited to consider if, during the next biennium, the assignment of Packing Instruction P099 in the Model Regulations should be reviewed in light of the relaxations already in place for international road and/or air transport for the substances and articles identified.

## Appendix A

UN#	Proper Shipping Name	Class / Div	Sub Risk	PG	ADR	49 CFR <sup>i</sup>	ICAO TI <sup>ii</sup>	IMDG Code
1194	ETHYL NITRILE	3	6.1	I	P001	173.201	PI 305/ 5.0 L Y305 1.0 L PI 307/ 60.0 L	P099
1222	ISOPROPYL NITRATE	3		II	LQ 1.0 L P001	173.202	PI 305/ 5.0 L Y305 1.0 L PI 307/ 60.0 L	P099
1261	NITROMETHANE	3		II	LQ 1.0 L P001	173.202	Forbidden PI 307 60.0 L	P099
1614	HYDROGEN CYANIDE STABILIZED	6.1		I	P601	173.195	Forbidden Forbidden	P099
1865	N-PROPYL NITRATE	3		II	LQ 1.0 L P001	173.202	PI 305/ 5.0 L Y305 1.0 L PI 307/ 60.0 L	P099
2186	HYDROGEN CHLORIDE REFRIGERATED LIQUID	2.3	8		Forbidden	173.314 173.315	Forbidden Forbidden	Forbidden
2249	DICHLORODIMETHYL ETHER STABILIZED	6.1	3	I	Forbidden	173.201 173.243	Forbidden Forbidden	P099
3094	CORROSIVE LIQUID, WATER- REACTIVE, N.O.S.	8	4.3	I	P001	173.201 173.243	Forbidden PI 809 / 1.0 L	P099
3095	CORROSIVE SOLID, SELF-HEATING, N.O.S.	8	4.2	I	P002	173.211 173.243	PI 810 / 1.0 kg PI 811 / 25 kg	P099
3096	CORROSIVE SOLID, WATER- REACTIVE, N.O.S.	8	4.3	I	P002	173.211 173.243	PI 810 / 1.0 kg PI 811 / 25 kg	P099
3097	FLAMMABLE SOLID, OXIDIZING, N.O.S.	4.1	5.1	II/III	Forbidden	173.214	Forbidden Forbidden	P099
3100	OXIDIZING SOLID, SELF-HEATING, N.O.S.	5.1	4.2	I/II	Forbidden	173.214	Forbidden Forbidden	P099
3121	OXIDIZING SOLID, WATER- REACTIVE, N.O.S.	5.1	4.3	I/II	Forbidden	173.214	Forbidden Forbidden	P099
3123	TOXIC LIQUID, WATER-REACTIVE, N.O.S.	6.1	4.3	I	P099	173.201 173.243	Forbidden PI 604 / 1.0 L	P099
3124	TOXIC SOLID, SELF-HEATING, N.O.S.	6.1	4.2	I	P002	173.211 173.242	PI 606 / 5.0 kg PI 607 / 15.0 kg	P099
3125	TOXIC SOLID, WATER-REACTIVE, N.O.S.	6.1	4.3	I	P099	173.211 173.242	PI 606 / 5.0 kg PI 607 / 15.0 kg	P099
3127	SELF-HEATING SOLID, OXIDIZING, N.O.S.	4.2	5.1	II/III	Forbidden	173.214	Forbidden (A2) Forbidden (A2)	P099
3133	WATER-REACTIVE SOLID, OXIDIZING, N.O.S.	4.3	5.1	II/III	Forbidden	173.214	Forbidden (A2) Forbidden (A2)	P099
3137	OXIDIZING SOLID, FLAMMABLE, N.O.S.	5.1	4.1	I	Forbidden	173.214	Forbidden Forbidden	P099
3255	TERT-BUTYL HYPOCHLORITE	4.2	8	I	Forbidden	173.211 173.243	Forbidden Forbidden	P099
3256	ELEVATED TEMPERATURE LIQUID, FLAMMABLE, N.O.S.	3		III	P099	173.247	Forbidden Forbidden	P099
3257	ELEVATED TEMPERATURE LIQUID, N.O.S.	9		III	P099	173.247	Forbidden Forbidden	P099

UN#	Proper Shipping Name	Class / Div	Sub Risk	PG	ADR	49 CFR	ICAO TI	IMDG Code
3258	ELEVATED TEMPERATURE SOLID, N.O.S.	9		III	P099	173.247	Forbidden Forbidden	P099
3301	CORROSIVE LIQUID, SELF-HEATING, N.O.S.	8	4.2	I	P001	173.201 173.243	PI 807 / 0.5 L PI 809 / 2.5 L	P099
3315	CHEMICAL SAMPLE, TOXIC, N.O.S.	6.1		I	P099	N/A	Forbidden (A106) Forbidden (A106)	P099
3319	NITROGLYCERIN MIXTURE DESENSITIZED, SOLID, N.O.S. with more than 2% but not more than 10% nitroglycerin, by weight	4.1			P099	Approval required – See SP 118	Forbidden (A1) PI 435 / 0.5 kg	P099
3343	NITROGLYCERIN MIXTURE DESENSITIZED, LIQUID, N.O.S.	3			P099	173.214	Forbidden Forbidden	P099
3357	NITROGLYCERIN MIXTURE DESENSITIZED, LIQUID, N.O.S.	3			P099	173.202 173.243 Approval required - See SP 142	Forbidden Forbidden	P099
3375	AMMONIUM NITRATE EMULSION or SUSPENSION or GEL	5.1		II	P099	173.214	Forbidden Forbidden	P099
3379	DESENSITIZED EXPLOSIVE, LIQUID, N.O.S.	3		I	P099	173.201 Approval required - See SP 164	Forbidden Forbidden	P099
3380	DESENSITIZED EXPLOSIVE, SOLID, N.O.S.	4.1		I	P099	173.211 Approval required - See SP 164	Forbidden Forbidden	P099
3468	HYDROGEN IN METAL HYDRIDE STORAGE SYSTEMS	2.1			P099	173.214	Forbidden (A1) PI 214 / 100 kg	P099

<sup>i</sup> **49 CFR** – identifies the section within the US Code of Federal Regulations, Title 49 that specifies the non-bulk packagings authorized for the transport of the substance or article.

<sup>ii</sup> **ICAO TI** – Some substances and articles are approved for transport subject to the conditions of a special provision. The relevant special provisions are included below for information:

**A1** This commodity may be transported on passenger aircraft only with the prior approval of the appropriate authority of the State of origin under the written conditions established by that authority. A copy of the document of approval, showing the quantity limitations and packing requirements, must accompany consignment. The commodity may be carried on cargo aircraft in accordance with Columns K and L of the List of Dangerous Goods in Subsection 4.2. Where States, other than the State of origin, have lodged a variation advising that they require prior approval of shipments made under this Special Provision, approval must also be obtained from these States, as appropriate.

**A2** This commodity may be transported on passenger aircraft and on cargo aircraft, only with the prior approval of the appropriate authority of the State of origin under the written conditions established by the authority. Where States, other than the State of origin, have lodged a variation advising that they require prior approval of shipments made under this Special Provision, approval must also be obtained from the States of transit, overflight and destination and of State of the operator, as appropriate.

In each case, a copy of the document(s) of approval, showing the quantity limitations and the packing and labelling requirements, must accompany consignment.

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**A106** This entry may only be used for samples of chemicals taken for analysis in connection with the implementation of the Chemical Weapons Convention.

They may be transported on a passenger or cargo aircraft providing prior approval has been granted by the appropriate authority of the State of origin or the Director General of the Organization for the Prohibition of Chemical Weapons. For instructions on shipping such samples contact the national competent authority.

The substance is assumed to meet the criteria of Packing Group I for Division 6.1. Subsidiary risk labelling is not required. A copy of the document of approval, showing the quantity limitations and the packing requirements, must accompany the consignment.

**Note:**

*The transport of substances under this description must be in accordance with chain of custody and security procedures specified by the Organization for the Prohibition of Chemical Weapons.*

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