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**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-second session**

Geneva, 3 – 11 December 2012

Item 7 of the provisional agenda

**New proposals for amendments to the Model Regulations  
on the Transport of Dangerous Goods****Environmentally hazardous paints, printing inks and  
adhesives****Transmitted by the International Paint & Printing Ink Council  
(IPPIC)<sup>1</sup>****Introduction**

1. The increase in the number of paint, printing inks, and adhesives coming into the scope of the transport of dangerous goods regulations because of classification as environmentally hazardous under GHS has created confusion for emergency responder, transport operators, regulators and industry personnel. IPPIC have reviewed these issues overall in order to develop proposals relating to Dangerous Goods List entries and packaging provisions.

2. These products include oil- or solvent-borne materials with flashpoints above 60 °C and the ever increasing ranges of water-borne adhesives, paints, inks, wood preservatives and the resins used in their manufacture, as well as some cleaning materials, all of which are now classified in Class 9. These water-borne and high flash-point products have historically been transported as unregulated products, as they presented little or no safety risk, when compared with those of PG III for flammability or corrosivity.

3. Paint and printing ink are extremely high volume commodities in the global marketplace. Current data suggests that some 50% of the paint and printing ink shipped is water-borne, a high percentage of which is now regulated in Class 9. In the European Union

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<sup>1</sup> In accordance with the programme of work of the Sub-Committee for 2011-2012, approved by the Committee at its fifth session (refer to ST/SG/AC.10/C.3/76, para. 116 and ST/SG/AC.10/38 para. 16)

alone, this is estimated to exceed some 5 million tonnes per annum. Examples of the additives which now cause the products to be EHS include zinc and the biocides to achieve product stability in warmer climates.

4. Over the years it has been recognised that the use of generic entries for paint and printing inks, etc, has made it easier for emergency responders, ship operators and transport personnel to understand the type of product being shipped and appropriate actions to take in case of spillage. At present, there are 4 entries for “PAINT” and “PAINT RELATED MATERIAL” in the Dangerous Goods List in the Model Regulations. These are for materials meeting the criteria for Class 3 (UN 1263), for Class 8 (UN 3066) and the criteria for Class 3 and 8 (UN 3469 and UN 3470): see annex.

5. For paint and printing ink products that meet the Class 9 criteria, manufacturers are required to use UN 3077 or UN 3082 Environmentally Hazardous Substance, solid or liquid, N.O.S. followed by the technical names in brackets. The proper shipping name for these entries are quite lengthy and complex (including technical names), which are required to be marked on packages and included in the transport document. Many of the technical names are lengthy and incomprehensible to the general user and do not clearly identify the material as paint or printing ink or adhesive. First responders will more clearly appreciate the task in front of them if they arrive at an incident and instantly recognise the material in question. In addition, some of our members have had loads delayed because port authorities have sought clarification on the goods, despite the fact that the shipment was fully marked and documented in accordance with current regulations. A generic N.O.S. description is not warranted when there is a more accurate and descriptive proper shipping name available - this is a long-held principle of dangerous goods transport and why UN1263, UN1210, UN1133, etc. were originally established. It is IPPIC’s belief that the inclusion of specific entries for Class 9 paints, printing inks, and adhesives would overcome these problems for the emergency response community and the shipping industry. Please note that the development of UN entries under Class 9 for these products will not alter the current requirement for sea transport that the technical names be added to the description in accordance with 3.2.1.9 of the IMDG Code.

6. During the preparation of this paper, it has been suggested to us that there are water-borne versions of numerous types of materials on the Dangerous Goods List that could meet the new Class 9 criteria and this would lead to a proliferation of new UN numbers. Our initial review of the DGL indicates that there are only a handful of such materials. These include Adhesives (UN 1133); Extracts, Aromatic Liquids (UN 1169); Perfumery Products (UN 1266); Wood Preservatives, Liquid (UN 1306); Coating Solutions (UN 1139); and Resin Solutions (UN 1866). If the Sub-Committee are willing to embrace the logic of our case for paint and printing inks, then we believe it will be appropriate to include similar numbers, at least for adhesives and resin solutions.

## Proposal

7. The following new entries be added to the Dangerous Goods List in the Model Regulations:

-1	-2	-3	-4	-5	-6	-7a	-7b	-8	-9	-10	-11
3XXX	PAINT (including paint, lacquer, enamel, stain, shellac, varnish, polish, liquid filler and liquid lacquer base) or PAINT RELATED MATERIAL, (including paint thinning or reducing compound)	9		III	223 331	5 L	E1	P001 IBC03 LP01	PP1	T4	TP1 TP29
3YYY	PRINTING INK or PRINTING INK RELATED MATERIAL (including printing ink, thinning or reducing compound)	9		III	223 331	5 L	E1	P001 IBC03 LP01	PP1	T4	TP1 TP29
3AAA	ADHESIVES	9		III	223 331	5 L	E1	P001 IBC03 LP01	PP1	T4	TP1 TP29
3BBB	RESIN SOLUTION	9		III	223 331	5 L	E1	P001 IBC03 LP01	PP1	T4	TP1 TP29

8. The Index to be amended to accommodate the new entries.

## Justification

9. New UN numbers for PAINT, PRINTING INK, ADHESIVES and RESIN SOLUTION in class 9 makes it clear to first responders that the material in question is a paint, printing ink, adhesive or resin solution. Consequently, it will not be necessary to decipher the generic n.o.s. proper shipping name in order to determine the immediate response in case of an incident. Safety and the work of emergency responders are enhanced while the addition of a UN number and designated Proper Shipping Name in Class 9 logically extends the existing classification framework for these types of material.

10. For ease of reference, IPPIC is requesting Class 9 entries for those materials which are included in the PP1 packing instruction only at this time.

## Annex

## Existing paint and printing ink UN entries

-1	-2	-3	-4	-5	-6	-7a	-7b	-8	-9	-10	-11
1263	PAINT (including paint, lacquer, enamel, stain, shellac, varnish, polish, liquid filler and liquid lacquer base) or PAINT RELATED MATERIAL (including paint thinning or reducing compound)	3		I	163	500 ml	E3	P001		T11	TP1 TP8 TP27
1263	PAINT (including paint, lacquer, enamel, stain, shellac, varnish, polish, liquid filler and liquid lacquer base) or PAINT RELATED MATERIAL (including paint thinning or reducing compound)	3		II	163	5 l	E2	P001 IBC02	PP1	T4	TP1 TP8 TP28
1263	PAINT (including paint, lacquer, enamel, stain, shellac, varnish, polish, liquid filler and liquid lacquer base) or PAINT RELATED MATERIAL (including paint thinning or reducing compound)	3		III	163 223	5 l	E1	P001 IBC02	PP1	T4	TP1 TP8 TP28
3066	PAINT (including paint, lacquer, enamel, stain, shellac, varnish, polish, liquid filler and liquid lacquer base) or PAINT RELATED MATERIAL (including paint thinning or reducing compound)	8		II	163	1 l	E2	P001 IBC02		T7	TP2 TP28
3066	PAINT (including paint, lacquer, enamel, stain, shellac, varnish, polish, liquid filler and liquid lacquer base) or PAINT RELATED MATERIAL (including paint thinning or reducing compound)	8		III	163 223	5 l	E1	P001 IBC03		T4	TP1 TP29
3469	PAINT, FLAMMABLE, CORROSIVE (including paint, lacquer, enamel, stain, shellac, varnish, polish, liquid filler and liquid lacquer base) or PAINT RELATED MATERIAL, FLAMMABLE, CORROSIVE (including paint thinning or reducing compound)	3	8	I	163	0	E0	P001		T11	TP2 TP27
		3	8	II	163	1 L	E2	P001 IBC02		T7	TP2 TP8 TP28
		3	8	III	163 223	5 L	E1	P001 IBC03		T4	TP1 TP29
3470	PAINT, CORROSIVE, FLAMMABLE (including paint, lacquer, enamel, stain, shellac, varnish, polish, liquid filler and liquid lacquer base) or PAINT RELATED MATERIAL CORROSIVE, FLAMMABLE (including paint thinning or reducing compound)	8	3	II	163	1 L	E2	P001 IBC02		T7	TP2 TP8 TP28
1210	PRINTING INK, flammable or PRINTING INK RELATED MATERIAL (including printing ink thinning or reducing compound), flammable	3		I	163	500 ml	E3	P001		T11	TP1 TP8

-1	-2	-3	-4	-5	-6	-7a	-7b	-8	-9	-10	-11
1210	PRINTING INK, flammable or PRINTING INK RELATED MATERIAL (including printing ink thinning or reducing compound), flammable	3		II	163	5 L	E2	P001 IBC02	PP1	T4	TP1 TP8
1210	PRINTING INK, flammable or PRINTING INK RELATED MATERIAL (including printing ink thinning or reducing compound), flammable	3		III	163 223	5 L	E1	P001 IBC03 LP01	PP1	T2	TP1