
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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Listing, classification and packing

Technical names for environmentally hazardous goods of Class 9 (UN 3077 and UN 3082)

**Transmitted by the International Paint and Printing Ink Council
(IPPIC)**

Introduction

1. At its forty-third session in June 2013, the Sub-Committee considered a proposal from IPPIC (document ST/SG/AC.10/C.3/2013/29) to simplify the task of emergency responders, transport handlers and industry by creating new entries in the Dangerous Goods List for certain ‘commodity’ products hitherto transported under UN numbers 3077 and 3082 (“ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID/LIQUID, N.O.S.”). These entries were proposed for analogy with existing entries for the same product type but with other primary risks, for example UN 1263 PAINT (Class 3), UN 3066 PAINT (Class 8).
2. Whilst some experts were in favour of the proposal to introduce specific UN numbers for such Class 9 substances, others were reluctant to add new entries and suggested that the problems described would be better addressed by looking at the requirements of Special Provision 274, which is assigned to UN 3077 and UN 3082.
3. IPPIC has continued to consider this issue, in consultation with other delegations and stakeholders, and offers this new proposal for the consideration of the Sub-Committee.

Discussion and justification

4. Paint and printing ink are extremely high volume commodities in the global marketplace. Current data suggest that some 50% of the paint and printing ink shipped is now water-borne, a high percentage of which is regulated in Class 9. In the European Union alone, this is estimated to exceed 5 million tonnes per annum. Examples of the additives which now cause the products to be classified as environmentally hazardous include zinc and the biocides required to achieve product stability in warmer climates.
5. Special Provision 274 requires the proper shipping name (PSN) to be supplemented with the technical name, according to 3.1.2.8, for the purposes of documentation and package marking. These technical (chemical) names can comprise many characters and so lead to a very long PSN; in some cases this could even exceed the size of the relevant field in an IT system and thus cause it to be truncated. The following are some genuine examples of paint-related products transported under UN 3077 or UN 3082:

Powder coating:

UN 3077, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S., (Benzene-1,2,4,5-tetracarboxylic acid, compound with 4,5-dihydro-2-phenyl-1H-imidazole (1:1); Phenol, 4,4'-(1-methylethylidene)bis-, polymer with 2,2'-[(1-methylethylidene) bis(4,1-phenyleneoxymethylene)]bis[oxirane]), 9, PG III

Solvent-based paint:

UN 3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S., (Naphtha (petroleum), hydrodesulphurised heavy; Solvent naphtha (petroleum), medium aliphatic), 9, III, (E)

UV-cured coating:

UN 3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S., (Sulfonium, diphenyl[(phenylthio)phenyl]-, hexafluorophosphate(1-); Sulfonium, (thiodi-4,1-phenylene)bis[diphenyl-, bis[hexafluorophosphate(1-)]], 9, PG III

6. As illustrated by the examples above, some technical names can be incomprehensible to many readers. Also naming selected ingredients in this way does not clearly identify the nature of the material in question (such as paint). This has been known to lead to delayed shipments whilst port authorities seek clarification on the dangerous goods, despite the consignment being marked and documented in full compliance with the current regulations.
7. This lack of clarity may also hinder the task of emergency responders. Feedback received by IPPIC from some competent authorities and emergency responders' organisations has indicated that the technical name is of limited or no value in the initial response phase, where the priority is the containment and clean-up of a spill. It can however be useful for subsequent follow-up measures to limit the impact on the environment, but in this case the relevant component(s) can be readily identified from the safety data sheet for the product, along with other useful information.
8. Under ADR for road transport in Europe, dangerous goods transported under entries other than UN 3077/ UN 3082 are also required to be classified as environmentally hazardous where appropriate, in addition to their primary (and any secondary) hazard. Here however the PSN is not required to be supplemented by a technical name, although the dangerous goods could represent an equal or greater hazard to the environment compared with those transported under UN 3077 and UN 3082. This suggests that the technical name is not considered to provide important additional information in the first instance.
9. IPPIC therefore suggests that the addition of the technical name is unnecessary in the case of UN 3077 and UN 3082, and the application of special provision 274 to these two entries in the Dangerous Goods List could be reconsidered.
10. At present this proposal is without prejudice to the requirement in section 3.1.2.9.1 of the IMDG Code to supplement the proper shipping name with the name of marine pollutants in accordance with 2.10.3. IPPIC would nonetheless welcome a discussion with interested delegations on the relevance of this requirement in the context of maritime transport.

Proposal

11. On the basis of the arguments above, IPPIC proposes the deletion of special provision 274 from column 6 in the Dangerous Goods List for the entries UN 3077 and UN 3082. The Sub-Committee is invited to consider and discuss this idea, and if it finds support IPPIC is willing to submit a formal proposal for the next session.