Economic Commission for Europe

Inland Transport Committee

Working Party on the Transport of Dangerous Goods

28 August 2013

Joint Meeting of the RID Committee of Experts and the Working Party on the Transport of Dangerous Goods

Geneva, 17-27 September 2013 Item 5 of the provisional agenda Interpretation of RID/ADR/ADN

Classification of mixtures with marine pollutants

Transmitted by the Government of Germany

- 1. This document provides information on the outcome of a discussion during the 19th session of the Editorial and Technical Group (E&T Group). The E&T Group considered document DSC 17/3/11, seeking clarification on how to apply the provisions in 2.0.2.5 of the IMDG Code to mixtures containing components which are not listed by name and of which the only hazard is to the environment.
- 2. The text of 2.0.2.5 of the IMDG Code is text from the UN Model Regulations and the same as 2.1.3.3 RID/ADR/ADN and RID/ADR/ADN require the indication of an environmentally hazardous substance in the transport document. Thus, the E&T Group invited delegations to bring the issue to the attention of the joint meeting (RID/ADR/ADN) for consideration.
- 3. According to 2.0.2.5 of the IMDG Code, mixtures of single predominant substances identified by name in the Dangerous Goods List and one or more substances not subject to these Regulations and/or traces of one or more substances identified by name in the Dangerous Goods List, shall be assigned to the UN number and proper shipping name of the predominant substance named in the Dangerous Goods List.
- 4. Based on this rule the question arises, how to deal with mixtures, consisting of dangerous good listed by name and a second component of which the only hazard is the hazard to the environment and which is not listed by name.
- 5. The following classifications are possible:
- (a) Assignment of the UN-number of the predominant substance, with or without the additional information on the marine pollutant ingredient, or
- (b) Assignment of a generic entry, listed substance and marine pollutant added as technical names in brackets after the description

Example: Mixture containing Acetone (listed) and an epoxy resin (not listed, environmentally hazardous), Formulation: 70% Acetone and 30% Epoxy resin

Following (a) the classification would be

UN1090 Acetone solution (Epoxy resin), 3, II, Marine Pollutant

UN 1090 Acetone solution, 3, II

Following (b) the classification would be



or

UN 1993 Flammable liquid, n.o.s. (Acetone, Epoxy resin), 3, II, Marine Pollutant

- 6. The E& T Group came to the conclusion that the application of 2.0.2.5 does not lead to a classification under a n.o.s. entry and information on the marine pollutant and a technical name is required. Thus the classification under UN number of the predominant substance with the additional information on marine pollutant ingredient is the appropriate classification. This leads to the following classification for the example given above: UN1090 Acetone solution (Epoxy resin), 3, II, Marine Pollutant.
- 7. Document DSC 17/3/11 and an extract from the Report of the E&T Group are presented as annexes to this document.
- 8. The Joint Meeting is invited to note the information above and to confirm that the classification of mixtures with components which are not listed by name and of which the only hazard is to the environment as described in paragraph 6 is also acceptable for carriage under RID/ADR/ADN.

DSC 17/3/11

13 July 2012

Original: ENGLISH

Annex 1

SUB-COMMITTEE OF DANGEROUS GOODS, SOLID CARGOES AND CONTAINERS 17th session Agenda item 3

AMENDMENTS 37-14 TO THE IMDG CODE AND SUPPLEMENTS, INCLUDING HARMONIZATION OF THE IMDG CODE WITH THE UN RECOMMENDATIONS ON THE TRANSPORT OF DANGEROUS GOODS

Classification of mixtures with marine pollutants

Submitted by Germany

SUMMARY

Executive This document seeks for clarification how to apply the

summary: provisions in 2.0.2.5 of the IMDG Code to mixtures containing

marine pollutants.

Strategic direction: 5.2

High-level action: 5.2.3

Planned output: 5.2.3.1

Action to be taken: Paragraph 6

Related

documents:

Introduction

- According to 2.0.2.5 of the IMDG Code, mixtures of single predominant substances identified by name in the Dangerous Goods List and one or more substances not subject to these Regulations and/or traces of one or more substances identified by name in the Dangerous Goods List, shall be assigned the UN number and proper shipping name of the predominant substance named in the Dangerous Goods List. The current wording was incorporated in the 35th Amendment to the IMDG Code, due to the harmonisation with the 16th revised edition of the UN model regulation
- 2 Based on this rule the question arises, how to deal with mixtures, consisting of dangerous good listed by name and a second component of which the only hazard is the hazard to the environment and which is not listed by name. Environmentally hazardous

substances are a specific problem, as they need to be named on the transport document according to the IMDG-Code as a Marine Pollutant.

- 3 In general 2 classifications are possible:
 - a) Assignment of the UN-number of the predominant substance
 - a. With the additional information on the marine pollutant ingredient, or
 - b. Without the additional information of the marine pollutant ingredient, or
 - b) Assignment of a generic entry, listed substance and marine pollutant added as technical names in brackets after the description
- 4 To make the options more clear here are 2 examples:

Example 1:

Mixture containing Acetone (listed) and an epoxy resin (not listed, environmentally hazardous)

Formulation:

70% Acetone

30% Epoxy resin

Following a) the classification would be

UN1090 Acetone solution (Epoxy resin), 3, II, Marine Pollutant or UN 1090 Acetone solution, 3, II

Following b) the classification would be

UN 1993 Flammable liquid, n.o.s. (Acetone, Epoxy resin), 3, II, Marine Pollutant

Example 2:

Mixture containing Zinc chlorate (listed) and Zinc oxide (not listed, environmentally hazardous, chronic 1)

Formulation

90% Zinc chlorate

10% Zinc oxide

Following a) the classification would be

UN1513 Zinc Chlorate mixture (Zinc oxide), 5.1, II, Marine Pollutant or UN 1513 Zinc Chlorate mixture, 5.1, II

Following b) the classification would be

UN 1479 Oxidizing solid, n.o.s. (Zinc chlorate, zinc oxide), 5.1, II, Marine Pollutant

5 There are good arguments for either way; therefore guidance is needed to ensure classification of these kinds of mixtures in a harmonized way, for all modes of transport. Arguments for each direction are listed below:

Assignment to the UN-number of the predominant substance listed in part 3	Assignment to a generic UN-number
Packing instructions of the predominant substance have to be used	Emergency procedure are different because of the marine pollutant ingredient
Emergency response based on the UN- number of the most severe hazard → more suitable emergency response possible	Mixture has 2 different hazards, which are better reflected by a generic entry
Segregation based on most severe hazard	Segregation based on all hazards
Normally the marine pollutant component needs not to be indicated, as this is only	If a generic entry is chosen, which is not linked to SP274, the hazardous
required for generic entries	ingredients need not to be indicated

Action requested of the Sub-Committee

6 The Sub-Committee is invited to consider the information provided and take action as appropriate.

Annex 2

Extract from DSC 18/7/1 (Report of the Editorial and Technical Group)

"Classification of mixtures with marine pollutants

- 3.35 The group considered document DSC 17/3/11 (Germany), seeking clarification on how to apply the provisions in 2.0.2.5 of the IMDG Code to mixtures containing marine pollutants.
- 3.36 After a long discussion on the different options, the group came to the following conclusions when the mixture contains components which are not listed by name and of which the only hazard is to the environment:
 - the application of 2.0.2.5 does not lead to a classification under an n.o.s. entry; and
 - information on the marine pollutant and a technical name is required.

Thus the classification under UN number of the predominant substance with the additional information on marine pollutant ingredient is the appropriate classification (see example UN 1263 in 3.1.2.9.2). In this context, the group invited delegations to bring the issue to the attention of the joint meeting (ADR/RID/ADN) for consideration."

6