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PREPARATION OF DRAFT AMENDMENT 04-17 TO THE IMSBC CODE

**New proposals of amendments to the Code, new individual schedules
or amendments to existing ones**

**New entry for oily vegetable materials and their processing by-products
(non-hazardous) to substitute existing schedule for SEED CAKE (non-hazardous)**

Submitted by Germany and Italy

SUMMARY

<i>Executive summary:</i>	This document contains a proposal to include a new entry for oily vegetable materials and their processing by-products in bulk (non-hazardous) in order to substitute the existing schedule for SEED CAKE (non-hazardous)
<i>Strategic direction:</i>	5.2
<i>High-level action:</i>	5.2.3
<i>Output:</i>	5.2.3.3
<i>Action to be taken:</i>	Paragraph 14
<i>Related documents:</i>	DSC 18/6/23; CCC 1/5/4 and CCC 2/5/6

Introduction

1 Seed cake is the residue remaining after oil has been extracted by a solvent process or expelled mechanically from oil bearing seeds. Seed cake may be transported as Group B solid bulk cargo, depending on oil extraction process and its oil and moisture content, under three different schedules.

2 The existing entries for SEED CAKE comprise:

- .1 SEED CAKE, containing vegetable oil UN 1386
(a) mechanically expelled seeds, containing more than 10% of oil or more than 20% of oil and moisture combined;

- .2 SEED CAKE, containing vegetable oil UN 1386
(b) solvent extractions and expelled seeds, containing not more than 10% of oil and when the amount of moisture is higher than 10%, not more than 20% of oil and moisture combined;
- .3 SEED CAKE UN 2217
with not more than 1.5% oil and not more than 11% moisture; and
- .4 SEED CAKE
(non-hazardous), with a list of items and under particular requirements with respect to oil content or moisture.

3 Seed cake may also be transported as Group C solid bulk cargo (non-hazardous), although this is only allowed for a few kinds of cereals and for a particular oil and moisture range. Notwithstanding the above, almost all entries for seed cake with secondary names (not BCSN) in appendix 4 of the IMSBC Code refer to Group B or C. This may lead to the misunderstanding that every kind of seed cake may be transported as Group C cargo under the schedule for "SEED CAKE (non-hazardous)".

Discussion

4 The existing entry "SEED CAKE" does not correctly include the whole seeds (soya beans, sunflower beans, etc.), materials not related to seeds (citrus pulp) or extracted seed that has not been shaped into "cakes" (bakery materials, meal, oily, etc.). Moreover, the actual oil/moisture/method of extraction criteria could be adequate to ascertain the dangerous properties of seed cakes, but there is evidence that this might not always be the case and, furthermore, it might not be suitable for other derivatives. The existing entry for SEED CAKE (non-hazardous) cannot be extended to all types of oily vegetable materials and relevant derivatives that are being offered for shipment or will be offered in future.

5 The existing entry for SEED CAKE (non-dangerous) covers only a limited number of cargoes, and new cargoes that are eligible for bulk sea cargo transport under this entry require this schedule to be reviewed in order to be transported as Group C cargoes. This problem is becoming more and more important as the number of such cargoes is continuously increasing.

6 For sea transport of bulk cargoes, a new bulk cargo shipping name should, therefore, include all the dangerous oily vegetable material cargoes, not taking into account whether they are fresh and/or whole vegetable materials, processed vegetable materials (whatever be their production process, hot/cold extraction, pressure extraction, steam or solvent extraction) or the kind of hazard they can cause.

7 Actually, this proposal was part of a broader proposal aiming to reform the entries for packaged and bulk transport of oily vegetable materials and their processing by products. In particular, bulk sea cargoes should be allowed to be transported as Group B cargo. This approach, however, had no success, since the UN Committee of Experts on The Transport of Dangerous Goods (UN TDG) refused to amend the existing entries for SEED CAKE so that the proper shipping name covers further organic materials with self-heating properties. One reason for this is the fact that n.o.s. entries apply to the transport of packaged organic material of Class 4.2 which is not seed cake (see document ST/SG/AC.10/C.3/2015/7, paragraphs 30 and 31 of document ST/SG/AC.10/C.3/94).

8 Presently, it is not possible to estimate the time frame for a solution by UN TDG. Even if a new proposal were to be submitted to and accepted by UN TDG in 2016, it would be incorporated only in amendment 39-18 to the IMDG-Code (enter into force on 1 January 2020, applicable as of 1 January 2019). Consequently, the consideration on the basis of harmonization could start after 2018, and, after reaching a decision, the implementation of the IMSBC Code could start after 2020 at the earliest date. However, this scenario is very ambitious; and as the legal situation is different for packaged dangerous goods, more time is needed for a new discussion at UN level.

9 Considering the procedure described in paragraph 8, and taking into account that the majority amount of seed cake is carried at sea as bulk cargo, an alternative procedure for bulk cargoes seems to be appropriate. For these transports realistic classification of the goods and, consequently, realistic transport regulations are urgently needed. The classification of non-hazardous Seed Cake for bulk transport does not fall in the competence of the UN Committee of Experts on The Transport of Dangerous Goods (see Recommendations on the Transport of Dangerous Goods, paragraph 1). Therefore, the regulation for the carriage of SEED CAKE (non-hazardous) as bulk cargo can be solved separately.

Proposal

10 A new name for Cargoes classified presently under "SEED CAKE" shall be "OILY VEGETABLE MATERIALS AND THEIR PROCESSING BY-PRODUCTS (non-hazardous)".

11 The Schedule for OILY VEGETABLE MATERIALS AND THEIR PROCESSING BY-PRODUCTS (non-hazardous) is set out in annex 1. This schedule shall replace the existing schedule for SEED CAKE (non-hazardous). The remaining entry of SEED CAKE in the Code is dedicated only to dangerous goods.

12 The ascertainment of the properties and the subsequent classification of the cargoes should rely, as far as possible, on experimental data, according to the flow chart shown in annex 2.

13 The submission should be addressed to CCC 3 in order to finalize the schedule for amendment 04-17 of the IMSBC Code, as appropriate.

Action requested of the group

14 The group is invited to consider the proposals in paragraphs 10, 11, 12 and 13 and take action as appropriate.

ANNEX 1

OILY VEGETABLE MATERIALS AND THEIR PROCESSING BY-PRODUCTS (NON-HAZARDOUS)

This entry applies to the following types:

- .1 solvent extracted rape seed meal, soya bean meal, cotton seed meal, sunflower seed meal and to pellets produced from these meals, provided they contain no more than 4% oil and 15% oil and moisture combined, which have been prepared or treated to ensure that they cannot give off dangerous gases in dangerous quantities (no risk of explosion) during carriage;
- .2 mechanically expelled citrus pulp pellets containing not more than 2.5% oil and 14% oil and moisture combined;
- .3 mechanically expelled corn gluten meal containing not more than 11.0% oil and 23.6% oil and moisture combined;
- .4 mechanically expelled corn gluten feed pellets containing not more than 2.8% oil and 15.0% oil and moisture combined; and
- .5 mechanically expelled beet pulp pellets containing not more than 2.8% oil and 15% oil and moisture combined.

This entry applies also to consignments of solvent extracted seeds which have been prepared or treated to ensure that they cannot give off dangerous gases in dangerous quantities (no risk of explosion) during carriage, which has to be certified by the shipper or, preferably, by a person recognized by the competent authority of the country of shipment, issued on the basis of tests to be purposely developed and mechanically processed cereals and vegetable pulps other than oil seed expeller which are accompanied by a certificate of a person recognized by the competent authority of the country of shipment, stating that the material in the composition as to be shipped was tested according to test N.4 of the UN Manual of Tests and Criteria and proved to exhibit no self-heating properties when transported in bulk, in accordance with the criteria described in 9.2.3.3 of this Code.

Description

All types of food and feed industry products, other than mechanically expelled oil seeds, containing vegetable materials oil and moisture in such low concentrations that the material is not liable to self-heating. The material may be shipped in the form of pulp, meals, cake and pellets. The oil contained in the cargoes to which this entry is applicable may exist in the form of fat.

Characteristics

ANGLE OF REPOSE	BULK DENSITY (kg/m ³)	STOWAGE FACTOR (m ³ /t)
Not applicable	478 to 719	1.39 to 2.09
SIZE	CLASS	GROUP
Not applicable	Not applicable	C

Hazard

This cargo is liable to cause oxygen depletion and increase of carbon dioxide in the cargo space and adjacent spaces

This cargo is non-combustible or has a low fire risk.

Stowage & segregation

No special requirements.

Hold cleanliness

Clean and dry as relevant to the hazards of the cargo.

Weather precautions

This cargo shall be kept as dry as practicable. This cargo shall not be handled during precipitation. During handling of this cargo all non-working hatches of the cargo spaces into which this cargo is to be loaded shall be closed.

Loading

This cargo shall only be accepted for loading when it has been prepared or treated to ensure that it cannot give off dangerous gases or vapours in dangerous quantities (no risk of explosion) during carriage, which in case of solvent extracted seeds has to be certified by the shipper or, preferably, by a person recognized by the competent authority of the country of shipment, issued on the basis of tests to be purposely developed. For all the oily by-products a certificate from a person recognized by the competent authority of the country of shipment specifying the oil content and moisture content shall be issued. For the oily by-products not nominally listed in the schedule an additional certificate from a person recognized by the competent authority of the country of shipment stating that the cargo exhibit no self-heating properties in accordance with criteria described in 9.2.3.3 of the Code shall be issued.

Trim in accordance with the relevant provisions required under sections 4 and 5 of this Code.

Precautions

Entry of personnel into cargo and adjacent confined spaces shall not be permitted until tests have been carried out and it has been established that the oxygen level is 21%. If this condition is not met, additional ventilation shall be applied to the cargo hold or adjacent confined spaces and remeasuring shall be conducted after a suitable interval. An oxygen meter shall be worn and activated by all crew when entering cargo and adjacent enclosed spaces.

Ventilation

No special requirements.

Carriage

Hatches of the cargo spaces carrying this cargo shall be weather tight to prevent the ingress of water.

Discharge

No special requirements.

Clean up

No special requirements.

ANNEX 2
CLASSIFICATION FLOWCHART

