RESOLUTION MSC.286(86)
(adopted on 5 June 2009)
RECOMMENDATIONS FOR MATERIAL SAFETY DATA
SHEETS (MSDS) FOR MARPOL ANNEX I OIL CARGO AND OIL FUEL

ANNEX 12

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RECOMMENDATIONS FOR MATERIAL SAFETY DATA SHEETS (MSDS) FOR MARPOL ANNEX I OIL CARGO AND OIL FUEL

THE MARITIME SAFETY COMMITTEE,

RECALLING Article 28(b) of the Convention on the International Maritime Organization concerning the functions of the Committee,

RECALLING ALSO that, at its seventy-sixth session, it approved the Recommendation for the use of a standard format for the cargo information required by chapter 16 of the IBC Code,

RECALLING FURTHER that, at its seventy-seventh session, it adopted the Recommendation for material safety data sheets for MARPOL Annex I cargoes and marine fuel oils (MSC.150(77)),

NOTING that, at its eighty–third session, it adopted amendments to SOLAS regulation VI/5-1, by means of resolution MSC.239(83), making the provision of material safety data sheets (MSDS) mandatory prior to the loading of MARPOL Annex I type cargo in bulk and oil fuel,

RECOGNIZING the importance of providing seafarers with clear, concise and accurate information on the health and the environmental effects of toxic substances carried on board tankers,

RECOGNIZING ALSO the need to ensure a common understanding for an unambiguous implementation of SOLAS regulation VI/5-1,

HAVING CONSIDERED the recommendation made by the Sub-Committee on Bulk Liquids and Gases at its thirteenth session,

1. ADOPTS:

.1 the Recommendations for material safety data sheets (MSDS) for marine use suitable to meet the particular needs of the marine industry containing safety, handling, and environmental information to be supplied to a ship prior to the loading of MARPOL Annex I type oil as cargo in bulk and the bunkering of oil fuel, as set out in Annex 1 to the present resolution; and

.2 the Guidelines for the completion of MSDS for the MARPOL Annex I type oil as cargo in bulk and oil fuel, as set out in Annex 2 to the present resolution;

2. URGES Governments to ensure the supply and carriage of the material safety data sheets (MSDS) for MARPOL Annex I type oil as cargo in bulk and oil fuel, as from 1 July 2009;

3. FURTHER URGES Governments to direct their port State control officers to accept MSDS meeting the Recommendations adopted by this resolution as from 1 July 2009 in lieu of the Recommendations adopted by resolution MSC.150(77); and

4. REVOKES resolution MSC.150(77) as from 1 July 2009.

ANNEX 1

RECOMMENDATIONS FOR MATERIAL SAFETY DATA SHEETS (MSDS) FOR MARINE USE SUITABLE TO MEET THE PARTICULAR NEEDS OF THE MARINE INDUSTRY CONTAINING SAFETY, HANDLING, AND ENVIRONMENTAL INFORMATION TO BE SUPPLIED TO A SHIP PRIOR TO THE LOADING OF MARPOL ANNEX I TYPE OIL AS CARGO IN BULK AND THE BUNKERING OF OIL FUEL

Section	Heading	Content
1	**Identification of the substance or mixture and of the supplier**	• Name of the category – see guidance in annex 2 for MARPOL Annex I type oil cargoes and oil fuels. • The name of the substances. • Trade name of the substances. • Description on Bill of Lading (B/L), Bunker Delivery Note or other shipping document. • Other means of identification. • Supplier's details (including name, address, telephone number, etc.). • Emergency telephone number.
2	**Hazards identification**	• GHS* classification of the substance/mixture and any regional information. • Other hazards which do not result in classification (e.g., hydrogen sulphide) or are not covered by the GHS. See Guidelines in annex 2.
3	**Composition/information on ingredients**	• Common name, synonyms, etc. • Impurities and stabilizing additives which are themselves classified and which contribute to the classification of the substances. • The chemical identity and concentration or concentration ranges of all ingredients which are hazardous within the meaning of GHS and are present above their cut-off levels. Cut-off level for reproductive toxicity, carcinogenicity and category 1 mutagenicity is 0.1%. Cut-off level for all other hazard classes is 1%. See Guidelines in annex 2.
4	**First aid measures**	• Description of necessary measures, subdivided according to the different routes of exposure, i.e. inhalation, skin and eye contact and ingestion. • Most important symptoms/effects, acute and delayed. • Indication of immediate medical attention and special treatment, if necessary.

* Globally Harmonized System of Classification and Labelling of Chemicals (GHS), United Nations (2007 edition, as revised).

Section	Heading	Content
5	**Fire-fighting measures**	• Suitable extinguishing media. • Specific hazards arising from the chemical (e.g., nature of any hazardous combustion products). • Special protective equipment and precautions for fire-fighters.
6	**Accidental release measures**	• Personal precautions, protective equipment and emergency procedures. • Environmental precautions. • Methods and materials for containment and clean-up.
7	**Handling and storage**	• Precautions for safe handling. • Conditions for safe storage, including any incompatibilities.
8	**Exposure controls/ personal protection**	• Control parameters (e.g., occupational exposure limit values). • Appropriate technical precautions. • Individual protection measures, such as personal protective equipment.
9	**Physical and chemical properties**	• See Guidelines in annex 2.
10	**Stability and reactivity**	• Chemical stability. • Possibility of hazardous reactions. • Conditions to avoid (e.g., static discharge).
11	**Toxicological information**	• Concise but complete and comprehensible description of the various toxicological (health) effects and the available data used to identify those effects, including: o Information on the likely routes of exposure (inhalation, ingestion, skin and eye contact); o Symptoms related to the physical, chemical and toxicological characteristics; o Delayed and immediate effects and also chronic effects from short- and long-term exposure. • Numerical measures of toxicity (such as acute toxicity estimates). • See Guidelines in annex 2.
12	**Ecological information**	• Ecotoxicity (aquatic and terrestrial, where available). • Persistence and degradability. • Bioaccumulation potential. • Mobility in soil. • Other adverse effects. • See Guidelines in annex 2.
13	**Disposal considerations**	• Description of waste residues and information on their safe handling and methods of disposal, in line with MARPOL requirements.

Section	Heading	Content
14	**Transport information**	• UN number, where applicable. • UN Proper shipping name, where applicable. • Transport Hazard class(es), where applicable. • Special precautions which a user needs to be aware of or needs to comply with in connection with transport (e.g., heating and carriage temperatures). • Note that this product is being carried under the scope of MARPOL Annex I.
15	**Regulatory information**	• Safety, health and environmental regulations specific for the product in question.
16	**Other information including information on preparation and revision of the MSDS**	• Version No. • Date of issue. • Issuing source.

ANNEX 2

GUIDELINES FOR THE COMPLETION OF MSDS FOR THE MARPOL ANNEX I TYPE OIL AS CARGO IN BULK AND OIL FUEL

1 Categories of liquids

The following categories subdivide the full scope of substances covered by Annex I of MARPOL 73/78 and set in groups specific products for general identification purposes.

.1 crude oils;

.2 fuel and residual oils, including ship's bunkers*;

.3 unfinished distillates, hydraulic oils and lubricating oils;

.4 gas oils, including ship's bunkers**;

.5 kerosenes;

.6 naphthas and condensates;

.7 gasoline blending stocks;

.8 gasoline and spirits; and

.9 asphalt solutions.

2 Properties and information

In addition to properties and information specified in annex 1, the following properties and information should be reported:

.1 for the following provide appropriate hazards identification in section 2, composition/information on ingredients in section 3, and toxicological information in section 11 of the MSDS:

.1 Benzene – if present ≥ 0.1% by weight (even if naturally occurring ingredient of the material);

.2 Hydrogen sulphide – if present at any concentration, in liquid and vapour phases, or if possible to accumulate in a tank's vapour space; and

.3 Total Sulphur – if present ≥0.5% by weight, identify in section 3 and warn of potential for hydrogen sulphide evolution in sections 2 and 11;

* Refer to standard ISO 8217:2005, Petroleum products – Fuels (class F) – Specifications of marine fuels, table 2.

** Refer to standard ISO 8217:2005, Petroleum products – Fuels (class F) – Specifications of marine fuels, table 1.

.2 for physical and chemical properties in section 9 of the MSDS:

.1 appearance (physical state, colour, etc.);

.2 odour;

.3 pour point;

.4 boiling range;

.5 flashpoint;

.6 upper/lower flammability or explosive limits;

.7 vapour pressure (Reid vapour pressure (RVP) when appropriate);

.8 vapour density;

.9 density;

.10 auto-ignition temperature; and

.11 kinematic viscosity; and

.3 for ecological information in section 12 of the MSDS: Persistent or non-persistent oil as per the International Oil Pollution Compensation (IOPC) Fund definition*.

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* International Oil Pollution Compensation (IOPC) Fund definition: "A non-persistent oil is oil, which, at the time of shipment, consists of hydrocarbon fractions, (a) at least 50% of which, by volume, distils at a temperature of 340ºC (645ºF) and (b) at least 95% of which, by volume, distils at a temperature of 370ºC (700ºF) when tested by the ASTM Method D-86/78 or any subsequent revision thereof".

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