

Appendix

Class	Cargo space						
	1	2					
1.1 except 1.4S - 1.6 1.4 S	---	---					
2.1	---	---					
2.2	---	---					
2.3 Flammable	---	---					
2.3 Non-flammable	---	---					
3 FP<23°C	---	---					
3 23°C ≤ FP ≤ 60°C	---	---					
4.1	B	---					
4.2	B	---					
4.3 Liquids	---	---					
4.3 Solids	---	---					
5.1	B	---					
5.2	---	---					
6.1 Liquids FP<23°C	---	---					
6.1 Liquids 23°C ≤ FP ≤ 60°C	---	---					
6.1 Liquids FP>60°C	---	---					
6.1 Solids	---	---					
8 Liquids FP<23°C	---	---					
8 Liquids 23°C ≤ FP ≤ 60°C	---	---					
8 Liquids FP>60°C	---	---					
8 Solids	B	---					
9	A	P					

(Meaning of symbols used in this table)
 - Class 8 bulk cargoes may be loaded into the No.1 to No.5 holds.
 (However, the cargoes which may be carried are limited to those listed on the next page)
 - Class 9 bulk and packed cargoes can be loaded into the No.1 to No.5 cargo holds.
 (However, the bulk cargoes which may be carried are limited to those listed on the next page.)
 - Class 9 packed cargoes can be loaded onto weather decks

Cargo space 1: No.1 to No.5 Cargo Holds

2: Weather deck

- P: Packaged Goods Permitted
- A: Packaged And Bulk Goods Allowed
- B: Bulk Goods Permitted
- : Not Permitted To Be Carried

Notes for Packaged Goods

Nil

Appendix

The dangerous bulk cargoes that may be carried are listed in the following table.

SOLID BULK CARGOES List

Bulk Cargo Shipping Name	Class	UN No.	Cargo holds No.	Note
ALUMINIUM NITRATE	5.1	1438	ALL	
AMMONIUM NITRATE	5.1	1942	ALL	1
AMMONIUM NITRATE BASED FERTILIZER	5.1	2067	ALL	1
AMMONIUM NITRATE BASED FERTILIZER	9	2071	ALL	1
BARIUM NITRATE	5.1	1446	ALL	
CALCIUM NITRATE	5.1	1454	ALL	
CASTOR BEANS	9	2969	ALL	
COPRA (dry)	4.2	1363	ALL	1
FERROUS METAL BORINGS, SHAVINGS, TURNINGS or CUTTINGS	4.2	2793	ALL	1
FISHMEAL (FISHSCRAP), STABILIZED	9	2216	ALL	
IRON OXIDE, SPENT or IRON SPONGE, SPENT	4.2	1376	ALL	1
LEAD NITRATE	5.1	1469	ALL	
MAGNESIUM NITRATE	5.1	1474	ALL	
METAL SULPHIDE CONCENTRATES, CORROSIVE	8	1759	ALL	
METAL SULPHIDE CONCENTRATES, SELF-HEATING	4.2	3190	ALL	1
POTASSIUM NITRATE	5.1	1486	ALL	
SEED CAKE (a)	4.2	1386	ALL	1
SEED CAKE (b)	4.2	1386	ALL	1,2
SODIUM NITRATE	5.1	1498	ALL	
SODIUM NITRATE AND POTASSIUM NITRATE MIXTURE	5.1	1499	ALL	
SULPHUR (crushed lump and coarse grained)	4.1	1350	ALL	1

Note for Solid Bulk Cargoes:

- 1: To be stowed at least 3m horizontally away from engine room boundaries.
- 2: Except Seedcake containing solvent extractions.

List of cargoes permitted to be carried.

CARGOES	IMO CLASS	UN NO.	NOTE (See following page)
All cargoes of Group A and Group C	-	-	1,3
ALUMINA HYDRATE	MHB	-	-
ALUMINIUM FERROSILICON POWDER	4.3	1395	5
ALUMINIUM NITRATE	5.1	1438	-
ALUMINIUM SILICON POWDER, UNCOATED	4.3	1398	5
ALUMINIUM SMELTING BY-PRODUCTS or ALUMINIUM REMELTING BY-PRODUCTS	4.3	3170	5
ALUMINIUM SMELTING / REMELTING BY-PRODUCTS PROCESSED	MHB	-	-
AMMONIUM NITRATE	5.1	1942	5
AMMONIUM NITRATE BASED FERTILIZER (Type A)	5.1	2067	5
AMMONIUM NITRATE BASED FERTILIZER (Type B)	9	2071	5
AMORPHOUS SODIUM SILICATE LUMPS	MHB	-	-
BARIUM NITRATE	5.1	1446	-
BORIC ACID	MHB	-	-
BROWN COAL BRIQUETTES	MHB	-	-
CALCIUM NITRATE	5.1	1454	-
CASTOR BEANS	9	2969	6
CHARCOAL	MHB	-	-
CLINKER ASH	MHB	-	-
COAL	MHB	-	-
COAL TAR PITCH	MHB	-	-
COPRA (dry)	4.2	1363	5
DIRECT REDUCED IRON,(A)Briquettes, hot-moulded	MHB	-	-
DIRECT REDUCED IRON,(B)Lumps, pellets, cold moulded briquettes	MHB	-	7
DIRECT REDUCED IRON,(C)(By product fines)	MHB	-	7
FERROPHOSPHORUS (including briquettes)	MHB	-	-
FERROSILICON with 30% or more but less than 90% silicon (including briquettes)	4.3	1408	5
FERROSILICON with at least 25% but less than 30% silicon, or 90% or more silicon	MHB	-	-
FERROUS METAL BORINGS, SHAVINGS, TURNINGS or CUTTINGS	4.2	2793	5
FISHMEAL (FISHSCRAP), STABILIZED	9	2216	-
FLUE DUST, CONTAINING LEAD AND ZINC	MHB	-	-
FLUORSPAR	MHB	-	-
GRANULATED NICKEL MATTE (LESS THAN 2% MOISTURE CONTENT)	MHB	-	-
IRON OXIDE, SPENT or IRON SPONGE, SPENT	4.2	1376	5
LEAD NITRATE	5.1	1469	-
LIME (UNSLAKED)	MHB	-	-
LINTED COTTON SEED	MHB	-	-
MAGNESIA (UNSLAKED)	MHB	-	-
MAGNESIUM NITRATE	5.1	1474	-
MATTE CONTAINING COPPER AND LEAD	MHB	-	-
METAL SULPHIDE CONCENTRATES	MHB	-	-
METAL SULPHIDE CONCENTRATES, CORROSIVE	8	1759	-
METAL SULPHIDE CONCENTRATES, SELF-HEATING	4.2	3190	-
MONOAMMONIUM PHOSPHATE (M.A.P.), MINERAL ENRICHED COATING	MHB	-	-
MONOCALCIUMPHOSPHATE (MCP)	MHB	-	-
PEAT MOSS	MHB	-	-
PETROLEUM COKE, calcined or uncalcined	MHB	-	-
PITCH PRILL	MHB	-	-
POTASSIUM NITRATE	5.1	1486	-
PYRITES, CALCINED(Calcined Pyrites)	MHB	-	-
RADIOACTIVE MATERIAL, LOW SPECIFIC ACTIVITY (LSA-I)	7	2912	-
RADIOACTIVE MATERIAL, SURFACE CONTAMINATED OBJECTS (SCO-I)	7	2913	-
SAND, MINERAL CONCENTRATE, RADIOACTIVE MATERIAL, LOW SPECIFIC ACTIVITY (LSA-I)	7	2912	-
SAWDUST	MHB	-	-

Sample (Material Safety Data Sheet)

Sea transport (IMDG-Code / GGVSee)	
UN number	3077
Packing group	III
UN proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (contains lead sulfide)
Environmental hazard	Not Applicable
Transport hazard class(es)	IMDG Class : 9
	IMDG Subrisk : Not Applicable
Special precautions for user	EMS Number : F-A , S-F
	Special provisions : 274 335 966 967
	Limited Quantities : 5 kg

SECTION 15 REGULATORY INFORMATION

Safety, health and environmental regulations / legislation specific for the substance or mixture

lead sulfide(1314-87-0) is found on the following regulatory lists	
ferrous sulfide(1317-37-9) is found on the following regulatory lists	"Not Applicable"
zinc sulfide(1314-98-3) is found on the following regulatory lists	"Not Applicable"
cadmium sulfide(1306-23-6) is found on the following regulatory lists	
water(7732-18-5) is found on the following regulatory lists	"Not Applicable"

SECTION 16 OTHER INFORMATION

Other information

INTERNATIONAL MARITIME SOLID BULK CARGOES FORM

Bulk Cargo Shipping Name: LEAD CONCENTRATE IN BULK	
Shipper:	Transport document number:
	Carrier:
Consignee: TO ORDER	Instructions or Other Matters: NIL
Name/Means of Transport: Ocean Transport	Gross mass/(kg/tonnes): 5,434.600 MT +/- 3%
Port/Place of Departure:	General description of cargo: LEAD CONCENTRATE IN BULK
Port/Place of Destination:	Type of material/particle size: FOR SOLID BULK CARGO
EHS/HME (see Chapters 2.10 and 2.9.3 of the IMDG Code and Marpol Annex V) residues must be disposed of in accordance with Marpol annex V	
EHS/MARINE POLLUTANT	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
HUMAN HEALTH CRITERIA MET	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Not available
RUBBER/PLASTIC	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Note: Human Health Criteria data may not be available on until 31 December 2014 From 1 January 2015 Human Health Criteria data must be available	
Specifications of bulk cargo, if applicable: LEAD CONCENTRATE	
Stowage factor:	0,38 M3/mt
Angle of Repose, if applicable:	42°
Trimming procedures:	N/A
Chemical properties if potential hard*:	N/A *eg., Class & UN No. or "MHB"
Group of the cargo:	Transportable moisture limit:
<input checked="" type="checkbox"/> Group A and B*	8,60 %
<input type="checkbox"/> Group A*	
<input type="checkbox"/> Group B	Moisture content at shipment:
<input type="checkbox"/> Group C	5,62 %
For cargoes which may liquefy (Group A and Group A and B cargoes)	
Relevant special properties of the cargo: (e.g., highly soluble in water)	Additional certificate(s)*: *if required
Stowage : AS PER IMDG CODE	<input checked="" type="checkbox"/> Certificate of moisture content and transportable moisture limit
Levelling : LEVELLED	<input type="checkbox"/> Weathering certificate
Temperature control : N/A	<input type="checkbox"/> Exemption certificate
Protective means : According to MSDS	<input type="checkbox"/> Other (specify)
Environmental protection : NIL	
Fire : According to MSDS	
Class or division : 9	
UN N° : 3077	
Classification of Cargo: In Accordance with IMO MARPOL Annex V and utilizing Globally Harmonized System of Classification and Labelling of Chemicals (GHS), these concentrates are classified as harmful to the marine environment The cargo has "LOW FIRE RISK"	
I hereby declare that the consignment is fully and accurately described and that the given test results and other data to the best of my knowledge and experience are representative for the cargo	Name/status, company/organization of signatory

SHIPPER'S DECLARATION

VOYAGE NUMBER:

BCSN: METAL SULPHIDE CONCENTRATES - LEAD CONCENTRATES

TRANSPORT DOCUMENT:

GROSS MASS (KG/TONNES): APPROX XXXX WET METRIC TONS

SHIPPER:

CARRIER:

NAME/MEANS OF TRANSPORT:

LOAD PORT/DISCHARGE PORT:

CARGO DESCRIPTION, SPECIFICATIONS, AND PROPERTIES

LEAD CONCENTRATES ARE REFINED ORES IN WHICH VALUABLE COMPONENTS HAVE BEEN ENRICHED BY ELIMINATING THE BULK OF WASTE MATERIALS.

A MIXTURE OF PREDOMINATELY ZINC SULPHIDE COMPOUNDS CONTAINING MINOR AMOUNTS OF VARIOUS IRON, LEAD AND OTHER METAL SULPHIDE COMPOUNDS AND LESSER AMOUNTS OF OXIDE COMPOUNDS AND OTHER METAL COMPOUNDS. ALSO CONTAINS QUARTZ AND OTHER INSOLUBLE MINERALS. SEE ATTACHED MSDS FOR MORE INFORMATION.

STOWAGE FACTOR
116 lbs/ ft³ => 0.54 m³/ tonne

CLASS
MHB

TRANSPORTABLE MOISTURE LIMIT
8.62%

GROUP OF THE CARGO
A and B

SIZE
VARIOUS

MOISTURE CONTENT AT SHIPMENT
7.8%%

ANGLE OF REPOSE
35 - 45 °

HAZARD

Some sulphide concentrates are liable to oxidation and may have a tendency to self-heat, with associated oxygen depletion and emission of toxic fumes. While some materials may present corrosion problems, the proposed IMO testing criteria is currently under review

When a Metal Sulphide Concentrate is considered as presenting a low fire-risk, the carriage of such cargo on a ship not fitted with a fixed gas fire-extinguishable system should be subject to the Administration's authorization as provided by SOLAS regulation 11-2/10.7.1.4.