

標題

BC コード/IMSBC コードについて

ClassNK

テクニカル インフォメーション

No. TEC-0772

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各位

[BC コード適合鑑定実施要領の一部改訂]

ClassNK テクニカルインフォメーション No.TEC-0757にてお知らせしております BC コード適合鑑定実施要領を一部改訂しました。改訂の概要は、オペレーションで対応可能な要件を構造設備要件から除外したこと及び編集上の誤記を訂正したことです。具体的な改訂箇所は次の通りです。

- 1章 Table 1.1 : 要件“B6”、“C”及び“D2”を削除した。
- (同上) : 要件“G6”及び“G7”を統合して“G6”とした。
- 1章 Table 1.2 : 要件“B6”、“C”及び“D2”を削除した。
- (同上) : “PEAT MOSS with a moisture content of more than 65% by weight-fine to coarse fibrous structure”の要件中“Reg.II-2/53.1 or 10.7.1, FFEA”の要件を非適用に訂正した(“X”から“E”に訂正)。
- 1章 Appendix 1.1: 証書のフォームを変更した。

なお、本件に関してご不明な点は、以下の部署にお問い合わせください。

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添付:

1. BC コード/IMSBC コード適合鑑定実施要領

NOTES:

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1 章 BC コード適合鑑定実施要領

0101 一般

BC コードでは、貨物は、液状化することのあるばら積み物質（同コードの付録 A に掲載）、化学的危険性を有するばら積み物質（付録 B に掲載）及び前者のいずれにも該当しないばら積み物質（付録 C に掲載）に分類されている。本要領では、それらを各々「付録 A 貨物」、「付録 B 貨物」及び「付録 C 貨物」と呼ぶ。

0102 構造・設備の要件

- 1. 運送貨物の種類に拘わらず、ローディングマニュアル及び復原性資料の備付けが要求される。
- 2. 付録 A 貨物及び付録 C 貨物については、特別な構造・設備は要求されない。ただし、付録 A 貨物について含水量の制限を条件としない場合は、貨物の移動を制限するための可搬式隔壁または固定式縦通隔壁が要求される。
- 3. 付録 B 貨物については、BC コードに規定された構造・設備が要求される。石炭及び褐炭以外の付録 B 貨物の要件については、Table 1.1 及び Table 1.2 にその概要が示されている。石炭及び褐炭については Table 1.3 に掲げる設備が要求される。

注 2.1 付録 B には消防及び人身保護のための構造・設備の他、オペレーションに関する注意及び各貨物の性状に関する情報が掲載されている。

注 2.2 Table 1.2 には、便宜のために改正 SOLAS74 の関係要件の概要も一緒に示されている。

0103 申込み

- 1. 申込者(船舶所有者若しくはその代理者または船舶建造者)は、少なくとも次の事項を記載した申込書を、船上検査に先立ち、支部・事務所または材料艙装部(EQD)に提出する。
(0104 参照。)
 - (1) 対象貨物（付録 A 貨物及び付録 C 貨物のみか、付録 B 貨物も含むか。付録 B 貨物も含む場合、そのリスト）
 - (2) 受検予定日及び場所並びに現地代理店（就航船の場合）
 - (3) 提出書類のリスト（申請書と一緒に提出されるもののリスト及び別途提出されるもののリスト）
- 2. 対象貨物に危険物が含まれている場合、申込者は必要に応じて危険物運送適合証書発行（船級検査及び条約検査）も申し込む。
- 3. 上記 2 の場合の他、船級要件に関わる改造、変更等が行われる場合、申込者は船級検査も申し込む。

0104 書類の提出

- 1. 対象貨物に付録 B 貨物が含まれている場合、申込者は Table 1.4（石炭及び褐炭以外）及びまたは Table 1.5（石炭及び褐炭）に掲げる書類を本部審査用は EQD に各 3 部、支部・事務所審査用は各 1 部提出する。ただし、就航船の場合であって、特定の構造・設備について、要件への適合の確認が船上検査のみにより行えると検査員が判断する場合、書類の提出・審査を省略して差し支えない。
- 2. 対象貨物に含水量の制限を条件としない付録 A 貨物が含まれている場合、申込者は関連の船体構造図、復原性計算書及びその他本会が必要と認める書類を EQD に各 3 部提出する。

0105 書類審査、船上検査及び鑑定書の発行

- 1. 対象貨物に付録 B 貨物を含まない場合
本部における書類審査及び船上検査は必要としない。支部・事務所は、Appendix 1.1 に

- 従い、Form130 を使用して鑑定書を作成し、発行する。ただし、
- (1) 付録 A 貨物の運送について含水量の制限を条件としない場合、船体部による図面審査が必要なので、支部・事務所は本部（EQD）に連絡すること。
 - (2) 船舶の長さが 100m（1998 年 7 月 1 日以降建造契約の船舶にあつては 65m）未満の場合、
 - (a) 各貨物倉に積載される貨物の許容最大比重及び縦強度に関する情報を含む適当な積付資料が船上に備え付けられていることを確認すること、
 - (b) Appendix 1.1 に記載の ”approved” を削除すること。
 - (3) 旗国政府の代行権限が付与されていない場合は、Appendix 1.1 に記載の ”on behalf of” を削除すること。
- 2. 対象貨物に付録 B 貨物を含む場合（付録 B 貨物が石炭及び/又は褐炭のみの場合を除く）
対象貨物に付録 B 貨物を含む場合（石炭及び/又は褐炭のみの場合を除く）、0105-1 による他、次の(1)ないし(3)による。ただし、Fluorspar (calcium fluoride)、Woodchips (with moisture content of 15% or more)及び Wood pulp pellets (with moisture content of 15% or more)については、それらの運送に対して特別な構造・設備は要求されないので、(1)及び(2)の書類審査及び船上検査は必要としない。支部・事務所は、Form130 を使用して鑑定書を作成し、発行する。
- (1) 本部は、Table 1.4 に掲げられた書類の中、本部審査用の書類を審査の上、審査結果を申込者及び支部・事務所に、また審査所要時間を支部・事務所に連絡（Table 1.1 を使用）する。
 - (2) 支部・事務所は、
 - Table 1.4 に掲げられた書類の中、支部・事務所審査用の書類を審査の上、その結果及び本部による書類審査結果に基づき、Table 1.1 をチェックリストとして用いて船上検査を行い、
 - その結果に応じて鑑定書を作成し、発行する。鑑定書には同チェックリストを添付する。
 - (3) 特定の要件（例えば機関室と貨物区域の隔壁からの貨物の隔離）に適合するため積載貨物倉を制限する場合には、Appendix 1.1 の鑑定書様式中の”in all cargo holds”を制限に応じて”in cargo holds No.1 to 4”のように修正する。
- 3. 対象貨物に付録 B 貨物として石炭及び/又は褐炭のみを含む場合
対象貨物に付録 B 貨物としては石炭及び/又は褐炭のみを含む場合 0105-1 による他、次による。
本部における書類審査は必要としない。支部・事務所は、Table 1.5 に掲げられた書類を審査の上、Table 1.3 をチェックリストとして用いて船上検査を行い、その結果に応じて鑑定書を発行する。鑑定書には同チェックリストを添付する。

0106 鑑定書の更新及び書換（対象貨物の変更を伴わない場合）

- 1. 有効期限切れに伴う鑑定書の更新
本部における書類審査は必要としない。支部・事務所は、鑑定書に添付された Table をチェックリストとして用いて船上検査を行い、その結果に応じて鑑定書を発行する。鑑定書には同チェックリストを添付する。
- 2. 旗国政府又は船名変更に伴う鑑定書の書換
本部における書類審査は必要としない。支部・事務所は、鑑定書に添付された Table をチェックリストとして用いて船上検査を行い、その結果に応じて鑑定書を発行する。鑑定書には同チェックリストを添付する。

注 6.1 鑑定書の有効期限は、発行日から 5 年とする。

Table 1.1 - Requirements of BC Code for the carriage of Appendix B cargoes other than coal
(The following requirements govern the application of Table 1.2.)

A1	Bulkheads between the cargo space and the engine room should be insulated to class "A-60" standard. Alternatively, means should be provided to enable the cargo to be stowed at least 3m horizontally away from such bulkheads.	<input type="checkbox"/>
A2	Means should be provided to enable the cargo to be stowed out of direct contact with a metal engine-room boundary.	<input type="checkbox"/>
B1	Natural or mechanical, preferably mechanical, ventilation should be provided in cargo holds.	<input type="checkbox"/>
B2	Natural ventilation should be provided in cargo holds.	<input type="checkbox"/>
B3	Mechanical ventilation should be provided in cargo holds.	<input type="checkbox"/>
B4	Mechanical ventilation with at least two separate fans should be provided in cargo holds. The total ventilation should be at least six air changes per hour, based on the empty space.	<input type="checkbox"/>
B5	Spark-arresting screens should be fitted to ventilators.	<input type="checkbox"/>
D1	In case where bilge lines are led to machinery space, stop valves and blank flanges should be provided on the bilge lines on machinery space side.	<input type="checkbox"/>
E1	Fixed fire extinguishing system should be provided in cargo holds.	<input type="checkbox"/>
E2	Fixed fire extinguishing system of CO ₂ or inert gas system should be provided in cargo holds.	<input type="checkbox"/>
F1	Instrument for measuring temperature should be provided.	<input type="checkbox"/>
F2	At least two suitable detectors for quantitative measurements of phosphine and arsine should be provided.	<input type="checkbox"/>
F3	At least two suitable detectors for quantitative measurements of phosphine, arsine and silane should be provided.	<input type="checkbox"/>
F4	At least two suitable explosimeters capable of detecting flammable gases should be provided.	<input type="checkbox"/>
F5	Instrument for measuring oxygen and hydrogen should be provided.	<input type="checkbox"/>
F6	Instrument for measuring oxygen should be provided.	<input type="checkbox"/>
G1-5	Electrical equipment should be of safe type as follows. G1: IIAT2 G2: IIAT3 G3: IIAT4 G4: IICT1 G5: IICT2	<input type="checkbox"/>
G6	All electrical circuits for/through cargo spaces are required to be isolated except water ingress alarm and all removal electric equipment (non-safety type) should not be used in cargo spaces. The isolation shall be achieved out side of the space, and a caution plate should be provided.	<input type="checkbox"/>
H	Additional two sets of self-contained breathing apparatus with 200% spare charges should be provided.	<input type="checkbox"/>
I	Additional four sets of protective clothing resistant to various chemicals should be provided.	<input type="checkbox"/>
J	Dust mask and goggles should be provided.	<input type="checkbox"/>
K	"NO SMOKING" signs should be posted on decks and in areas adjacent to cargo compartments.	<input type="checkbox"/>
L	Nozzles for the fire main system should be of jet/spray dual purpose type, otherwise spray nozzles should be additionally provided.	<input type="checkbox"/>
M	Fire pump in engine room should be capable of starting from the navigation bridge. The outlet and inlet valves of the fire main in E/R is fitted with caution plate with "Keep Open" symbol.	<input type="checkbox"/>
N	The quantity of water delivered should be capable of supplying four nozzles at pressure as specified in SOLAS Reg. II-2/4 and being trained on any part of the cargo spaces when empty.	<input type="checkbox"/>

×: Complied -: Not applicable

Ship's name:
Class number:
Date:

Signature: _____

Table 1.2 - Application of the requirements to different materials listed in Appendix B to BC Code

General notes:

- For details of requirements of BC Code, the relevant part of BC Code as well as Table 1.1 and 1.2 of this appendix should be referred to.
- The application of the SOLAS requirements is shown just for ready reference. For details, the relevant part of SOLAS should be referred to.
- For installation of electrical equipment, in particular, applicable requirements of Part H of NK Rules are to be complied with.

Notes:

- 1 “X” means “applicable. “E” means “may be exempted from the requirement”.
- 2 Applicable to ships constructed on or after 1 July 1998.
- 3 Applicable to ships constructed before 1 July 1998.
- 4 As to pencil pitch, an exemption from the requirement may be granted.
- 5 If the moisture content is 15 % or more, an exemption from the requirement may be granted.
- 6 G5 is applicable to only non-briquettes.
- 7 Applicable to only solvent-extracted seed cakes.
- 8 The compliance with the requirement “4 jets of water” may be accepted as an alternative of this requirement.
- 9 As to sodium nitrate and chilean natural nitrate, the compliance with the requirement “4 jets of water” may be accepted as an alternative of this requirement.

Material (1) IMO class (2) UN No./BC No.	BC Code requirements															SOLAS Reg. II-2/54.2 or 19.3 ¹							Reg. II-2/53.1 or 10.7.1, FFEA		
	A-60/ segregation	Ventilation systems	F.O.T. leak testing	Bilge systems	FFEA or IGS	Measuring instruments	Explosion proof	Breath. apparatus	Protective closing	Dust mask/goggles	NO SMOKING signs	Dual-purpose nozzles	F.P. remote starting	4 jets of water	F.P. remote start.	4 jets of water	Explosion proof	Mechanical vent.	Safe-type fan	Natural vent.	Personnel protect.	A-60 insulation			
ALMINIUM FERROSILICON POWDER (incl. Briquettes)	4.3	1395	—	B4	—	—	—	F2	G5	H	—	—	K	—	—	—	—	—	X	X	X	—	X	X	E
ALMINIUM NITRATE	5.1	1438	—	—	—	—	—	—	—	H	I	—	—	L	—	—	X	X	—	—	—	X	X	—	X ⁸
ALUMINIUM SILICON POWDER, UNCOATED	4.3	1398	—	B4	—	—	—	F3	G5	H	—	—	K	—	—	—	—	—	X	X	X	—	X	X	E
ALUMINIUM SMELTING BY-PRODUCTS	4.3	3170	—	B4 B5	—	DI	—	F4	G5	H	—	—	K	—	—	—	—	—	X	X	X	—	X	X	E
AMMONIUM NITRATE	5.1	1942	A1	—	—	—	—	—	G6	H	I	—	K	—	M	—	X	X	X	—	X ²	X	X	X	X ⁸
AMMONIUM NITRATE FERTILIZERS, Type A	5.1	2067 to 2070	A1	—	—	—	—	—	G6	H	I	—	K	—	M	—	X	X	X	—	X ²	X	X	X	X ⁸

Material (1) IMO class (2) UN No./BC No.	BC Code requirements																SOLAS Reg. II-2/54.2 or 19.3 ¹						Reg. II-2/53.1 or 10.7.1, FFEA		
	(1)	(2)	A-60/ segregation	Ventilation systems	F.O.T. leak testing	Bilge systems	FFEA or IGS	Measuring instruments	Explosion proof	Breath. apparatus	Protective closing	Dust mask/goggles	NO SMOKING signs	Dual-purpose nozzles	F.P. remote starting	4 jets of water	F.P. remote start.	4 jets of water	Explosion proof	Mechanical vent.	Safe-type fan	Natural vent.		Personnel protect.	A-60 insulation
AMMONIUM NITRATE FERTILIZERS, Type B	9	2071	A2	—	—	—	—	—	G6	H	I	—	K	—	—	N	X	X	X	—	X ²	X	X	—	X ⁸
BARIUM NITRATE	5.1	1446	—	—	—	—	—	—	H	I	—	—	L	—	—	X	X	—	—	—	X	X	—	X ⁸	
BROWN COAL (LIGNITE) BRIQUETTES	MHB	002	See Table 1.3.													—	—	—	—	—	—	—	—	E	
CALCINED PYRITES (Pyritic ash, Fly ash)	MHB	003	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	E	
CALCIUM NITRATE	5.1	1454	—	—	—	—	—	—	H	I	—	—	L	—	—	X	X	—	—	—	X	X	—	X ⁸	
CASTOR BEANS	9	2969	—	—	—	—	—	—	H	I	J	—	L	—	—	X	X	—	—	—	X	X	—	X	
CHARCOAL	MHB	005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	X	
COAL	MHB	010	See Table 1.3.													—	—	—	—	—	—	—	—	E	
COPRA, dry	4.2	1363	—	B2	—	—	—	—	—	—	—	—	K	—	—	—	X	X	—	—	—	X	X	X	X
DIRECT REDUCED IRON, DRI (not to be confused with iron sponge, spent) such as lumps, pellets and cold-moulded briquettes	MHB	015	—	—	—	—	—	F5	G5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	X	
DIRECT REDUCED IRON (Briquettes, hot moulded)	MHB	016	—	B2	—	—	—	F6	G5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	E	
FERROPHOSPHORUS (including Briquettes) ⁶	MHB	020	—	B3	—	—	—	G4	H	—	—	—	—	—	—	—	—	—	—	—	—	—	—	E	
FERROSILICON, with 30% or more but less than 90% silicon (including Briquettes)	4.3	1408	—	B4 B5	—	D1	—	F2	G4	H	—	—	K	—	—	—	—	—	X	X	X	—	X	X	E

Material (1) IMO class (2) UN No./BC No.			BC Code requirements														SOLAS Reg. II-2/54.2 or 19.3 ¹						Reg. II-2/53.1 or 10.7.1, FFEA		
			A-60/ segregation	Ventilation systems	F.O.T. leak testing	Bilge systems	FFEA or IGS	Measuring instruments	Explosion proof	Breath. apparatus	Protective closing	Dust mask/goggles	NO SMOKING signs	Dual-purpose nozzles	F.P. remote starting	4 jets of water	F.P. remote start.	4 jets of water	Explosion proof	Mechanical vent.	Safe-type fan	Natural vent.		Personnel protect.	A-60 insulation
FERROSILICON, containing 25% to 30%silicon,or 90% or more silicon (including Briquettes)	MHB	022	-	B4 B5	-	DI	-	F2	G4	H	-	-	-	-	-	-	-	-	-	-	-	-	-	E	
FERROUS METAL BORINGS, SHAVINGS, TURNINGS or CUTTINGS	4.2	2793	-	-	-	-	-	F1	-	H	-	-	K	-	-	-	X	X	-	-	-	X	X	X	X
FISHMEAL, STABILIZED and FISHSCRAP, STABILIZED anti-oxidant treated	9	2216	-	-	-	-	E2	F1	-	H	-	-	-	-	-	-	X	X	-	-	-	X	X	-	X
FLUORSPAR (calcium fluoride)	MHB	025	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	E
IRON OXIDE, IRON SPONGE, spent	4.2	1376	-	-	-	-	-	-	G1	H	I	-	K	L	-	-	X	X	X ³	-	-	X	X	X	X
LEAD NITRATE	5.1	1469	-	-	-	-	-	-	-	H	I	-	-	L	-	-	X	X	-	-	-	X	X	-	X ⁸
LIME (UNSLAKED)	MHB	030	-	-	-	-	-	-	-	-	-	-	J	-	-	-	-	-	-	-	-	-	-	-	E
MAGNESIA (UNSLAKED)	MHB	032	-	-	-	-	-	-	-	-	-	-	J	-	-	-	-	-	-	-	-	-	-	-	E
MAGNESIUM NITRATE	5.1	1474	-	-	-	-	-	-	-	H	I	-	-	L	-	-	X	X	-	-	-	X	X	-	X ⁸
METAL SULPHIDE CONCENTRATES	MHB	035	-	-	-	-	E1	-	-	H	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X
PEAT MOSS with a moisture content of more than 65% by weight-fine to coarse fibrous structure	MHB	038	-	B2	-	-	-	-	-	-	-	-	J	-	-	-	-	-	-	-	-	-	-	-	E
PETROLEUM COKE, calcined or uncalcined	MHB	040	-	-	-	-	-	-	-	H	I	-	-	L	-	-	-	-	-	-	-	-	-	-	E
PITCH PRILL, PRILLED COAL TAR, PENCIL PITCH	MHB	050	-	-	-	-	-	-	-	H	I	-	-	L	-	-	-	-	-	-	-	-	-	-	X ⁴

Material (1) IMO class (2) UN No./BC No.	BC Code requirements																SOLAS Reg. II-2/54.2 or 19.3 ¹						Reg. II-2/53.1 or 10.7.1, FFEA	
	(1)	(2)	A-60/ segregation	Ventilation systems	F.O.T. leak testing	Bilge systems	FFEA or IGS	Measuring instruments	Explosion proof	Breath. apparatus	Protective closing	Dust mask/goggles	NO SMOKING signs	Dual-purpose nozzles	F.P. remote starting	4 jets of water	F.P. remote start.	4 jets of water	Explosion proof	Mechanical vent.	Safe-type fan	Natural vent.		Personnel protect.
POTASSIUM NITRATE (SALTPETRE)	5.1	1486	—	—	—	—	—	—	H	I	—	—	L	—	—	X	X	—	—	—	X	X	—	X ⁸
RADIOACTIVE MATERIAL, LOW SPECIFIC ACTIVITY MATERIAL (LSA-I)	7	2912	—	—	—	—	—	—	H	I	—	—	—	—	—	—	—	—	—	—	—	—	—	E
RADIOACTIVE MATERIAL, SURFACE CONTAMINATED OBJECT(S) (SCO-I)	7	2913	—	—	—	—	—	—	H	I	—	—	—	—	—	—	—	—	—	—	—	—	—	E
SAWDUST	MHB	055	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	X
SEED CAKE (a), containing vegetable oil, MEAL, OIL CAKE, SEED EXPELLERS	4.2	1386	—	—	—	—	—	—	H	—	—	K	—	—	—	X	X	—	—	—	X	X	X	X
SEED CAKE (b), containing vegetable oil, MEAL, OIL CAKE, SEED EXPELLERS	4.2	1386	—	B2 B3 ⁷ B5	—	—	F2	—	G2 ⁷	H	—	—	K	—	—	X	X	X	X	X	—	X	X	X
SEED CAKE (c), containing vegetable oil, MEAL, OILCAKE, SEED EXPELLERS	4.2	2217	—	B3 B5	—	—	F2	—	G2	H	—	—	K	—	—	X	X	X	X	X	—	X	X	X
SILICONMANGANESE	MHB	060	—	B3	—	—	—	—	G4	H	—	—	—	—	—	—	—	—	—	—	—	—	—	E
SODIUM NITRATE, CHILE SALTPETRE, CHILEAN NATURAL NITRATE	5.1	1498	—	—	—	—	—	—	H	I	—	—	L	—	—	X	X	—	—	—	X	X	—	X ⁹
SODIUM NITRATE and POTASSIUM NITRATE, mixture CHILEAN NATURAL POTASSIC NITRATE	5.1	1499	—	—	—	—	—	—	H	I	—	—	L	—	—	X	X	—	—	—	X	X	—	X ⁸
SULPHUR (lump or coarse grained powder)	4.1	1350	—	B1 B5	—	—	—	G3	H	—	—	K	—	—	—	X	X	X	—	X	X	X	X	E

Material (1) IMO class (2) UN No./BC No.			BC Code requirements														SOLAS Reg. II-2/54.2 or 19.3 ¹							
			A-60/ segregation	Ventilation systems	F.O.T. leak testing	Bilge systems	FFEA or IGS	Measuring instruments	Explosion proof	Breath. apparatus	Protective closing	Dust mask/goggles	NO SMOKING signs	Dual-purpose nozzles	F.P. remote starting	4 jets of water	F.P. remote start.	4 jets of water	Explosion proof	Mechanical vent.	Safe-type fan	Natural vent.	Personnel protect.	A-60 insulation
TANKAGE, Garbage tankage, Rough ammonia tankage, Tankage fertilizer	MHB	065	-	-	-	-	-	Fl	-	H	-	-	-	-	-	-	-	-	-	-	-	-	-	X
VANADIUM ORE	MHB	070	-	-	-	-	-	-	-	H	-	-	-	-	-	-	-	-	-	-	-	-	-	E
WOODCHIPS	MHB	075	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X ⁵
WOOD PULP PELLETS	MHB	080	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X ⁵
ZINC ASHES, ZINC DROSS, ZINC RESIDUES, ZINC SKIMMINGS	4.3	1435	-	B3	-	-	-	G5	H	I	-	K	-	-	-	-	-	X	X	X	-	X	X	E

Table 1.3

Requirements of BC Code for the carriage of coal/brown coal (lignite) briquettes

1	Boundaries of cargo spaces should be resistant to fire and liquids.	<input type="checkbox"/>
2	Electrical cables and components situated in cargo spaces and adjacent spaces should be free from defects and safe for use in explosive atmosphere or positively isolated as detailed below.	<input type="checkbox"/>
	— Electrical equipment fitted in the spaces should be of explosion protected type classified IIAT4 or d1G4, or upward; or	<input type="checkbox"/>
	— electrical equipment fitted in the spaces, including motors of mechanical ventilation systems, should be capable of being positively isolated out side of the spaces and be at least of IP55 or upward, and caution plates to ensure isolation of electrical equipment should be provided.	<input type="checkbox"/>
3	Appropriate instruments for measuring followings into cargo spaces without entry into such spaces should be provided. Methane Oxygen Carbon monoxide pH value Temperature(0 - 100°C)	<input type="checkbox"/>
4	Two sets of self-contained breathing apparatus to be provided. (Note; The apparatus required by SOLAS Reg.II-2/17(00E) or Reg.II-2/10(00N) may be used for this purpose)	<input type="checkbox"/>
5	"No Smoking" sign and "No naked flames" sign should be posted in conspicuous places.	<input type="checkbox"/>
6(*)	Natural surface ventilation should be provided for cargo spaces as detailed below.	<input type="checkbox"/>
	— Natural or mechanical ventilation systems should be provided; and	<input type="checkbox"/>
	— (00N) ventilation openings should be provided in the fore and aft end plates of hatch covers (00E) ventilation openings should be provided in the fore and aft end plates of hatch covers or on upper deck; and	<input type="checkbox"/>
	— air holes should be provided at the upper part of web plates of longitudinal and transverse girders fitted to deck plates with appropriate spacing. Note: Air holes should not be located at any part that may be subject to stress concentration.	<input type="checkbox"/>
7	Natural or mechanical ventilation systems should be provided for adjacent enclosed working spaces, such as store rooms, carpenter's shops, passage ways, tunnels. In the case of mechanical ventilation, only the equipment, which is safe type for use in an explosive atmosphere should be used in cargo area.	<input type="checkbox"/>
8	Two sampling holes per hold, one on each side of the hatch cover should be provided with threaded stub and sealing cap.	<input type="checkbox"/>

Note ; (*) : Not applicable to brown coal (lignite) briquettes
(00N) : the new ships under SOLAS as amended in 2000
(00E) : the existing ships under SOLAS as amended in 2000

×: Complied —: Not applicable

Ship's name:

Class number:

Date:

Signature: _____

Table 1.4

Documents/information to be submitted

(1) (2)		Required items (1) Codes of BC Code requirements (2) Paragraphs of SOLAS II-2/54	Documents/information to be submitted The meanings of “H” and “L” are specified under this table.	
A1	2.8	“A-60” class insulation of bulkheads between the cargo space and engine room	H	Drawings of fire protection construction Type and manufacture of the material
		Alternative means to enable the cargo to be stowed at least 3m away from such bulkheads	H	Specifications and drawings
A2	-	Means to enable the cargo to be stowed out of direct contact with a metal engine-room boundary.	H	Specifications and drawings
B1	-	Natural or mechanical ventilation.	H	Drawings of the system
B2	2.4.3	Natural ventilation		
B3	-	Mechanical ventilation		
B4	2.4.1	Mechanical ventilation (total ventilation at least six air changes per hour)	H	Drawings of the system Calculations of the air changes
B5	2.4.2	Spark-arresting screens (wire mesh guard)	L	Specifications
-		Non-sparking fans	L	Specifications
B6	-	Ventilation: any escaping gases can not reach living quarters on or under the deck.	H	Drawings of the system
C	-	Testing of the fuel tanks	L	Fuel oil tank arrangement
D1	-	Stop valves and blank flanges on the bilge lines on machinery space side	H	Drawing of the bilge lines
D2	-	Separation of bilge lines		
E1	-	Fixed fire extinguishing system	H	Specifications and drawings of the system
E2	-	Fixed fire extinguishing system or IGS		
F	-	Instrument for measuring temperature, detecting flammable gases, etc.	L	Type, manufacturer and specifications
G 1-5	2.2	Electrical equipment to be of safe type.	H	Arrangement and wiring diagram of electrical equipment fitted in the space including grade of each equipment, such as IIAT4.
G6	-	Caution plate (Electric fuses/no-fuse breakers should be extracted/cut off.)	-	---
G7	-	Electrical circuits to be capable of being isolated out side of the space. Caution plate	H	Wiring diagram of circuits for through cargo spaces
H	-	Self-contained breathing apparatus	L	Type, manufacturer and specifications
I	2.6	Protective clothing resistant to chemicals		
J	-	Dust mask and goggles		
K	-	“NO SMOKING” signs	L	Number and locations of the signs
L	-	Jet/spray dual purpose type nozzle	L	Type, manufacturer and specifications
M	2.1.1	Remote starting of fire pump Caution plate with “Keep Open”	H	Wiring diagram of the remote control system
N	2.1.2	Capacity of fire pumps to supply four nozzles	H	Fire main piping diagram with arrangement of hydrant and pump capacity.

H: Three copies of documents are to be submitted to Material and Equipment department for examination by the Head office.

L: One copy is to be submitted to the local office for their checking.

Table 1.5

Documents/information to be submitted for coal/brown coal (lignite) briquettes

Requirements of BC Code for the carriage of coal (Table 1.3)	Documents/information to be submitted The meaning of “L” is specified under this table	
Boundaries of cargo spaces should be resistant to fire and liquids.	—	—
Electrical cables and components situated in cargo spaces and adjacent spaces should be free from defects and safe for use in explosive atmosphere or positively isolated.	L	Arrangement and wiring diagram of electrical equipment fitted in the space including grade of each equipment, such as IIAT4.
Appropriate instruments for measuring followings into cargo spaces without entry into such spaces should be provided. Methane Oxygen Carbon monoxide pH value Temperature(0 - 100°C)	L	Type, manufacturer and specifications
Two sets of self-contained breathing apparatus to be provided.	L	Type, manufacturer and specifications
“No Smoking” sign and “No naked flames” sign should be posted in conspicuous places.	L	Number and locations of the signs
Natural surface ventilation should be provided for cargo spaces. (Mechanical ventilation is not to be used.)	L	Drawings of the ventilation systems, Arrangement of air holes
Natural or mechanical ventilation should be provided for enclosed working spaces, such as store rooms, carpenter's shops, passage ways, tunnels. Mechanical ventilation, if used, should be of safe type for use in explosive atmosphere.	L	Drawings of the system
Two sampling holes per hold, one on each side of the hatch cover should be provided with threaded stub and sealing cap.	L	Drawings of the system

L: One copy is to be submitted to the local office for their checking.

Appendix 1.1 – Form of certificate

**Certificate of Compliance
with the Code of Safe Practice for Solid Bulk Cargoes (BC Code)**

No.

Name of ship :
Distinctive number or letters :
Port of Registry :
Gross tonnage :
Class Number :
IMO Number :

This is to certify that the ship is suitable for the carriage in bulk of all cargoes listed in the attachment in the cargo holds stated in accordance with the provisions of the Code of Safe Practice for Solid Bulk Cargoes provided that;

1. the relevant construction and equipment are maintained in good order,
2. any cargo should be loaded and distributed in pursuant to information provided in the **approved*** loading manual and the stability information booklet provided onboard the ship,
3. the nominal specific gravity of any cargo should not exceed the allowable value indicated in the loading manual, and
4. the remaining operational requirements stipulated in the Code should be ensured.

This certificate is valid until (*date of five years after the date of issue*).

Completion date of the survey on which this certificate is based :

Issued at (*place*) on (*date*) **on behalf of (the name of the flag government)***.

NIPPON KAIJI KYOKAI

(*name*), Surveyor

* *Delete if not appropriate.*

** *The list of cargoes may be attached to this certificate.*

Attachment to the certificate No.

List of Cargoes permitted to be carried.

NAME OF CARGOES	UN. No.	IMO Class	Cargo Holds
All cargoes of Group A and Group C	--	--	All cargo holds

Note:

-- End --



2 章 IMSBC コード適合鑑定実施要領

0201 一般

IMSBC コードでは、貨物は、液化化することのあるばら積み物質 (Group A)、化学的危険性を有するばら積み物質 (Group B) 及び前者のいずれにも該当しないばら積み物質 (Group C) に分類されている。本要領では、それらを各々「Group A 貨物」、「Group B 貨物」及び「Group C 貨物」と呼ぶ。

0202 構造・設備の要件

- 1. 運送貨物の種類に拘わらず、ローディングマニュアル及び復原性資料の備付けが要求される。
- 2. Group A 貨物について含水量の制限を条件としない場合は、貨物の移動を制限するための可搬式隔壁または固定式縦通隔壁が要求される。
- 3. 石炭及び褐炭以外の貨物の要件については、Table 2.1 及び Table 2.2 にその概要が示されている。石炭及び褐炭については Table 2.3 に掲げる設備が要求される。

注 2.1 同コードには消防及び人身保護のための構造・設備の他、オペレーションに関する注意及び各貨物の性状に関する情報が掲載されている。

注 2.2 Table 2.1 には、便宜のために改正 SOLAS74 の関係要件の概要も一緒に示されている。

0203 申込み

- 1. 申込者(船舶所有者若しくはその代理者または船舶建造者)は、少なくとも次の事項を記載した申込書を、船上検査に先立ち、支部・事務所または材料艀装部(EQD)に提出する。
(0204 参照)
 - (1) 対象貨物 (Group A 貨物及び Group C 貨物のみか、Group B 貨物も含むか。Group B 貨物も含む場合、そのリスト)
 - (2) 受検予定日及び場所並びに現地代理店 (就航船の場合)
 - (3) 提出書類のリスト (申請書と一緒に提出されるもののリスト及び別途提出されるもののリスト)
- 2. 対象貨物に危険物が含まれている場合、申込者は必要に応じて危険物運送適合証書発行 (船級検査及び条約検査) も申込み。
- 3. 上記 2 の場合の他、船級要件に関わる改造、変更等が行われる場合、申込者は船級検査も申し込む。

0204 書類の提出

- 1. 対象貨物に Group B 貨物が含まれている場合、申込者は Table 2.4 (石炭及び褐炭以外) 及び/または Table 2.5 (石炭及び褐炭) に掲げる書類各 1 部を適宜 EQD 又は支部・事務所に提出する。ただし、就航船の場合であって、特定の構造・設備について、要件への適合の確認が船上検査のみにより行えると検査員が判断する場合、書類の提出・審査を省略して差し支えない。
- 2. 対象貨物に含水量の制限を条件としない Group A 貨物が含まれている場合、申込者は関連の船体構造図、復原性計算書及びその他本会が必要と認める書類を EQD に各 1 部提出する。

0205 書類審査、船上検査及び鑑定書の発行

- 1. 対象貨物に Group B 貨物を含まない場合、次の(1)及び(2)による。
 - (1) 本部における書類審査及び船上検査は必要としない。支部・事務所は、鑑定書及びチェックリスト (適用要件がある場合) を作成する。ただし、
 - (a) Group A 貨物の運送について含水量の制限を条件としない場合、船体部による

- (b) 船舶の長さが 100m (1998 年 7 月 1 日以降建造契約の船舶にあつては 65m) 未満の場合、各貨物倉に積載される貨物の許容最大比重及び縦強度に関する情報を含む適当な積付資料が船上に備え付けられていることを確認すること。この場合、Appendix 2.1 を基に “**approved**” を削除して鑑定書を作成する。
- (2) 支部・事務所は、鑑定書及びチェックリスト (もし、あれば) の写し 1 部を船級部に送付する。
- 2. 対象貨物に Group B 貨物を含む場合 (Group B 貨物が石炭及び/又は褐炭のみの場合を除く)、次の(1)及び(2)による。
 - (1) 本部は、Table 2.4 に掲げられた書類の中、本部審査用の書類を審査の上、鑑定書及びチェックリストの原稿を支部・事務所に、審査所要時間を含め報告する。
 - (2) 支部・事務所は、
 - (a) Table 2.4 に掲げられた書類の中、支部・事務所審査用の書類を、必要に応じ、審査の上、その結果及び本部による書類審査結果に基づき、Table 2.2 をチェックリストとして用いて船上検査を行う。
 - (b) その結果に応じて鑑定書を完成させ、発行する。チェックリストは鑑定書に添付せず、定期的検査用に船上に保管する。
 - (c) 鑑定書及びチェックリストの写し 1 部を船級部に送付する。
- 3. 対象貨物に Group B 貨物の石炭及び/又は褐炭のみを含む場合、次の(1)乃至(3)による。
 - (1) 本部における書類審査は必要としない。支部・事務所は、鑑定書及びチェックリストを作成する。
 - (2) Table 2.5 に掲げられた書類を、必要に応じ、審査の上、作成したチェックリストを用いて船上検査を行う。チェックリストは鑑定書に添付せず、定期的検査用に船上に保管する。
 - (3) 鑑定書及びチェックリストの写し 1 部を船級部に送付する。

0206 鑑定書の更新・書換え

- 1. BC コード適合鑑定書から IMSBC コード適合鑑定書への切換え
本部における書類審査は必要としない。申込みに応じ、本部又は支部・事務所は、鑑定書、申請者への送付状及びチェックリストを作成する。鑑定書及びチェックリスト (もし、あれば) の写し 1 部を船級部に送付する。
- 2. 有効期限切れに伴う BC コード鑑定書の IMSBC コード鑑定書への切換えを含む更新
本部における書類審査は必要としない。支部・事務所は、鑑定書及びチェックリストを作成する。作成したチェックリストを用いて船上検査を行い、鑑定書を発行する。チェックリストは鑑定書に添付せず、定期的検査用に船上に保管する。鑑定書及びチェックリスト (もし、あれば) の写し 1 部を船級部に送付する。(注 6.1 参照)
- 3. 有効期限切れに伴う IMSBC コード鑑定書の更新
本部における書類審査は必要としない。支部・事務所は、船上に保管されたチェックリストを用いて船上検査を行い、その結果に応じて、Appendix 2.1 を基に鑑定書を作成し、Form 130 を使用して発行する。鑑定書の写し 1 部を船級部に送付する。(注 6.1 を参照。)
- 4. 旗国政府又は船名変更等に伴う IMSBC コード鑑定書の書換え
本部における書類審査は必要としない。支部・事務所は、船上に保管されたチェックリストを用いて船上検査を行い、その結果に応じて、Appendix 2.1 を基に鑑定書を作成し、Form 130 を使用して発行する (注 6.1 を参照)。ただし、有効期限を前鑑定書と同じ日とする場合、船上検査は要求しない。鑑定書の写し 1 部を船級部に送付する。

注 6.1 鑑定書の有効期限は、発行日から 5 年とする。

Table 2.1
Requirements of construction and equipment for individual cargoes
under the provisions of the IMSBC Code and SOLAS Reg.II-2/54.2 (Reg.II-2/19.3 on or after 2000 amendments)

a	b	c	d	e	f	g	h	i	j	k	l	m	n	o	p	q	r	s	t	u	v		
MATERIALS	IMO class	UN No.	Group	Stowage	NO SMOKING sign	Ventilation	SCBA	Protective clothing	Bilge line	Explosion protected electrical equipment	Dual purpose nozzles	4 jets of water	SOLAS Reg.II-2/54.2 or 19.3								FFEA (SOLAS Reg.II-2/10.7.1.3)		
													Remote control of fire pump	4 jets of water	Explosion protected electrical equipment	Mechanical ventilation	Safe type fan	Natural ventilation	Personnel protection	A-60 insulation			
ALFALFA			C																				
ALUMINA			C																				
ALUMINA, CALCINED			C																				
ALUMINA, SILICA			C																				
ALUMINA SILICA, pellets			C																				
ALUMINIUM FERROSILICON POWDER	4.3	1395	B	A, G	Yes	ML,Sa	Yes			IICT2					X	X	X	X	X	X			
ALUMINIUM NITRATE	5.1	1438	B				Yes	Yes			Yes	Yes	X	X				X	X			(Yes)	
ALUMINIUM SILICON POWDER, UNCOATED	4.3	1398	B	A, G	Yes	ML,Sa	Yes			IICT2					X	X	X	X	X	X			
ALUMINIUM SMELTING BY-PRODUCTS or ALUMINIUM REMELTING BY-PRODUCTS	4.3	3170	B	A, G	Yes	ML,Sa	Yes			IICT2					X	X	X	X	X	X			
AMMONIUM NITRATE	5.1	1942	B	A	Yes		Yes	Yes		IS		Yes	X	X	X		X ⁹	X	X	X		(Yes)	
AMMONIUM NITRATE BASED FERTILIZER (Type A)	5.1	2067	B	A	Yes		Yes	Yes		IS		Yes	X	X	X		X ⁹	X	X	X		(Yes)	
AMMONIUM NITRATE BASED FERTILIZER (Type B)	9	2071	B	A	Yes		Yes	Yes		IS		Yes	X	X	X		X ⁹	X	X	X		(Yes)	
AMMONIUM NITRATE, BASED FERTILIZER (non-hazardous) ⁸			C		Yes		Yes	Yes		IS		Yes											
AMMONIUM SULPHATE			C																				
ANTIMONY ORE AND RESIDUE			C																				
BARIUM NITRATE	5.1	1446	B			Nm	Yes	Yes			Yes	Yes	X	X				X	X			(Yes)	
BARYTES			C																				
BAUXITE			C																				
BIOSLUDGE			C																				
BORAX, ANHYDROUS, crude or refined			C																				
BORAX (PENTAHYDRATE CRUDE)			C																				
BROWN COAL BRIQUETTES	MHB		B							See Table 2.3.													
CALCIUM NITRATE	5.1	1454	B				Yes	Yes			Yes	Yes	X	X				X	X			(Yes)	
CALCIUM NITRATE FERTILIZER			C																				
CARBORUNDUM			C																				
CASTOR BEANS ¹	9	2969	B			Nm	Yes	Yes			Yes		X	X				X	X			Yes	
CEMENT			C																				
CEMENT CLINKERS			C																				
CEMENT COPPER			A																				

a	b	c	d	e	f	g	h	i	j	k	l	m	n	o	p	q	r	s	t	u	v
MATERIALS	IMO class	UN No.	Group	Stowage	NO SMOKING sign	Ventilation	SCBA	Protective clothing	Bilge line	Explosion protected electrical equipment	Dual purpose nozzles	4 jets of water	SOLAS Reg.II-2/54.2 or 19.3								FFEA (SOLAS Reg.II-2/10.7.1.3)
													Remote control of fire pump	4 jets of water	Explosion protected electrical equipment	Mechanical ventilation	Safe type fan	Natural ventilation	Personnel protection	A-60 insulation	
CHAMOTTE			C																		
CHARCOAL	MHB		B																		Yes
CHOPPED RUBBER AND PLASTIC INSULATION			C																		Yes ²
CHROME PELLETS			C																		
CHROMITE ORE			C																		
CLAY			C																		
COAL			A and B																		
COAL SLURRY			A			N															
COARSE CHOPPED TYRES			C																		Yes ²
COKE			C																		
COKE BREEZE			A																		
COLEMANITE			C																		
COPPER CONCENTRATE			A																		
COPPER GRANULES			C																		
COPPER MATTE			C																		
COPRA (dry)	4.2	1363	B	A	Yes	Nm							X	X				X	X	X	Yes
CRYOLITE			C																		
DIAMMONIUM PHOSPHATE (D.A.P.)			C																		
DIRECT REDUCED IRON, (A) Briquettes, hot-moulded	MHB		B	F	Yes	Nm, Sp				IICT2											
DIRECT REDUCED IRON, (B) Lumps, pellets, cold moulded briquettes ³	MHB		B	F	Yes					IICT2											Yes
DIRECT REDUCED IRON, (C) (By product fines) ³	MHB		B	F	Yes		Yes			IICT2											Yes
DOLOMITE			C																		
FELSPAR LUMP			C																		
FERROCHROME			C																		
FERROCHROME, exothermic			C																		
FERROMANGANESE			C																		
FERRONICKEL			C																		
FERROPHOSPHORUS (including briquettes)	MHB		B			M, Sa	Yes			IICT1											
FERROSILICON with 30% or more but less than 90% silicon (including briquettes)	4.3	1408	B	A, G	Yes	ML, Sa	Yes	Yes	F, N	IICT1				X	X	X	X	X	X	X	
FERROSILICON 25% to 30% silicon, or 90% or more with silicon	MHB		B	G	Yes	ML, Sa	Yes		F, N	IICT1											

a	b	c	d	e	f	g	h	i	j	k	l	m	n	o	p	q	r	s	t	u	v
MATERIALS	IMO class	UN No.	Group	Stowage	NO SMOKING sign	Ventilation	SCBA	Protective clothing	Bilge line	Explosion protected electrical equipment	Dual purpose nozzles	4 jets of water	SOLAS Reg.II-2/54.2 or 19.3								FFEA (SOLAS Reg.II-2/10.7.1.3)
													Remote control of fire pump	4 jets of water	Explosion protected electrical equipment	Mechanical ventilation	Safe type fan	Natural ventilation	Personnel protection	A-60 insulation	
(including briquettes)																					
FERROUS METAL BORINGS, SHAVINGS, TURNINGS or CUTTINGS	4.2	2793	B	A	Yes		Yes						X	X				X	X	X	Yes
FERTILIZERS WITHOUT NITRATES (non-hazardous)			C																		
FISH (IN BULK)			A																		
FISHMEAL (FISHSCRAP), STABILIZED	9	2216	B			Nm	Yes						X	X				X	X		Yes
FLUORSPAR	MHB		A and B																		
FLY ASH			C																		
GRANULATED SLAG			C																		
GRANULATE TYPE RUBBER			C																		Yes ²
GYPSUM			C																		
ILMENITE CLAY			A																		
ILMENITE SAND			C																		
IRON ORE			C																		
IRON ORE PELLETS			C																		
IRON OXIDE, SPENT or IRON SPONGE, SPENT	4.2	1376	B	A		Nm	Yes	Yes		IIAT2	Yes		X	X				X	X	X	Yes
IRONSTONE			C																		
LABRADORITE			C																		
LEAD NITRATE	5.1	1469	B			N	Yes	Yes			Yes	Yes	X	X				X	X		(Yes)
LEAD ORE			C																		
LIME (UNSLAKED)	MHB		B																		
LIMESTONE			C																		
LINTED COTTON SEED	MHB		B				Yes														Yes
MAGNESIA (DEADBURNED)			C																		
MAGNESIA (UNSLAKED)	MHB		B																		
MAGNESITE, natural			C																		
MAGNESIUM NITRATE	5.1	1474	B				Yes	Yes			Yes	Yes	X	X				X	X		(Yes)
MANGANESE ORE			C																		
MARBLE CHIPS			C																		
METAL SULPHIDE CONCENTRATES	MHB		A and B				Yes														Yes
Mineral Concentrates			A																		
MONOAMMONIUM PHOSPHATE (M.A.P.)			C																		
PEANUTS (in shell)			C	A																	
PEAT MOSS	MHB		A and B			Nm															

a	b	c	d	e	f	g	h	i	j	k	l	m	n	o	p	q	r	s	t	u	v	
MATERIALS	IMO class	UN No.	Group	Stowage	NO SMOKING sign	Ventilation	SCBA	Protective clothing	Bilge line	Explosion protected electrical equipment	Dual purpose nozzles	4 jets of water	SOLAS Reg.II-2/54.2 or 19.3								FFEA (SOLAS Reg.II-2/10.7.1.3)	
													Remote control of fire pump	4 jets of water	Explosion protected electrical equipment	Mechanical ventilation	Safe type fan	Natural ventilation	Personnel protection	A-60 insulation		
PEBBLES (sea)			C																			
PELLETS (concentrates)			C																			
PERLITE ROCK			C																			
PETROLEUM COKE, calcined or uncalcined	MHB		B				Yes	Yes			Yes											
PHOSPHATE, defluorinated			C																			
PHOSPHATE ROCK, calcined			C																			
PHOSPHATE ROCK, uncalcined			C																			
PIG IRON			C																			
PITCH PRILL	MHB		B			Nm	Yes	Yes			Yes											
POTASH			C																			
POTASSIUM CHLORIDE			C																			
POTASSIUM NITRATE	5.1	1486	B				Yes	Yes			Yes	Yes	X	X				X	X			(Yes)
POTASSIUM SULPHATE			C																			
PUMICE			C																			
PYRITE (containing copper and iron)			C																			
PYRITES, CALCINED (Calcined Pyrites)	MHB		A and B																			
PYROPHYLLITE			C																			
QUARTZ			C																			
QUARTZITE			C																			
RADIOACTIVE MATERIAL, LOW SPECIFIC ACTIVITY (LSA-1)	7	2912	B				Yes	Yes														
RADIOACTIVE MATERIAL, SURFACE CONTAMINATED OBJECTS (SCO-1)	7	2913	B				Yes	Yes														
RASORITE (ANHYDROUS)			C																			
RUTILE SAND			C																			
SALT			C																			
SALT CAKE			C																			
SALT ROCK			C																			
SAND			C	A ⁴																		
SAWDUST	MHB		B			Nm																Yes
SCRAP METAL			C			Nm																
SEED CAKE Type (a)	4.2	1386	B	A			Yes						X	X				X	X	X		Yes
SEED CAKE Type (b)	4.2	1386	B	A ⁵	Yes	Nm, Sp	Yes			IIAT3 ⁵			X	X	X ⁵	X ⁵	X ⁵	X	X	X		Yes
SEED CAKE	4.2	2217	B	A	Yes	Nm, Sp	Yes			IIAT3			X	X	X	X	X	X	X	X		Yes
SEED CAKE (non-hazardous)			C																			

a	b	c	d	e	f	g	h	i	j	k	l	m	n	o	p	q	r	s	t	u	v	
MATERIALS	IMO class	UN No.	Group	Stowage	NO SMOKING sign	Ventilation	SCBA	Protective clothing	Bilge line	Explosion protected electrical equipment	Dual purpose nozzles	4 jets of water	SOLAS Reg.II-2/54.2 or 19.3								FFEA (SOLAS Reg.II-2/10.7.1.3)	
													Remote control of fire pump	4 jets of water	Explosion protected electrical equipment	Mechanical ventilation	Safe type fan	Natural ventilation	Personnel protection	A-60 insulation		
SILICOMANGANESE (low carbon) (with known hazard profile or known to evolve gases) (with silicon content of 25% or more)	MHB		B		Yes	M, Sa	Yes			IICT1												
SODA ASH			C																			
SODIUM NITRATE	5.1	1498	B				Yes	Yes			Yes	Yes	X	X				X	X			(Yes)
SODIUM NITRATE AND POTASSIUM NITRATE MIXTURE	5.1	1499	B				Yes	Yes			Yes	Yes	X	X				X	X			(Yes)
STAINLESS STEEL GRINDING DUST			C																			
STONE CHIPPINGS			C																			
SUGAR			C																			
SULPHATE OF POTASH AND MAGNESIUM			C																			
SULPHUR (crushed lump and coarse grained) ⁶	4.1	1350	B	A	Yes	Nm, Sp	Yes			IIAT4			X	X	X		X ⁹	X	X	X		
SULPHUR (formed, solid)			C			Nm																
SUPERPHOSPHATE			C																			
SUPERPHOSPHATE (triple, granular)			C																			
TACONITE PELLETS			C																			
TALC			C																			
TANKAGE	MHB		B				Yes															Yes
TAPIOCA			C																			
UREA			C																			
VANADIUM ORE	MHB		B				Yes															
VERMICULITE			C																			
WHITE QUARTZ			C																			
WOODCHIPS	MHB		B																			Yes ⁷
WOOD PELLETS	MHB		B																			Yes
WOOD PULP PELLETS	MHB		B																			Yes ⁷
ZINC ASHES	4.3	1435	B	A	Yes	ML,Sa	Yes	Yes		IICT2					X	X	X	X	X	X	X	
ZIRCON SAND			C																			

The contents of each column in the Table 2.1 are as follows.

1. MATERIALS (column "a")
Bulk Cargo Shipping Names are expressed in capital letters and identifies a bulk cargo during transport by sea.
2. IMO class (column "b")
Group B cargoes are categorized into the following classes.
 - Class 4.1 : Flammable solids
 - Class 4.2 : Substances liable to spontaneous combustion
 - Class 4.3 : Substances which, in contact with water, emit flammable gases
 - Class 5.1 : Oxidizing substances (agents)
 - Class 7 : Radioactive materials
 - Class 9 : Miscellaneous dangerous substances and articles
 - MHB : Materials which may possess chemical hazards when transported in bulk other than materials classified as dangerous goods in the IMDG Code.
3. UN No. (column "c")
This is a 4-digit number assigned to a particular dangerous substance included in the dangerous substance list (approximately 3,000 items) within the United Nations Recommendations on the Transport of Dangerous Goods issued by the United Nations Committee of Experts on the Transport of Dangerous Goods.
4. Group (column "d")
 - A : Group A consists of cargoes which may liquefy if shipped at moisture content in excess of their transportable moisture limit.
 - B : Group B consists of cargoes which possess a chemical hazard which could give rise to a dangerous situation on a ship.
 - C : Group C consists of cargoes which are neither liable to liquefy (Group A) nor to possess chemical hazards (Group B).
5. Stowage (column "e")
 - A : Bulkheads to the engine room are to be insulated to A-60 standard.
 - F : Boundaries of components are to be resistant to fire and passage of water.
 - G : Bulkheads to the engine room are to be of gastight.
6. NO SMOKING sign (column "f")
Yes : "NO SMOKING" signs are to be posted on decks and in areas adjacent to cargo compartments.
7. Ventilation (column "g")
 - N : Natural ventilation system is to be provided for cargo holds.
 - Nm : Natural or mechanical ventilation system is to be provided for cargo holds.
 - M : Mechanical ventilation system is to be provided for cargo holds.
 - ML : At least two mechanical ventilation fans are to be provided for cargo holds. The total ventilation is to be at least six air changes per hour. Ventilation openings are to comply with the requirements of the Load Line Convention as amended for openings not fitted with means of closure.
 - Sa : Ventilation fans are to be safe for use in a flammable atmosphere.
 - Sp : Spark-arresting screens (wire mesh guards with max. 13mm X 13mm) are to be fitted to ventilation openings.
8. SCBA (column "h")
Yes : Two self contained breathing apparatuses with 200% spare cylinders are to be additionally provided.
9. Protective clothing resistant to chemical attack (column "i")
Yes : Four sets of protective clothing which consists of a pair of gloves, boots, a protective clothing and helmet with goggles are to be additionally provided.

10. Bilge line (column “j”)
 F : In case where bilge lines are led to machinery space, bilge line is to be isolated either by fitting a blank flange or by a closed lockable valve.
 N : A notice is to be placed adjacent to the valve warning against opening without the master’s permission.
11. Electrical equipment (column “k”)
 Not suitable explosion protected type electrical equipment are to be disconnected (by removal of links in the system, other than fuses) from the power source at a point external to the space.
 IIAT2: Electrical equipment having an explosion protection grade of IIAT2 or upwards are considered as suitable explosion protected type electrical equipment.
 IIAT3: Electrical equipment having an explosion protection grade of IIAT3 or upwards are considered as suitable explosion protected type electrical equipment.
 IIAT4: Electrical equipment having an explosion protection grade of IIAT4 or upwards are considered as suitable explosion protected type electrical equipment.
 IICT1: Electrical equipment having an explosion protection grade of IICT1 or upwards are considered as suitable explosion protected type electrical equipment.
 IICT2: Electrical equipment having an explosion protection grade of IICT2 or upwards are considered as suitable explosion protected type electrical equipment.
 IS: Intrinsically safe type electrical equipment are considered as suitable explosion protected type electrical equipment.
12. Dual purpose nozzles (column “l”)
 Yes : Nozzles provided with fire hoses are to be of dual-purpose type (i.e., spray/jet type).
13. 4 jets of water (column “m”)
 Yes : The quantity of water delivered is to be capable of supplying four nozzles at pressure as specified in SOLAS regulation and being trained on any part of the cargo space when empty.
14. Requirements of SOLAS Reg.II-2/54.2 (Reg.II-2/19.3 on or after 2000 amendments) (column “n” ~ “u”)
 X : Applicable.
15. FFEA (SOLAS Reg.II-2/10.7.1.3) (column “v”)
 Yes : Fixed CO2 fire extinguishing system for cargo holds are required by SOLAS Reg.II-2/10.7.1.3.
 (Yes): Fixed gas fire-extinguishing system is ineffective and for which a fixed fire-extinguishing system giving equivalent protection shall be available. According to the Unified Interpretation of IMO, water supplies defined in SOLAS Reg.II-2/19.3.1.2 are considered as the alternative of a fixed gas fire-extinguishing system in cargo spaces.
- General notes:
- For the detailed requirements of the IMSBC Code, the relevant part of the Code should be referred to.
 - The application of the requirements of SOLAS Reg.II-2/54.2 or 19.3 is shown just for ready reference. For the detailed requirements, the relevant part of the SOLAS should be referred to.
 - Blank columns mean “Not applicable”.
- Notes : 1. CASTER MEAL, CASTER POMACE and CASTER FLAKE shall not be carried in bulk.
 2. For the planned voyage not exceeding 5 days from the commencement of loading to the completion of discharge, the vessel may be exempted from the requirements of FFEA.
 3. Consideration shall be given to providing the vessel with the means to top up the cargo spaces with additional supplies of inert gas taking into account the duration of the voyage. The ship’s fixed CO2 fire extinguishing system shall not be used for this purpose.
 4. Only applicable to Industrial sand coated with resin.
 5. Only applicable to Seedcake containing solvent extractions only.
 6. Fine grained sulphur (flowers of sulphur) shall not be transported in bulk.
 7. With moisture content of 15% or more, the vessel may be exempted from the requirements of FFEA.
 8. To be stowed out of direct contact with a metal engine room boundary.
 9. Only suitable wire mesh guards are required.

Table 2.2

**IMSBC Code - Initial Checklist
(for cargoes other than COAL and BROWN COAL BRIQUETTES)**

Column of Table 2.1	Requirements	Result
e	Stowage: <input type="checkbox"/> Bulkheads to the engine room are to be insulated to A-60 standard. <input type="checkbox"/> Boundaries of components are to be resistant to fire and passage of water. <input type="checkbox"/> Bulkheads to the engine room are to be of gastight.	<input type="checkbox"/>
f	NO SMOKING sign: <input type="checkbox"/> "NO SMOKING" signs are to be posted on decks and in areas adjacent to cargo compartment.	<input type="checkbox"/>
g	Ventilation: <input type="checkbox"/> Natural ventilation systems are to be provided for cargo holds. <input type="checkbox"/> Natural or mechanical ventilation systems are to be provided for cargo holds. <input type="checkbox"/> Mechanical ventilation systems are to be provided for cargo holds. <input type="checkbox"/> At least two mechanical ventilation fans are to be provided for cargo holds. The total ventilation are to be at least six air changes per hour. Ventilation openings are to comply with the requirements of the Load Line Convention as amended for openings not fitted with means of closure. <input type="checkbox"/> Ventilation fans are to be safe for use in a flammable atmosphere. <input type="checkbox"/> Spark-arresting screens (wire mesh guards with max. 13mm×13mm) are to be fitted to ventilation openings.	<input type="checkbox"/>
h	SCBA: <input type="checkbox"/> Two self contained breathing apparatuses with 200% spare cylinders are to be additionally provided.	<input type="checkbox"/>
i	Protective clothing resistant to chemical attack: <input type="checkbox"/> Four sets of protective clothing which consists of boots, gloves, coverall and headgear are to be additionally provided.	<input type="checkbox"/>
j	Bilge line: <input type="checkbox"/> In case where bilge lines are led to machinery space, bilge lines are to be isolated either by fitting a blank flange or by a closed lockable valve. <input type="checkbox"/> A notice is to be placed adjacent to the valve warning against opening without the master's permission.	<input type="checkbox"/>
k	Electrical equipment: <input type="checkbox"/> Electrical equipment fitted in the cargo holds, including motors of mechanical ventilation systems, are to be of safe type having an explosion protection grade/type stated below or upwards. Not suitable explosion protected type electrical equipment are to be capable of being positively isolated from outside of the spaces. (<input type="checkbox"/> IIAT2 / <input type="checkbox"/> IIAT3 / <input type="checkbox"/> IIAT4 / <input type="checkbox"/> IICT1 / <input type="checkbox"/> IICT2 / <input type="checkbox"/> IICT3 / <input type="checkbox"/> IICT4 / <input type="checkbox"/> Intrinsically safe type)	<input type="checkbox"/>
l	Dual purpose nozzles <input type="checkbox"/> Nozzles provided with fire hoses are to be of dual-purpose type (i.e., spray/jet type).	<input type="checkbox"/>
m	4 jets of water <input type="checkbox"/> The quantity of water delivered is to be capable of supplying four nozzles at pressure as specified in SOLAS regulation and being trained on any part of the cargo space when empty.	<input type="checkbox"/>

- Note: 1. The requirements checked are applied to the vessel.
 2. The results of confirmation survey on board have been shown in the right columns. For the requirements complied with, the columns should be checked. For the requirements not applied, "NA" or "--" should be entered in the columns.

Ship's name :
 Class number :
 Date :

Signature: _____

Table 2.3

**IMSBC Code - Initial Checklist
(for COAL and BROWN COAL BRIQUETTES)**

1	Boundaries of cargo spaces are to be resistant to fire and liquids.	<input type="checkbox"/>
2	Electrical equipment fitted in the cargo holds are to be of safe type having an explosion protection grade of IIAT4 or upwards. Not suitable explosion protected type electrical equipment are to be capable of being positively isolated from outside of the spaces and have the enclosure having a protection degree of IP55 or upwards, and caution plates to ensure isolation of electrical equipment are to be provided.	<input type="checkbox"/>
3	Suitable means for measuring following gases, etc. in cargo spaces without entry into such spaces are to be provided. Electrical measuring device is to be of safe type having an explosion protection grade of IIAT4 or upwards. Methane Oxygen Carbon monoxide pH value Temperature(0 - 100°C)	<input type="checkbox"/>
4(*)	Two sets of self-contained breathing apparatus are to be provided. (Note: The apparatus required by SOLAS Reg.II-2/17(00E) or Reg.II-2/10(00N) may be used for this purpose)	<input type="checkbox"/>
5	"No Smoking" signs are to be posted in conspicuous places.	<input type="checkbox"/>
6(*)	Natural ventilation system is to be provided for cargo spaces and air holes should be provided at the upper part of web plates of longitudinal and transverse girders fitted to deck plates with appropriate spacing. Note: Air holes should not be located at any part that may be subject to stress concentration.	<input type="checkbox"/>
7	Natural or mechanical ventilation systems are to be provided for adjacent enclosed working spaces, such as store rooms, carpenter's shops, passage ways, tunnels. In the case of mechanical ventilation, only the equipment which is safe type for use in an explosive atmosphere can be used in cargo area.	<input type="checkbox"/>
8	Two sampling holes per hold, one on the port side and one on the starboard side of the hatch cover or upper parts of hatch coamings are to be provided with threaded stub and sealing cap.	<input type="checkbox"/>

Note: 1. The items marked with (*) are not applicable to brown coal (lignite) briquettes.
2. The results of confirmation survey on board have been shown in the right columns. For the requirements complied with, the columns should be checked. For the requirements not applied, "NA" or "--" should be entered in the columns.

Ship's name :

Class number :

Date :

Signature: _____

Table 2.4

Documents/information to be submitted

		Required items (1) Column of Table 2.2 (2) Regulation of SOLAS II-2/54 (II-2/19)	Documents/information to be submitted The meanings of “H” and “L” are specified under this table.	
(1)	(2)			
e	2.8 (3.8)	“A-60” class insulation of bulkheads between the cargo space and engine room	H	Drawings of fire protection construction Type and manufacture of the material
f	--	“NO SMOKING” signs	L	Number and locations of the signs
g	--	Natural ventilation.	H	Drawings of the system
	2.4.3 (3.4.3)	Natural or mechanical ventilation.		
	--	Mechanical ventilation	H	Drawings of the system Calculations of the air changes
	2.4.1 (3.4.1)	Mechanical ventilation (total ventilation at least six air changes per hour)		
	2.4.2 (3.4.2)	Non-sparking fans Spark-arresting screens (wire mesh guard)		
h	2.6.2 (3.6.2)	Self-contained breathing apparatus	L	Type, manufacturer and specifications
i	2.6.1 (3.6.1)	Protective clothing resistant to chemicals		
j	--	Stop valves and blank flanges on the bilge lines on machinery space side	H	Drawing of bilge lines
k	2.2 (3.2)	Electrical equipment to be of safe type.	H	Arrangement and wiring diagram of electrical equipment fitted in the space including grade of each equipment, such as IIAT4.
l	-	Jet/spray dual purpose type nozzle	L	Type, manufacturer and specifications
m	2.1.2 (3.1.2)	Capacity of fire pumps to supply four nozzles	H	Fire main piping diagram with arrangement of hydrant and pump capacity.

H: To be submitted to Material and Equipment department for examination by the Head office.

L: To be submitted to the local office for their checking.

Table 2.5

Documents/information to be submitted for COAL/BROWN COAL BRIQUETTES

Requirements on Table 2.3	Documents/information to be submitted The meaning of "L" is specified under this table	
Boundaries of cargo spaces should be resistant to fire and liquids.	—	—
Electrical cables and components situated in cargo spaces and adjacent spaces should be free from defects and safe for use in explosive atmosphere or positively isolated.	L	Arrangement and wiring diagram of electrical equipment fitted in the space including grade of each equipment, such as IIAT4.
Appropriate instruments for measuring followings into cargo spaces without entry into such spaces should be provided. Methane Oxygen Carbon monoxide pH value Temperature(0 - 100°C)	L	Type, manufacturer and specifications
Two sets of self-contained breathing apparatus to be provided.	L	Type, manufacturer and specifications
"No Smoking" sign and "No naked flames" sign should be posted in conspicuous places.	L	Number and locations of the signs
Natural surface ventilation should be provided for cargo spaces.	L	Drawings of the ventilation systems Arrangement of air holes
Natural or mechanical ventilation should be provided for enclosed working spaces, such as store rooms, carpenter's shops, passage ways, tunnels. Mechanical ventilation, if used, should be of safe type for use in explosive atmosphere.	L	Drawings of the system
Two sampling holes per hold, one on each side of the hatch cover should be provided with threaded stub and sealing cap.	L	Drawings of the system

L: To be submitted to the local office for their checking.

Appendix 2.1 - Form of certificate

Certificate of Compliance with the International Maritime Solid Bulk Cargoes (IMSBC) Code

No. (*certificate number*)

Name of ship :
Distinctive number or letters :
Port of registry :
Gross tonnage :
Class number :
IMO number :

This is to certify that the ship is suitable for the carriage in bulk of all cargoes listed in Attachment 1 in the cargo holds stated in accordance with the provisions of the International Maritime Solid Bulk Cargoes Code provided that:

1. the relevant construction and equipment are maintained in good order;
2. any cargo should be loaded and distributed in pursuant to information provided in the **approved*** loading manual and the stability information booklet provided onboard the ship;
3. the nominal specific gravity of any cargo should not exceed the allowable value indicated in the loading manual; and
4. the remaining operational requirements stipulated in the Code, including those stated in General Note on Attachment 2, should be ensured.

This certificate is valid until (*date of five years after the date of issue*).

Completion date of the survey on which this certificate is based : (*survey date*)

Issued at (*place*) on (*date*)

on behalf of (*the name of the flag government*)*.

NIPPON KAIJI KYOKAI

(*name*), Surveyor

* *Delete if not appropriate.*

Attachment to the certificate No. (*certificate number*)

General Note

- When it has been required by the Code, persons, who may be exposed to the dust of the cargo, shall wear protective clothing, goggles or other equivalent dust eye-protection and dust filter masks, as necessary.
- When carrying a solid bulk cargo which is liable to emit a toxic or flammable gas, and/or cause oxygen depletion in the cargo space, the appropriate instrument(s) for measuring the concentration of gas and oxygen in the cargo space shall be provided.

Note

1.	Except AMMONIUM NITRATE BASED FERTILIZER (non-hazardous), COAL SLURRY* , SCRAP METAL* and SULPHUR (formed, solid)* .
2.	CHOPPED RUBBER AND PLASTIC INSULATION, COARSE CHOPPED TYRES and GRANULATE TYPE RUBBER are not permitted to be loaded when the planned interval between the commencement of loading and the completion of discharge of the cargoes exceeds 5 days.
3.	AMMONIUM NITRATE BASED FERTILIZER (non-hazardous) is to be stowed out of direct contact with a metal engine room boundary.
4.	PEANUTS (in shell) and Industrial sand coated with resin are to be stowed at least 3m horizontally away from engine room boundaries.
5.	To be stowed at least 3m horizontally away from engine room boundaries.
6.	CASTER MEAL, CASTER POMACE and CASTER FLAKE shall not be carried in bulk.
7.	Consideration shall be given to providing the vessel with the means to top up the cargo spaces with additional supplies of inert gas taking into account the duration of the voyage. The ship's fixed CO2 fire extinguishing system shall not be used for this purpose.
8.	Except Seedcake containing solvent extractions.
9.	Fine grained sulphur (flowers of sulphur) shall not be transported in bulk.
10.	With moisture content of 15% or more.

* *Delete if not appropriate.*