

第 115/2015 號行政長官公告

中華人民共和國於一九九九年十二月十三日以照會通知聯合國秘書長，經修訂的《1974年國際海上人命安全公約》自一九九九年十二月二十日起適用於澳門特別行政區；

國際海事組織海上安全委員會於二零一一年五月二十日透過第MSC.318(89)號決議通過了《國際海運固體散貨規則》修正案，該修正案自二零一三年一月一日起適用於澳門特別行政區；

基於此，行政長官根據第3/1999號法律《法規的公佈與格式》第六條第一款的規定，命令公佈包含上指修正案的MSC.318(89)號決議的中文及英文文本。

二零一五年七月二十二日發佈。

行政長官 崔世安

Aviso do Chefe do Executivo n.º 115/2015

Considerando que a República Popular da China, por nota datada de 13 de Dezembro de 1999, notificou o Secretário-Geral das Nações Unidas sobre a aplicação da Convenção Internacional para a Salvaguarda da Vida Humana no Mar de 1974, tal como emendada, na Região Administrativa Especial de Macau a partir de 20 de Dezembro de 1999;

Considerando ainda que, em 20 de Maio de 2011, o Comité de Segurança Marítima da Organização Marítima Internacional, através da resolução MSC.318(89), adoptou emendas ao Código Marítimo Internacional de Cargas Sólidas a Granel, e que tais emendas são aplicáveis na Região Administrativa Especial de Macau desde 1 de Janeiro de 2013;

O Chefe do Executivo manda publicar, nos termos do n.º 1 do artigo 6.º da Lei n.º 3/1999 (Publicação e formulário dos diplomas), a resolução MSC.318(89), que contém as referidas emendas, nos seus textos em línguas chinesa e inglesa.

Promulgado em 22 de Julho de 2015.

O Chefe do Executivo, *Chui Sai On*.

第MSC.318（89）號決議

（2011年5月20日通過）

通過《國際海運固體散貨規則》修正案

海上安全委員會，

憶及《國際海事組織公約》第28（b）條關於本委員會的職能，

注意到第MSC.268（85）號決議通過的《國際海運固體散貨規則》（以下稱“《國際固散規則》”），它根據經修正的《1974年國際海上人命安全公約》（以下稱“本公約”）第VI章和第VII章已成為強制性規定，

還注意到本公約第VIII（b）條和第VI/1-1.1條關於修正《國際固散規則》的修正程序，

在其第89屆會議上，審議了按本公約第VIII（b）（i）條提議和散發的《國際固散規則》的修正案，

1. 按照本公約第VIII（b）（iv）條，通過《國際固散規則》的修正案，其文本載於本決議附件；

2. 按照本公約第VIII（b）（vi）（2）（bb）條，決定上述修正案於2012年7月1日須視為被接受，除非在此日期之前，有三分之一以上的本公約締約國政府或擁有商船合計噸位不少於世界商船總噸位50%的締約國政府通知其反對該修正案；

3. 請本公約各締約國政府注意，按照本公約第 VIII (b) (vii) (2) 條，該修正案須在按上述第 2 段被接受後，於 2013 年 1 月 1 日生效；

4. 同意本公約各締約國政府可從 2012 年 1 月 1 日起自願全部或部分適用上述修正案；

5. 要求秘書長遵照本公約第 VIII (b) (v) 條，將本決議及其附件中修正案文本的核證無誤副本發送給所有本公約締約國政府；

6. 進一步要求秘書長將本決議及其附件的副本發送給所有非本公約締約國的本組織會員國。

附件

《國際海運固體散貨規則》第 01-11 套修正案

附錄 1

固體散貨明細表

硅鐵鋁粉末 (ALUMINIUM FERROSILICON POWDER) UN 1395

注意事項

- 1 第 2 句中，“主管當局”一詞由“主管機關”替代。

硝酸鋁 (ALUMINIUM NITRATE) UN 1438

注意事項

- 2 在該段末尾增加下列句子：

“船長和高級船員應注意，船舶的固定式氣體滅火裝置對波及該貨物的火災無效並可能有必要施放大量的水。”

無塗層鋁硅粉 (ALUMINIUM SILICON POWDER, UNCOATED) UN 1398

注意事項

- 3 第 2 句中，“主管當局”一詞由“主管機關”替代。

硝酸銨 (AMMONIUM NITRATE) UN 1942

(可燃物質含量總計不超過 0.2%，包括任何以碳計算的有機物質，任何其他附加物質不計在內。)

說明

4 刪除“助燃。吸濕。”。

5 說明後新增註釋如下：

“註：

本明細表應僅用於在按第 1 類的試驗系列 1 和 2(見《聯合國試驗和衡準手冊》第 1 部分)進行試驗時不顯示第 1 類特性的物質。”。

危害

6 在第 1 段開頭，增加“氧化劑，助燃。”。

7 在現有第 1 句中，“這些物質”由“該貨物”替代。

積載和隔離

8 在第 1 句中，“應”由“須”替代。

裝載

9 在第 1 句中，“4 和 5”由“4、5 和 6”替代。

裝載期間，須符合下列規定：

10 刪除與吸煙有關的第 1 條。

注意事項

11 在第 1 段中，現有第 3 句由下列文本替代：

“船長和高級船員應注意，船舶的固定式氣體滅火裝置對波及該貨物的火災無效並可能有必要施放大量的水。”

12 在第 1 段中，刪除最後一句。

運輸

13 新增第 2 句如下：

“在航行期間，須每天監測並記錄該貨物溫度，以發現可能導致發熱和缺氧的分解現象。”

卸貨

14 第 2 句由下列文本替代：

“應不准加裝燃油。除機艙外，應不准在該貨物所用貨物處所的相鄰處所泵送燃油。”

應急程序

15 在關於裝有這種物質的貨物處所着火的規定中，在“船舶的固定式氣體滅火”後插入“裝置”一詞。

16 在關於裝有這種物質的貨物處所着火的規定中，“使用大量的水”由“使用大量的水並隔離熱源（如有）”替代。

硝酸銨基化肥（AMMONIUM NITRATE BASED FERTILIZER）UN 2067

說明

17 在第.2 項中，在“白雲岩”一詞後插入“和/或礦物硫酸鈣”。

註：

18 在註 3 中，刪除“爆炸”一詞。

積載和隔離

19 在第 4 句中，“液艙或雙層底”由“液艙、雙層底或管路”替代。

裝載

20 在第 1 句中，“4 和 5”由“4、5 和 6”替代。

注意事項

21 在第 1 句後，增加一句如下：

“船長和高級船員應注意，船舶的固定式氣體滅火裝置對波及該貨物的火災無效並可能有必要施放大量的水。”

運輸

22 在第 2 句中，“導致自熱”由“可能導致發熱”替代。

卸貨

23 第 1 句由下列文本替代：

“應不准加裝燃油。除機艙外，應不准在該貨物所用貨物處所的相鄰處所泵送燃油。”

24 在新增的第 2 句之後增加下列文本：

“硝酸銨基化肥吸濕，可能懸垂結塊，在卸貨期間損害安全。”

應急程序

25 在關於裝有這種物質的貨物處所着火的規定中，“船舶的固定式滅火裝置”由“船舶的固定式氣體滅火裝置”替代。

26 在關於裝有這種物質的貨物處所着火的規定中，在第 3 句中，在“水”一詞後插入“並隔離熱源（如有）”。

硝酸銨基化肥（AMMONIUM NITRATE BASED FERTILIZER）UN 2071

說明

27 在第 2 段中，插入與“（見《聯合國試驗和衡准手冊》第 III 部分第 38.2 小節）”有關的腳註如下：

“* 還見本規則附錄 2 的第 5 節。”

危害

28 在第 1 段中，“混合物”一詞由第 1 句中的“貨物”替代，在最後 1 句中，“混合物”一詞由“貨物”替代。

積載和隔離

29 在最後 1 句中，在“標準，則”之後插入“該貨物須積載”。

裝載

30 在第 1 段第一目中，“4 和 5”由“4、5 和 6”替代。

裝載期間，須符合下列規定：

31 增加新的 1 條如下：

“● 在合理可行範圍內不得使用可燃的繫固和保護材料。如有必要使用木質貨墊，須儘量少用。”

注意事項

32 在第 1 句後增加下列文本：

“船長和高級船員應注意，船舶的固定式氣體滅火裝置對波及該貨物的火災無效並可能有必要施放大量的水。”

卸貨

33 第 1 句由下列文本替代：

“應不准加裝燃油。除機艙外，應不准在該貨物所用貨物處所的相鄰處所泵送燃油。”

34 在新增的第 2 句之後，增加一句如下：

“硝酸銨基化肥吸濕，可能懸垂結塊，在卸貨期間損害安全。”

應急程序

35 在關於裝有這種物質的貨物處所着火的規定中，“船舶的固定式滅火裝置”由“船舶的固定式氣體滅火裝置”替代。

硝酸銨基化肥 (AMMONIUM NITRATE BASED FERTILIZER) (無危害)

說明

36 在第.2 項中，在“白雲岩”一詞後插入“和/或礦物硫酸鈣”。

37 在第.4 項中，插入與“(見《聯合國試驗和衡準手冊》第 III 部分第 38.2 小節)”有關的腳註如下：

“* 還見本規則附錄 2 的第 5 節。”

危害

38 該標題下的整個原文由下列文本替代：

“該貨物為不燃物或失火風險低。該貨物雖歸入無危害類別，但在遇到強熱時顯示 UN 2071 所屬第 9 類硝酸銨基化肥的某些特性。當該貨物遇到強熱時，會發生分解並放出有毒氣體，在貨物處所和相鄰處所內以及甲板上將有產生有毒煙氣的風險。對貨物溫度的監測可以及早顯示貨物分解。化肥粉塵可能會刺激眼睛和粘膜。該貨物吸濕，受潮會結塊。”

積載和隔離

39 在第 3 句中，“液艙或雙層底”由“液艙、雙層底或管路”替代。

40 在第 4 句中，“應”由“須”替代。

41 在第 5 句中，“擋板”由“佈置”替代。

42 在最後 1 段中，最後 1 句由下列文本替代：

“如為 A-60 級艙壁或對於短途國際航行，此要求不必適用。”

裝載

43 在第 1 段第 1 句中，“4 和 5”由“4、5 和 6”替代。

注意事項

44 在第 1 句後增加下列文本：

“船長和高級船員應注意，船舶的固定式氣體滅火裝置對波及該貨物的火災無效並可能有必要施放大量的水。”

運輸

45 刪除第 2 句。

卸貨

46 第 1 句由下列文本替代：

“應不准加裝燃油。除機艙外，應不准在該貨物所用貨物處所的相鄰處所泵送燃油。硝酸銨基化肥吸濕，可能懸垂結塊，在卸貨期間損害安全。”

應急程序

47 在關於裝有這種物質的貨物處所着火的規定中，“船舶的固定式滅火裝置”由“船舶的固定式氣體滅火裝置”替代。

48 在關於裝有這種物質的貨物處所着火的規定中，在第 3 句中，在“水”一詞後插入“並隔離熱源（如有）”。

硫酸銨（AMMONIUM SULPHATE）

危害

49 在該段末尾增加下列文本：

“該貨物吸濕，受潮會結塊。”

裝載

50 在最後 1 句中，“4 和 5”由“4、5 和 6”替代。

卸貨

51 在該段開頭增加下列文本：

“硫酸銨吸濕，可能懸垂結塊，在卸貨期間損害安全。”

硝酸鋇 (BARIUM NITRATE) UN 1446

注意事項

52 在該段末尾增加下列文本：

“船長和高級船員應注意，船舶的固定式氣體滅火裝置對波及該貨物的火災無效並可能有必要施放大量的水。”

硼砂 (BORAX) (五水合物原礦)

卸貨

53 在該段開頭增加下列文本：

“硼砂（五水合物原礦）吸濕，可能懸垂結塊，在卸貨期間損害安全。”

無水硼砂 (BORAX, ANHYDROUS) (原礦或提煉品)

裝載

54 “4 和 5” 由 “4、5 和 6” 替代。

卸貨

55 在該段開頭增加下列文本：

“無水硼砂（原礦或提煉品）吸濕，可能懸垂結塊，在卸貨期間損害安全。”

褐煤磚 (BROWN COAL BRIQUETTES)

危害

56 原文由下列文本替代：

“該貨物容易點燃，易於自熱，可能自燃並消耗貨物處所的氧氣。”

附錄

57 在注意事項的第 1.1 項中，刪除“和敞開的貨物處所封閉裝置”。

硝酸鈣 (CALCIUM NITRATE) UN 1454

注意事項

58 在該段末尾增加下列文本：

“船長和高級船員應注意，船舶的固定式氣體滅火裝置對波及該貨物的火災無效並可能有必要施放大量的水。”

卸貨

59 在該段開頭增加下列文本：

“硝酸鈣吸濕，可能懸垂結塊，在卸貨期間損害安全。”

硝酸鈣化肥 (CALCIUM NITRATE FERTILIZER)

裝載

60 “4 和 5” 由 “4、5 和 6” 替代。

粘土 (CLAY)

清掃

61 原文由“該貨物卸去後，須特別注意貨物處所的艙底污水井”替代。

磷酸二銨 (DIAMMONIUM PHOSPHATE) (D.A.P)**裝載**

62 “4 和 5” 由 “4、5 和 6” 替代。

卸貨

63 在該段開頭增加下列文本：

“磷酸二銨吸濕，可能懸垂結塊，在卸貨期間損害安全。”

乾酒糟及其可溶物 (DISTILLERS DRIED GRAINS WITH SOLUBLES)

64 在現有直接還原鐵 (C) 明細表後，新增乾酒糟及其可溶物明細表如下：

“乾酒糟及其可溶物

說明

用酵母和酶對玉米的澱粉部分進行發酵以產生乙醇和二氧化碳後殘留的粗穀粒和濃縮蒸餾可溶物的乾混合物。顏色為黃褐色並有煮熟的玉米味。含水量不超過 13%，含油量不超過 11%。本明細表不適用於非散裝運輸的濕酒糟 (WDG) 和乾酒糟 (DDG)。

特徵

靜止角	散貨密度 (kg/m ³)	積載因數 (m ³ /t)
不適用	450 至 520	1.92 至 2.22
尺寸	類別	組別
不適用	不適用	C

危害

無特殊危害。

該貨物為不燃物或失火風險低。

積載和隔離

無特殊要求。

貨艙清潔度

按貨物的危害程度達到相應的清潔和乾燥狀態。

天氣注意事項

該貨物須儘實際可能保持乾燥。該貨物不得在降水期間裝卸。在該貨物裝卸期間，裝載該貨物的貨物處所的所有未用艙口均須關閉。

裝載

在開敞未封閉的區域裝載。按本規則第 4 和 5 節的相關規定進行平艙。

注意事項

無特殊要求。

通風

無特殊要求。

運輸

載運該貨物的貨物處所的艙口須為風雨密，以防進水。

卸貨

如該貨物已硬化，必要時須平艙以避免形成懸垂塊片。

清掃

無特殊要求。”

磷鐵合金 (FERROPHOSPHORUS) (包括磚形塊)

運輸

65 原文由下列文本替代：

“為測量根據貨物信息獲得的該貨物可能釋放的易燃和有毒氣體（例如磷化氫）的含量，該貨物載運期間船上須有針對每種氣體或混合氣體的合適的探測器。探測器須為經核准在爆炸性空氣中使用的安全類型。載運該貨的貨物處所中這些氣體的濃度須在航行期間定期測量，測量結果須有記錄並在船上保存。”

硅鐵 (FERROSILICON) UN 1408

附錄 - 詳細要求

66 在第 1 句中，“主管當局”一詞由“主管機關”替代。

硅鐵 (FERROSILICON) (硅含量 25%至 30%或硅含量 90%或以上)

裝載

67 第 2 句由下列文本替代：

“由於該貨物密度極高，內底可能會受力過大，除非貨物在內底均勻鋪開以使重量平均分佈。在航行和裝載期間，須充分注意確保內底不因貨物呈堆狀而受力過大。參見本明細表的附錄。”

附錄 - 詳細要求

68 在第 1 句和第 2 句中，“主管當局”一詞由“主管機關”替代。

七水硫酸亞鐵 (FERROUS SULPHATE HEPTAHYDRATE)

69 在現有黑色金屬鑽屑、削屑、旋屑或切屑 UN 2793 明細表後，新增七水硫酸亞鐵明細表如下：

“七水硫酸亞鐵

說明

淡綠色晶體。水中極易溶解。貨品一般稱為“綠礬”。

特徵

靜止角	散貨密度 (kg/m ³)	積載因數 (m ³ /t)
不適用	750 至 1250	0.8 至 1.3
尺寸	類別	組別
不適用	不適用	C

危害

吞入有害。造成嚴重的眼睛刺激。造成皮膚刺激。

該貨物為不燃物或失火風險低。

潮濕時易結塊。

該貨物極易溶解，濕時會呈酸性。

過量溢入水系統會導致水中缺氧。

積載和隔離

與氧化性物質“隔離”。

貨艙清潔度

按貨物的危害程度達到相應的清潔和乾燥狀態。

天氣注意事項

該貨物須儘實際可能保持乾燥。該貨物不得在降水期間裝卸。在該貨物裝卸期間，裝載該貨物的貨物處所的所有未用艙口均須關閉。

裝載

按本規則第 4 和 5 節的相關規定進行平艙。

注意事項

避免接觸眼睛和皮膚。可能接觸貨品的人員須穿戴防護服、手套和護目用具。通常這是一個不起塵的貨品，但是在特別乾燥條件下，如果產生粉塵，還須戴過濾面罩。艙底污水井須保持清潔、乾燥並適當遮蓋以防貨物進入。

通風

在航行期間，不得對載運該貨物的貨物處所通風。

運輸

貨物處所的艙口須為風雨密，以防進水。

卸貨

如該貨物已硬化，必要時須平艙以避免形成懸垂塊片。

清掃

該貨物卸去後，貨物處所和艙底污水井須清掃乾淨然後徹底沖洗。”

不含硝酸鹽的化肥 (FERTILIZERS WITHOUT NITRATES) (無危害)

卸貨

70 在該段開頭增加下列文本：

“不含硝酸鹽的化肥吸濕，可能懸垂結塊，在卸貨期間損害安全。”

飄塵 (FLY ASH)

71 在該明細表的標題飄塵中，增加“，乾”。

飄塵，濕

72 在現有飄塵明細表後，新增飄塵，濕明細表如下：

“飄塵，濕

說明

灰色粉末。該貨物是燃燒煤和油的火力發電廠產生的輕質細碎且多粉塵的細粉末狀殘留物和水的混合物（水不少於 10%）。具有氨的氣味。

特徵

靜止角	散貨密度 (kg/m ³)	積載因數 (m ³ /t)
不適用	900 至 1300	0.77 至 1.11
尺寸	類別	組別
小於 1 mm	不適用	A

危害

濕飄塵如含水量足夠高則易於流動。

該貨物為不燃物或失火風險低。

積載和隔離

與食品“隔離”。

貨艙清潔度

無特殊要求。

天氣注意事項

當貨物由符合本規則第 7.3.2 小節要求的特別建造或裝備的貨船以外的船舶載運時，須符合下列規定：

- .1 須使貨物的含水量在航行期間低於其 TML；
- .2 除本明細表另有明文規定外，該貨物不得在降水期間裝卸；
- .3 除本明細表另有明文規定外，在該貨物裝卸期間，裝載或待裝載該貨物的處所的所有未用艙口均須關閉；

- .4 如貨物的實際含水量遠低於其 TML，使實際水分含量不會因降水而超過其 TML，則可在降水期間裝卸該貨物；
和
- .5 如某一貨物處所的全部貨物要在港口卸完，則該貨物處所可在降水期間卸貨。

裝載

按本規則第 4 和 5 節的相關規定進行平艙。

注意事項

艙底污水井須保持清潔、乾燥並適當遮蓋以防貨物進入。

通風

在航行期間，不得對載運該貨物的貨物處所通風。

運輸

該貨物的表面外形須在航行期間定期檢查。如在航行期間觀察到貨物表面出現自由水或貨物呈現流體狀態，船長須採取相應行動防止貨物的移動和船舶可能的傾覆，並考慮設法緊急駛入避難地。

卸貨

無特殊要求。

清掃

該貨物卸去後，須檢查貨物處所的艙底污水井和泄水孔並須排除艙底污水井和泄水孔的任何堵塞。”

顆粒狀硫酸亞鐵 (GRANULAR FERROUS SULPHATE)

73 在新飄塵，濕明細表後，新增顆粒狀硫酸亞鐵明細表如下：

“顆粒狀硫酸亞鐵**說明**

灰至褐色顆粒。吸收水分並極易溶於水。

特徵

靜止角	散貨密度 (kg/m ³)	積載因數 (m ³ /t)
30°至 45°	1100 至 1600	0.63 至 0.9
尺寸	類別	組別
最大 15 mm	不適用	C

危害

吞入有害。造成嚴重的眼睛刺激。造成皮膚刺激。

該貨物為不燃物或失火風險低。

潮濕時易結塊。

該貨物極易溶解，濕時會呈酸性。

過量溢入水系統會導致水中缺氧。

積載和隔離

與氧化性物質“隔離”。

貨艙清潔度

按貨物的危害程度達到相應的清潔和乾燥狀態。

天氣注意事項

該貨物須儘實際可能保持乾燥。該貨物不得在降水期間裝卸。在該貨物裝卸期間，裝載該貨物的貨物處所的所有未用艙口均須關閉。

裝載

按本規則第 4、5 和 6 節的相關規定進行平艙。

注意事項

避免接觸眼睛和皮膚。可能接觸貨品的人員須穿戴防護服、手套和護目用具。裝載時儘量減少粉塵的產生。如果產生粉塵，還須戴過濾面罩。

艙底污水井須保持清潔、乾燥並適當遮蓋以防貨物進入。

通風

在航行期間，不得對載運該貨物的貨物處所通風。

運輸

貨物處所的艙口須為風雨密，以防進水。

卸貨

如該貨物已硬化，必要時須平艙以避免形成懸垂塊片。

清掃

該貨物卸去後，貨物處所和艙底污水井須清掃乾淨然後徹底沖洗。”

石膏 (GYPSUM)

天氣注意事項

74 在第 2 和第 3 句中，“裝卸”和“裝卸中”分別由“裝載”和“裝載中”替代。

硝酸鉛 (LEAD NITRATE) UN 1469

注意事項

75 在該段末尾增加下列文本：

“船長和高級船員應注意，船舶的固定式氣體滅火裝置對波及該貨物的火災無效並可能有必要施放大量的水。”

硝酸鎂 (MAGNESIUM NITRATE) UN 1474

注意事項

76 原句由下列文本替代：

“船長和高級船員應注意，船舶的固定式氣體滅火裝置對波及該貨物的火災無效並可能有必要施放大量的水。”

卸貨

77 在該段開頭增加下列文本：

“硝酸鎂吸濕，可能懸垂結塊，在卸貨期間損害安全。”

硫酸鎂化肥 (MAGNESIUM SULPHATE FERTILIZERS)

78 在現有硝酸鎂 UN 1474 明細表後，新增硫酸鎂化肥明細表如下：

“硫酸鎂化肥

說明

含有硫酸鎂的粉末化肥或化肥成分。

灰至褐色粉末。部分溶於水並可能多粉塵。

特徵

靜止角	散貨密度 (kg/m ³)	積載因數 (m ³ /t)
30°至 35°	850 至 1150	0.87 至 1.18
尺寸	類別	組別
粉末	不適用	C

危害

吞入可能有害。可造成皮膚或眼睛刺激。

該貨物為不燃物或失火風險低。

該貨物部分可溶。

多粉塵但潮濕時可能結塊。

積載和隔離

無特殊要求。

貨艙清潔度

按貨物的危害程度達到相應的清潔和乾燥狀態。

天氣注意事項

該貨物須儘實際可能保持乾燥。該貨物不得在降水期間裝卸。
在該貨物裝卸期間，裝載該貨物的貨物處的所有未用艙口均須關閉。

裝載

按本規則第 4、5 和 6 節的相關規定進行平艙。

注意事項

避免接觸眼睛和皮膚。裝載時儘量減少粉塵的產生。可能暴露於貨物粉塵的人員須戴護目鏡或其他等效的防塵護目用具和粉塵過濾面罩，必要時須穿防護服。

艙底污水井須保持清潔、乾燥並適當遮蓋以防貨物進入。

通風

在航行期間，不得對載運該貨物的貨物處所通風。

運輸

貨物處所的艙口須為風雨密，以防進水。

卸貨

如該貨物已硬化，必要時須平艙以避免形成懸垂塊片。

清掃

該貨物卸去後，貨物處所和艙底污水井須清掃乾淨然後徹底沖洗。”

金屬硫化物精礦 (METAL SULPHIDE CONCENTRATES)

裝載

79 刪除“，特別對船長為 100 m 或以下的較小船舶”。

精礦 (MINERAL CONCENTRATES)**散貨船運名**

80 刪除散貨船運名清單之後的“以上列出了精礦的所有已知散貨船運名 (BCSN)，但該清單並非詳盡無遺。”一句。

裝載

81 刪除“，特別對船長為 100 m 或以下的較小船舶”。

磷酸一銨 (MONOAMMONIUM PHOSPHATE) (M.A.P.)**裝載**

82 “4 和 5”由“4、5 和 6”替代。

卸貨

83 在該段開頭增加下列文本：

“硫酸一銨吸濕，可能懸垂結塊，在卸貨期間損害安全。”

磷酸鹽岩 (PHOSPHATE ROCK) (經煨燒)**卸貨**

84 在該段開頭增加下列文本：

“磷酸鹽岩 (經煨燒) 吸濕，可能懸垂結塊，在卸貨期間損害安全。”

鉀鹼 (POTASH)**裝載**

85 “4 和 5”由“4、5 和 6”替代。

卸貨

86 在該段開頭增加下列文本：

“鉀鹼吸濕，可能懸垂結塊，在卸貨期間損害安全。”

氯化鉀 (POTASSIUM CHLORIDE)

裝載

87 “4 和 5” 由 “4、5 和 6” 替代。

卸貨

88 在該段開頭增加下列文本：

“氯化鉀吸濕，可能懸垂結塊，在卸貨期間損害安全。”

硝酸鉀 (POTASSIUM NITRATE) UN 1486

裝載

89 “4 和 5” 由 “4、5 和 6” 替代。

注意事項

90 在該段末尾增加下列文本：

“船長和高級船員應注意，船舶的固定式氣體滅火裝置對波及該貨物的火災無效並可能有必要施放大量的水。”

卸貨

91 在該段開頭增加下列文本：

“硝酸鉀吸濕，可能懸垂結塊，在卸貨期間損害安全。”

硫酸鉀 (POTASSIUM SULPHATE)**裝載**

92 “4 和 5” 由 “4、5 和 6” 替代。

黃鐵礦 (PYRITES, CALCINED) (煨燒黃鐵礦)**注意事項**

93 第 3 句中，“裝載前鋪上石灰” 由 “裝載前塗上防護塗層（例如用石灰水粉刷），以防貨物、水和鋼材之間可能產生腐蝕性反應。” 替代。

斜方硼砂 (RASORITE) (無水)**卸貨**

94 在該段開頭增加下列句子：

“斜方硼砂（無水）吸濕，可能懸垂結塊，在卸貨期間損害安全。”

鹽 (SALT)**天氣注意事項**

95 在第 2 和第 3 句中，“裝卸” 和 “裝卸中” 分別由 “裝載” 和 “裝載中” 替代。

含植物油種子餅 (SEED CAKE, containing vegetable oil) UN 1386 (b)**說明**

96 在最後 1 段第 1 句後，增加下列文本：

“本明細表的規定也不應適用於經機械壓榨的油含量不大於 2.5%、合計油和水含量不大於 14%的柑橘渣粒。”

注意事項

97 在第 5 句中，“不到貨物處所明顯不會着火時不得使用二氧化碳或惰性氣體，以免可能將溶劑蒸氣點燃”由“除非明顯着火時否則不得使用二氧化碳或惰性氣體”替代。

備註

98 刪除第 1 句。

種子餅 (SEED CAKE) UN 2217

注意事項

99 在現有第 4 句中，“不到貨物處所明顯不會着火時不得使用二氧化碳或惰性氣體，以免可能將溶劑蒸氣點燃”由“除非明顯着火時否則不得使用二氧化碳或惰性氣體”替代。

備註

100 刪除第 1 句。

種子餅 (SEED CAKE) (無危害)

說明

101 在第 1 段結尾增加一句如下：

“本明細表的規定也適用於經機械壓榨的油含量不大於 2.5%、合計油和水含量不大於 14%的柑橘渣粒。”

硝酸鈉 (SODIUM NITRATE) UN 1498**注意事項**

102 在該段末尾增加下列文本：

“船長和高級船員應注意，船舶的固定式氣體滅火裝置對波及該貨物的火災無效並可能有必要施放大量的水。”

卸貨

103 在該段開頭增加下列文本：

“硝酸鈉吸濕，可能懸垂結塊，在卸貨期間損害安全。”

硝酸鈉和硝酸鉀混合物 (SODIUM NITRATE AND POTASSIUM NITRATE MIXTURE) UN 1499**裝載**

104 “4 和 5” 由 “4、5 和 6” 替代。

注意事項

105 在該段末尾增加下列文本：

“船長和高級船員應注意，船舶的固定式氣體滅火裝置對波及該貨物的火災無效並可能有必要施放大量的水。”

卸貨

106 在該段開頭增加下列文本：

“硝酸鈉和硝酸鉀混合物吸濕，可能懸垂結塊，在卸貨期間損害安全。”

硫磺 SULPHUR (成形, 固體)

注意事項

107 第 3 句 “貨艙包括平艙板和內底應用市場上供應的有效防護塗層予以處理或用石灰水粉刷, 以防硫磺、水和鋼材之間可能產生腐蝕性反應。” 由 “貨艙包括平艙板和內底應用防護塗層予以處理 (例如用石灰水粉刷), 以防硫磺、水和鋼材之間可能產生腐蝕性反應。” 替代。

過磷酸鹽 (SUPERPHOSPHATE)

裝載

108 “4 和 5” 由 “4、5 和 6” 替代。

卸貨

109 在該段開頭增加下列文本：

“過磷酸鹽吸濕, 可能懸垂結塊, 在卸貨期間損害安全。”

木薯澱粉 (TAPIOCA)

裝載

110 “4 和 5” 由 “4、5 和 6” 替代。

尿素 (UREA)

裝載

111 “4 和 5” 由 “4、5 和 6” 替代。

卸貨

112 在該段開頭增加下列文本：

“尿素吸濕，可能懸垂結塊，在卸貨期間損害安全。”

木球團 (WOOD PELLETS)

裝載

113 “4 和 5” 由 “4、5 和 6” 替代。

木製品 (WOOD PRODUCTS) – 常規的

114 在現有木球團明細表後，新增木製品 – 常規的明細表如下：

“木製品 – 常規的

(見以下散貨船運名)

原木 製漿木材

木材 圓材

鋸木

說明

本明細表只適用於散裝運輸的木製品，即用升降機或抓斗等方式裝卸，且未具體列於單獨的明細表中。

特徵

靜止角	散貨密度 (kg/m ³)	積載因數 (m ³ /t)
不適用	250 至 500	2 至 4
尺寸	類別	組別
-	MHB	B

危害

這些貨物易造成貨物處所及相鄰處所缺氧和二氧化碳增加。

這些貨物為不可燃或失火風險低。

積載和隔離

無特殊要求。

貨艙清潔度

無特殊要求。

天氣注意事項

無特殊要求。

裝載

按本規則第 4 和 5 節的相關規定進行平艙。

注意事項

須不准人員進入貨物處所和相鄰狹小處所，除非已作檢測並已確定氧含量為 21%。如不符合這一條件，須增加貨艙或相鄰封閉處所的通風量，並須在經過一段適當時間間隔後重新測量氣體含量。

所有船員進入貨物處所和相鄰封閉處所時，均須配戴和啟用氧氣測量計。

通風

貨艙的相鄰封閉處所即使已明顯與貨艙密封分開，在進入這些處所前可能仍需通風。

運輸

無特殊要求。

卸貨

無特殊要求。

清掃

無特殊要求。

應急程序

須攜帶的專用應急設備 須備有自給式呼吸器及氧氣測量計。
應急程序 無
火災應急措施 關閉艙蓋板；使用船舶的固定式滅火裝置（如設有）。隔絕空氣可能足以控制火勢。
醫療急救 參見經修正的《醫療急救指南（MFAG）》。

木漿球團（WOOD PULP PELLETS）

115 現有木漿球團明細表全部刪除。

附錄 3

固體散貨的特性

116 在第 1.1 小節中，刪除下列散貨船運名：

蓖麻籽

硝酸鈉

117 在第 1.1 小節中，增加下列散貨船運名：

顆粒狀硫酸鹽亞鐵

硫酸鎂化肥

木薯澱粉

木球團

附錄 4

索引

118 BCSN “飄塵” 由 “飄塵，乾” 替代。

119 在表中增加下列各行：

物質	組別	參照
乾酒糟及其可溶物	C	
七水硫酸亞鐵	C	
飄塵，濕	A	
顆粒狀硫酸亞鐵	C	
原木	B	見木製品－明細總表
硫酸鎂化肥	C	
製漿木材	B	見木製品－明細總表
圓材	B	見木製品－明細總表
鋸木	B	見木製品－明細總表
木材	B	見木製品－明細總表
木製品－常規的	B	

120 刪除“木漿球團”和“球團，木漿質”。

RESOLUTION MSC.318(89)
(adopted on 20 May 2011)

**ADOPTION OF AMENDMENTS TO THE INTERNATIONAL MARITIME
SOLID BULK CARGOES CODE**

THE MARITIME SAFETY COMMITTEE,

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

NOTING resolution MSC.268(85) by which it adopted the International Maritime Solid Bulk Cargoes Code (hereinafter referred to as "the IMSBC Code"), which has become mandatory under chapters VI and VII of the International Convention for the Safety of Life at Sea (SOLAS), 1974 (hereinafter referred to as "the Convention"),

NOTING ALSO article VIII(b) and regulation VI/1-1.1 of the Convention concerning the amendment procedure for amending the IMSBC Code,

HAVING CONSIDERED, at its eighty-ninth session, amendments to the IMSBC Code, proposed and circulated in accordance with article VIII(b)(i) of the Convention,

1. ADOPTS, in accordance with article VIII(b)(iv) of the Convention, amendments to the IMSBC Code, the text of which is set out in the Annex to the present resolution;

2. DETERMINES, in accordance with article VIII(b)(vi)(2)(bb) of the Convention, that the said amendments shall be deemed to have been accepted on 1 July 2012, unless, prior to that date, more than one third of the Contracting Governments to the Convention or Contracting Governments the combined merchant fleets of which constitute not less than 50% of the gross tonnage of the world's merchant fleet, have notified their objections to the amendments;

3. INVITES Contracting Governments to the Convention to note that, in accordance with article VIII(b)(vii)(2) of the Convention, the amendments shall enter into force on 1 January 2013 upon their acceptance in accordance with paragraph 2 above;

4. AGREES that Contracting Governments to the Convention may apply the aforementioned amendments in whole or in part on a voluntary basis as from 1 January 2012;

5. REQUESTS the Secretary-General, in conformity with article VIII(b)(v) of the Convention, to transmit certified copies of the present resolution and the text of the amendments contained in the Annex to all Contracting Governments to the Convention;

6. FURTHER REQUESTS the Secretary-General to transmit copies of this resolution and its Annex to Members of the Organization which are not Contracting Governments to the Convention.

ANNEX**AMENDMENT 01-11 TO THE INTERNATIONAL MARITIME
SOLID BULK CARGOES CODE****APPENDIX 1****INDIVIDUAL SCHEDULES OF SOLID BULK CARGOES****ALUMINIUM FERROSILICON POWDER, UN 1395****PRECAUTIONS**

1 In the second sentence, the words "competent Authority" are replaced by the word "Administration".

ALUMINIUM NITRATE, UN 1438**PRECAUTIONS**

2 At the end of the paragraph, the following sentence is added:

"The master and officers are to note that the ship's fixed gas fire-fighting installation will be ineffective on fires involving this cargo and that applying copious amounts of water may be necessary."

ALUMINIUM SILICON POWDER, UNCOATED UN 1398**PRECAUTIONS**

3 In the second sentence, the words "competent Authority" are replaced by the word "Administration".

AMMONIUM NITRATE UN 1942

with not more than 0.2% total combustible substances including any organic substance calculated as carbon, to the exclusion of any other added substance

DESCRIPTION

4 The words "Supporter of combustion. Hygroscopic." are deleted.

5 A new note after Description is added, as follows:

"Note:

This schedule should only be used for substances that do not exhibit properties of class 1 when tested in accordance to Test Series 1 and 2 of class 1 (see UN Manual of Tests and Criteria, part 1)."

HAZARD

6 At the beginning of the first paragraph, the words "Oxidizer, supports combustion." are added.

7 In the existing first sentence, the words "these materials" are replaced by the words "this cargo".

STOWAGE & SEGREGATION

8 In the first sentence, the word "should" is replaced by the word "shall".

LOADING

9 In the first sentence, the references "4 and 5" are replaced by the references "4, 5 and 6".

During loading, the following provisions shall be complied with:

10 The first bullet related to smoking is deleted.

PRECAUTIONS

11 In the first paragraph, the existing third sentence is replaced by the following text:

"The master and officers are to note that the ship's fixed gas fire-extinguishing installation will be ineffective on the fire involving this cargo and that applying copious amounts of water may be necessary."

12 In the first paragraph, the last sentence is deleted.

CARRIAGE

13 A new second sentence is added, as follows:

"The temperature of this cargo shall be monitored and recorded daily during the voyage to detect decomposition, which may result in heating and oxygen depletion."

DISCHARGE

14 The second sentence is replaced by the following text:

"Bunkering of fuel oil shall not be allowed. Pumping of fuel oil in spaces adjacent to the cargo spaces for this cargo, other than the engine-room, shall not be allowed."

EMERGENCY PROCEDURES

15 In the provisions regarding Fire in cargo space containing this material, the word "installation" is inserted after the words "Ship's fixed gas fire-extinguishing".

16 In the provisions regarding Fire in cargo space containing this material, the words "Use copious quantities of water" are replaced by the words "Use copious amounts of water and isolate the source of heat, if any".

AMMONIUM NITRATE BASED FERTILIZER UN 2067**DESCRIPTION**

17 In subparagraph .2, after the word "dolomite", the words "and/or mineral calcium sulphate" are inserted.

NOTES:

18 In note 3, the word "explosive" is deleted.

STOWAGE & SEGREGATION

19 In the fourth sentence, the words "any tank or double bottom" are replaced by the words "any tank, double bottom or pipe".

LOADING

20 In the first sentence, the references "4 and 5" are replaced by the references "4, 5 and 6".

PRECAUTIONS

21 After the first sentence, the following sentence is added:

"The master and officers are to note that the ship's fixed gas fire-extinguishing installation will be ineffective on fires involving this cargo and that applying copious amounts of water may be necessary."

CARRIAGE

22 In the second sentence, the words "resulting in spontaneous" are replaced by the words "which may result in".

DISCHARGE

23 The first sentence is replaced by the following text:

"Bunkering of fuel oil shall not be allowed. Pumping of fuel oil in spaces adjacent to the cargo spaces for this cargo, other than the engine-room, shall not be allowed."

24 After the second new sentence, the following text is added:

"Ammonium nitrate based fertilizers are hygroscopic and may cake in overhangs, impairing safety during discharge."

EMERGENCY PROCEDURES

25 In the provisions regarding Fire in cargo space containing this material, the words "Ship's fixed fire-fighting installation" are replaced by the words "Ship's fixed gas fire-extinguishing installation".

26 In the provisions regarding Fire in cargo space containing this material, in the third sentence, after the word "water", the words "and isolate the source of heat, if any" are inserted.

AMMONIUM NITRATE BASED FERTILIZER UN 2071

DESCRIPTION

27 In the second paragraph, a footnote associated with "(see UN Manual of Tests and Criteria, part III, subsection 38.2)" is inserted, as follows:

" See also section 5 of Appendix 2 to this Code."

HAZARD

28 In the first paragraph, the word "mixtures" is replaced by the word "cargoes" in the first sentence, and in the last sentence the words "mixtures is subject to the" are replaced by the words "cargoes are subject to an".

STOWAGE & SEGREGATION

29 In the last sentence, after the word "standard,", the words "this cargo shall be stowed" are inserted.

LOADING

30 In the first paragraph, first sentence, the references "4 and 5" are replaced by the references "4, 5 and 6".

During loading, the following provisions shall be complied with:

31 A new bullet is added, as follows:

- As far as reasonably practicable, combustible securing and protecting materials shall not be used. When wooden dunnage is necessary, only a minimum amount shall be used."

PRECAUTIONS

32 After the first sentence, the following text is added:

"The master and officers are to note that the ship's fixed gas fire-fighting installation will be ineffective on fires involving this cargo and that applying copious amounts of water may be necessary."

DISCHARGE

33 The first sentence is replaced by the following text:

"Bunkering of fuel oil shall not be allowed. Pumping of fuel oil in spaces adjacent to the cargo spaces for this cargo, other than the engine-room, shall not be allowed."

34 After the second new sentence, the following sentence is added:

"Ammonium nitrate based fertilizers are hygroscopic and may cake in overhangs, impairing safety during discharge."

EMERGENCY PROCEDURES

35 In the provisions regarding Fire in cargo space containing this material, the words "Ship's fixed fire-fighting installation" are replaced by the words "Ship's fixed gas fire-extinguishing installation".

AMMONIUM NITRATE BASED FERTILIZER (non-hazardous)**DESCRIPTION**

36 In subparagraph .2, after the word "dolomite", the words "and/or mineral calcium sulphate" are inserted.

37 In subparagraph .4, a footnote associated with "(see UN Manual of Tests and Criteria, part III, subsection 38.2)" is inserted, as follows:

"* See also section 5 of Appendix 2 to this Code."

HAZARD

38 The entire text under this heading is replaced by the following text:

"This cargo is non combustible or has a low fire-risk. Even though this cargo is classified as non-hazardous, some of the properties of the ammonium nitrate based fertilizer classified in class 9 under UN 2071 are exhibited when heated strongly. When this cargo is heated strongly, it will decompose and give off toxic gases with the risk of toxic fumes in the cargo space, adjacent spaces and on deck. Monitoring of the cargo temperature may give an early indication of decomposition. Fertilizer dust might be irritating to skin and mucous membranes. It is hygroscopic cargo and will cake if wet."

STOWAGE & SEGREGATION

39 In the third sentence, the words "any tank or double bottom" are replaced by the words "any tank, double bottom or pipe".

40 In the fourth sentence, after the words "this type", the word "should" is replaced by the word "shall".

41 In the fifth sentence, the word "barrier" is replaced by the word "arrangement".

42 In the last paragraph, the last sentence is replaced by the following text:

"This requirement need not apply if the bulkhead is class A-60 or to short international voyages."

LOADING

43 In the first paragraph, first sentence, the references "4 and 5" are replaced by the references "4, 5 and 6".

PRECAUTIONS

44 After the first sentence, the following text is added:

"The master and officers are to note that the ship's fixed gas fire-fighting installation will be ineffective on fires involving this cargo and that applying copious amounts of water may be necessary."

CARRIAGE

45 The second sentence is deleted.

DISCHARGE

46 The first sentence is replaced by the following text:

"Bunkering of fuel oil shall not be allowed. Pumping of fuel oil in spaces adjacent to the cargo spaces for this cargo, other than the engine-room, shall not be allowed. Ammonium nitrate based fertilizers are hygroscopic and may cake in overhangs, impairing safety during discharge."

EMERGENCY PROCEDURES

47 In the provisions regarding Fire in cargo space containing this material, the words "Ship's fixed fire-fighting installation" are replaced by the words "Ship's fixed gas fire-extinguishing installation".

48 In the provisions regarding Fire in cargo space containing this material, in the third sentence, after the word "water", the words "and isolate the source of heat, if any" are inserted.

AMMONIUM SULPHATE

HAZARD

49 At the end of the paragraph, the following text is added:

"This cargo is hygroscopic and will cake if wet."

LOADING

50 In the last sentence, the references " 4 and 5" are replaced by the references "4, 5 and 6".

DISCHARGE

51 At the beginning of the paragraph, the following text is added:

"Ammonium sulphate is hygroscopic and may cake in overhangs, impairing safety during discharge."

BARIUM NITRATE, UN 1446**PRECAUTIONS**

52 At the end of the paragraph, the following text is added:

"The master and officers are to note that the ship's fixed gas fire-fighting installation will be ineffective on fires involving this cargo and that applying copious amounts of water may be necessary."

BORAX (PENTAHYDRATE CRUDE)**DISCHARGE**

53 At the beginning of the paragraph, the following text is added:

"Borax (pentahydrate crude) is hygroscopic and may cake in overhangs, impairing safety during discharge."

BORAX, ANHYDROUS (crude or refined)**LOADING**

54 The references "4 and 5" are replaced by the references "4, 5 and 6".

DISCHARGE

55 At the beginning of the paragraph, the following text is added:

"Borax anhydrous (crude or refined) is hygroscopic and may cake in overhangs, impairing safety during discharge."

BROWN COAL BRIQUETTES**HAZARD**

56 The text is replaced by the following text:

"This cargo is easily ignited, is liable to heat spontaneously, may ignite spontaneously and may deplete oxygen in the cargo space."

APPENDIX

57 In paragraph 1.1, in the section for Precautions, the words "and opening cargo space enclosures" are deleted.

CALCIUM NITRATE, UN 1454

PRECAUTIONS

58 At the end of the paragraph, the following text is added:

"The master and officers are to note that the ship's fixed gas fire-fighting installation will be ineffective on fires involving this cargo and that applying copious amounts of water may be necessary."

DISCHARGE

59 At the beginning of the paragraph, the following text is added:

"Calcium nitrate is hygroscopic and may cake in overhangs, impairing safety during discharge."

CALCIUM NITRATE FERTILIZER

LOADING

60 The references "4 and 5" are replaced by the references "4, 5 and 6".

CLAY

CLEAN-UP

61 The text is replaced by "After discharge of this cargo, particular attention shall be given to the bilge wells of the cargo spaces".

DIAMMONIUM PHOSPHATE (D.A.P.)

LOADING

62 The references "4 and 5" are replaced by the references "4, 5 and 6".

DISCHARGE

63 At the beginning of the paragraph, the following text is added:

"Diammonium phosphate is hygroscopic and may cake in overhangs, impairing safety during discharge."

DISTILLERS DRIED GRAINS WITH SOLUBLES

64 After existing schedule on DIRECT REDUCED IRON (C), the new schedule on DISTILLERS DRIED GRAINS WITH SOLUBLES is added, as follows:

"DISTILLERS DRIED GRAINS WITH SOLUBLES**DESCRIPTION**

A dried blend of coarse grains and condensed distillers solubles that remain after the fermentation of the starch fraction of corn with yeasts and enzymes to produce ethanol and carbon dioxide. Yellowish brown in colour with a cooked corn odour. Moisture content not more than 13% and oil content not more than 11%. This schedule is not applicable to wet distillers grain (WDG) and distillers dried grain (DDG), which are not transported in bulk.

CHARACTERISTICS

ANGLE OF REPOSE	BULK DENSITY (kg/m ³)	STOWAGE FACTOR (m ³ /t)
Not applicable	450 to 520	1.92 to 2.22
SIZE	CLASS	GROUP
Not applicable	Not applicable	C

HAZARD

No special hazards.

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 loaded shall be closed.

LOADING

Load in open unconfined areas. Trim in accordance with the relevant provision required under sections 4 and 5 of the Code.

PRECAUTIONS

No special requirements.

VENTILATION

No special requirements.

CARRIAGE

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

DISCHARGE

If this cargo has hardened, it shall be trimmed to avoid the formation of overhanging faces, as necessary.

CLEAN-UP

No special requirements."

FERROPHOSPHORUS (including briquettes)

CARRIAGE

65 The text is replaced by the following text:

"For quantitative measurement of flammable and toxic gases such as Phosphine, which may be evolved from this cargo in accordance with the cargo information, suitable detectors for each gas or combination of gases shall be on board while this cargo is carried. The detectors shall be of certified safe type for use in explosive atmosphere. The concentrations of these gases in the cargo spaces carrying this cargo shall be measured regularly, during the voyage, and the results of the measurements shall be recorded and kept on board."

FERROSILICON UN 1408

APPENDIX – DETAILED REQUIREMENTS

66 In the first sentence, the words "competent Authority" are replaced by the word "Administration", in all cases.

FERROSILICON with 25% to 30% silicon, or 90% or more silicon

LOADING

67 The second sentence is replaced by the following text:

"As the density of the cargo is extremely high, the tanktop may be overstressed unless the cargo is evenly spread across the tanktop for homogenous weight distribution. Due consideration shall be paid to ensure that the tanktop is not overstressed during voyage and during loading by a pile of the cargo. Refer to the appendix to this schedule."

APPENDIX – DETAILED REQUIREMENTS

68 In the first and second sentences, the words "competent Authority" are replaced by the word "Administration".

FERROUS SULPHATE HEPTAHYDRATE

69 After existing schedule on FERROUS METAL BORINGS, SHAVINGS, TURNINGS or CUTTINGS UN 2793, a new schedule on FERROUS SULPHATE HEPTAHYDRATE is added, as follows:

"FERROUS SULPHATE HEPTAHYDRATE**DESCRIPTION**

Pale green crystals. Highly soluble in water. Product commonly referred to as "Copperas".

CHARACTERISTICS

ANGLE OF REPOSE	BULK DENSITY (kg/m³)	STOWAGE FACTOR (m³/t)
Not applicable	750 to 1250	0.8 to 1.3
SIZE	CLASS	GROUP
Crystals	Not applicable	C

HAZARD

Harmful if swallowed. Causes serious eye irritation. Causes skin irritation.

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

Tends to caking when damp.

This cargo is highly soluble and will be acidic when wet.

Excessive levels spilt into water systems may result in oxygen depletion from the water.

STOWAGE & SEGREGATION

"Separated from" Oxidizing substances.

HOLD CLEANLINESS

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

WEATHER PRECAUTIONS

This cargo shall be kept as dry as practicable. It shall not be handled during precipitation.

During handling of this cargo all non-working hatches of the cargo spaces into which this cargo is loaded shall be closed.

LOADING

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

PRECAUTIONS

Avoid contact with eyes and skin. Persons who may be in contact with the product shall wear protective clothing, gloves and eye protection. Typically, this is a non-dusty product, however, in particularly dry conditions, if dust is generated a filter mask shall also be worn. Bilge wells shall be clean, dry and covered, as appropriate, to prevent ingress of the cargo.

VENTILATION

The cargo spaces carrying this cargo shall not be ventilated during voyage.

CARRIAGE

Hatches of the cargo spaces shall be weathertight to prevent water ingress.

DISCHARGE

If this cargo has hardened, it shall be trimmed to avoid the formation of overhangs, as necessary.

CLEAN-UP

After discharge of this cargo, the cargo spaces and the bilge wells shall be swept clean and then thoroughly washed out."

FERTILIZERS WITHOUT NITRATES (non-hazardous)**DISCHARGE**

70 At the beginning of the paragraph, the following text is added:

"Fertilizers without nitrates are hygroscopic and may cake in overhangs, impairing safety during discharge."

FLY ASH

71 In the title of the schedule of FLY ASH, the word ", DRY" is added.

FLY ASH, WET

72 After existing schedule on FLY ASH, a new schedule on FLY ASH, WET is added, as follows:

"FLY ASH, WET**DESCRIPTION**

Greyish powder. This cargo is a mixture of the light, finely divided dusty fine powder residue from coal and oil fired power stations and water (not less than 10% of water). Ammonia odour.

CHARACTERISTICS

ANGLE OF REPOSE	BULK DENSITY (kg/m ³)	STOWAGE FACTOR (m ³ /t)
Not applicable	900 to 1300	0.77 – 1.11
SIZE	CLASS	GROUP
Under 1 mm	Not applicable	A

HAZARD

Wet fly ash is liable to flow if it has sufficiently high moisture content. It is non-combustible or has a low fire-risk.

STOWAGE & SEGREGATION

"Separated from" foodstuffs.

HOLD CLEANLINESS

No special requirements.

WEATHER PRECAUTIONS

When a cargo is carried in a ship other than specially constructed or fitted cargo ship complying with the requirements in subsection 7.3.2 of this Code, the following provisions shall be complied with:

- .1 The moisture content of the cargo shall be kept less than its TML during voyage.

- .2 Unless expressly provided otherwise in this individual schedule, the cargo shall not be handled during precipitation.
- .3 Unless expressly provided otherwise in this individual schedule, during handling of the cargo, all non-working hatches of the cargo spaces into which the cargo is loaded or to be loaded shall be closed.
- .4 The cargo may be handled during precipitation provided that the actual moisture content of the cargo is sufficiently less than its TML so that the actual moisture content is not liable to be increased beyond the TML by the precipitation.
- .5 The cargo in a cargo space may be discharged during precipitation provided that the total amount of the cargo in the cargo space is to be discharged in the port.

LOADING

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

PRECAUTIONS

Bilge wells shall be clean, dry and covered as appropriate, to prevent ingress of the cargo.

VENTILATION

The cargo spaces carrying this cargo shall not be ventilated during voyage.

CARRIAGE

The appearance of the surface of this cargo shall be checked regularly during voyage. If free water above the cargo or fluid state of the cargo is observed during voyage, the master shall take appropriate actions to prevent cargo shifting and potential capsizing of the ship, and give consideration to seeking emergency entry into a place of refuge.

DISCHARGE

No special requirements.

CLEAN-UP

After discharge of this cargo, the bilge wells and the scuppers of the cargo spaces shall be checked and any blockage in the bilge wells and the scuppers shall be removed."

GRANULAR FERROUS SULPHATE

73 After the new schedule on FLY ASH, WET, a new schedule on GRANULAR FERROUS SULPHATE is added, as follows:

"GRANULAR FERROUS SULPHATE**DESCRIPTION**

Grey to brown granules. Absorbs moisture and is highly soluble in water.

CHARACTERISTICS

ANGLE OF REPOSE	BULK DENSITY (kg/m ³)	STOWAGE FACTOR (m ³ /t)
30° to 45°	1100 to 1600	0.63 to 0.9
SIZE	CLASS	GROUP
Up to 15 mm	Not applicable	C

HAZARD

Harmful if swallowed. Causes serious eye irritation. Causes skin irritation.

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

Tends to caking when damp.

It is highly soluble and will be acidic when wet.

Excessive levels spilt into water systems may result in oxygen depletion from the water.

STOWAGE & SEGREGATION

"Separated from" oxidizing substances.

HOLD CLEANLINESS

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

WEATHER PRECAUTIONS

This cargo shall be kept as dry as practicable. It shall not be handled during precipitation.

During handling of this cargo all non-working hatches of the cargo spaces into which this cargo is loaded shall be closed.

LOADING

Trim in accordance with the relevant provision required under sections 4, 5 and 6 of the Code.

PRECAUTIONS

Avoid contact with eyes and skin. Persons who may be in contact with the product shall wear protective clothing, gloves and eye protection. Minimize dust generation when loading. If dust is generated a filter mask shall also be worn.

Bilge wells shall be clean, dry and covered as appropriate, to prevent ingress of the cargo.

VENTILATION

The cargo spaces carrying this cargo shall not be ventilated during voyage.

CARRIAGE

Hatches of the cargo spaces shall be weathertight to prevent water ingress.

DISCHARGE

If this cargo has hardened, it shall be trimmed to avoid the formation of overhangs, as necessary.

CLEAN-UP

After discharge of this cargo, the cargo spaces and the bilge wells shall be swept clean and then thoroughly washed out."

GYPSUM**WEATHER PRECAUTIONS**

74 In the second and third sentences, the words "handled" and "handling" are replaced by the words "loaded" and "loading", respectively.

LEAD NITRATE, UN 1469**PRECAUTIONS**

75 At the end of the paragraph, the following text is added:

"The master and officers are to note that the ship's fixed gas fire-fighting installation will be ineffective on fires involving this cargo and that applying copious amounts of water may be necessary."

MAGNESIUM NITRATE, UN 1474**PRECAUTIONS**

76 The sentence is replaced by the following text:

"The master and officers are to note that the ship's fixed gas fire-fighting installation will be ineffective on fires involving this cargo and that applying copious amounts of water may be necessary."

DISCHARGE

77 At the beginning of the paragraph, the following text is added:

"Magnesium nitrate is hygroscopic and may cake in overhangs, impairing safety during discharge."

MAGNESIUM SULPHATE FERTILIZERS

78 After existing schedule on MAGNESIUM NITRATE, UN 1474, a new schedule on MAGNESIUM SULPHATE FERTILIZERS is added, as follows:

"MAGNESIUM SULPHATE FERTILIZERS**DESCRIPTION**

Powdered fertilizers or fertilizer components containing magnesium sulphate.
Grey to brown powder. Partially soluble in water and may be dusty.

CHARACTERISTICS

ANGLE OF REPOSE	BULK DENSITY (kg/m ³)	STOWAGE FACTOR (m ³ /t)
30° to 35°	850 to 1150	0.87 to 1.18
SIZE	CLASS	GROUP
Powder	Not applicable	C

HAZARD

May be harmful if swallowed. May cause skin or eye irritation.

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

It is partially soluble.

Dusty but may cake if wetted.

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. It shall not be handled during precipitation. During handling of this cargo all non-working hatches of the cargo spaces into which this cargo is loaded shall be closed.

LOADING

Trim in accordance with the relevant provision required under sections 4, 5 and 6 of the Code.

PRECAUTIONS

Avoid contact with eyes and skin. Minimize dust generation when loading. Persons who may be exposed to the dust of the cargo shall wear goggles or other equivalent dust eye protection and dust filter mask. Those persons shall wear protective clothing, as necessary. Bilge wells shall be clean, dry and covered as appropriate, to prevent ingress of the cargo.

VENTILATION

The cargo spaces carrying this cargo shall not be ventilated during voyage.

CARRIAGE

Hatches of the cargo spaces shall be weathertight to prevent water ingress.

DISCHARGE

If this cargo has hardened, it shall be trimmed to avoid the formation of overhangs, as necessary.

CLEAN-UP

After discharge of this cargo, the cargo spaces and the bilge wells shall be swept clean and then thoroughly washed out."

METAL SULPHIDE CONCENTRATES**LOADING**

79 The text ", in particular on smaller ships, i.e. 100 m long or less." is deleted.

MINERAL CONCENTRATES**BULK CARGO SHIPPING NAMES**

80 The sentence "All known Bulk Cargo Shipping Names (BCSN) of mineral concentrates are listed above but the list is not exhaustive" after the list of Bulk Cargo Shipping Names is deleted.

LOADING

81 The text ", in particular on smaller ships, i.e. 100 m long or less." is deleted.

MONOAMMONIUM PHOSPHATE (M.A.P.)**LOADING**

82 The references "4 and 5" are replaced by the references "4, 5 and 6".

DISCHARGE

83 At the beginning of the paragraph, the following text is added:

"Monoammonium phosphate is hygroscopic and may cake in overhangs, impairing safety during discharge."

PHOSPHATE ROCK (calcined)**DISCHARGE**

84 At the beginning of the paragraph, the following text is added:

"Phosphate rock (calcined) is hygroscopic and may cake in overhangs, impairing safety during discharge."

POTASH**LOADING**

85 The references "4 and 5" are replaced by the references "4, 5 and 6".

DISCHARGE

86 At the beginning of the paragraph, the following text is added:

"Potash is hygroscopic and may cake in overhangs, impairing safety during discharge."

POTASSIUM CHLORIDE

LOADING

87 The references "4 and 5" are replaced by the references "4, 5 and 6".

DISCHARGE

88 At the beginning of the paragraph, the following text is added:

"Potassium chloride is hygroscopic and may cake in overhangs, impairing safety during discharge."

POTASSIUM NITRATE UN 1486

LOADING

89 The references "4 and 5" are replaced by the references "4, 5 and 6".

PRECAUTIONS

90 At the end of the paragraph, the following text is added:

"The master and officers are to note that the ship's fixed gas fire-fighting installation will be ineffective on fires involving this cargo and that applying copious amounts of water may be necessary."

DISCHARGE

91 At the beginning of the paragraph, the following text is added:

"Potassium nitrate is hygroscopic and may cake in overhangs, impairing safety during discharge."

POTASSIUM SULPHATE

LOADING

92 The references "4 and 5" are replaced by the references "4, 5 and 6".

PYRITES, CALCINED (Calcined Pyrites)

PRECAUTIONS

93 In the third sentence, the words "lime before loading" are replaced by the words "protective coating such as lime-wash before loading to avoid any potential corrosive reaction between the cargo, water and steel."

RASORITE (ANHYDROUS)**DISCHARGE**

94 At the beginning of the paragraph, the following sentence is added:

"Rasorite (anhydrous) is hygroscopic and may cake in overhangs, impairing safety during discharge."

SALT**WEATHER PRECAUTIONS**

95 In the second and third sentences, the words "handled" and "handling" are replaced by the words "loaded" and "loading", respectively.

SEED CAKE, containing vegetable oil UN 1386 (b)**DESCRIPTION**

96 In the last paragraph, after the first sentence, the following text is added:

"The provisions of this schedule should also not apply to mechanically expelled citrus pulp pellets containing not more than 2.5% oil and 14% oil and moisture combined."

PRECAUTIONS

97 In the fifth sentence the words "it becomes apparent that fire is not liable to take place in the cargo space, to avoid the possibility of ignition of solvent vapours" are replaced by the words "fire is apparent".

REMARKS

98 The first sentence is deleted.

SEED CAKE UN 2217**PRECAUTIONS**

99 In the existing fourth sentence, the words "it becomes apparent that fire is not liable to take place in the cargo space, to avoid the possibility of ignition of solvent vapours" are replaced by the words "fire is apparent".

REMARKS

100 The first sentence is deleted.

SEED CAKE (non-hazardous)

DESCRIPTION

101 At the end of the first paragraph, the following sentence is added:

"The provisions of this schedule also apply to mechanically expelled citrus pulp pellets containing not more than 2.5% oil and 14% oil and moisture combined."

SODIUM NITRATE, UN 1498

PRECAUTIONS

102 At the end of the paragraph, the following text is added:

"The master and officers are to note that the ship's fixed gas fire-fighting installation will be ineffective on fires involving this cargo and that applying copious amounts of water may be necessary."

DISCHARGE

103 At the beginning of the paragraph, the following text is added:

"Sodium nitrate is hygroscopic and may cake in overhangs, impairing safety during discharge."

SODIUM NITRATE AND POTASSIUM NITRATE MIXTURE UN 1499

LOADING

104 The references "4 and 5" are replaced by the references "4, 5 and 6".

PRECAUTIONS

105 At the end of the paragraph, the following text is added:

"The master and officers are to note that the ship's fixed gas fire-fighting installation will be ineffective on fires involving this cargo and that applying copious amounts of water may be necessary."

DISCHARGE

106 At the beginning of the paragraph, the following text is added:

"Sodium nitrate and potassium nitrate mixture is hygroscopic and may cake in overhangs, impairing safety during discharge."

SULPHUR (formed, solid)**PRECAUTIONS**

107 The third sentence "Holds including trimming plates and tanktops shall be treated with effective, commercially available protective coating or lime-washed to avoid any potential corrosive reaction between sulphur, water and steel" is replaced by the sentence "Holds including trimming plates and tanktops shall be treated with protective coating such as lime-wash to avoid any potential corrosive reaction between sulphur, water and steel."

SUPERPHOSPHATE**LOADING**

108 The references "4 and 5" are replaced by the references "4, 5 and 6".

DISCHARGE

109 At the beginning of the paragraph, the following text is added:

"Superphosphate is hygroscopic and may cake in overhangs, impairing safety during discharge."

TAPIOCA**LOADING**

110 The references "4 and 5" are replaced by the references "4, 5 and 6".

UREA**LOADING**

111 The references "4 and 5" are replaced by the references "4, 5 and 6".

DISCHARGE

112 At the beginning of the paragraph, the following text is added:

"Urea is hygroscopic and may cake in overhangs, impairing safety during discharge."

WOOD PELLETS**LOADING**

113 The references "4 and 5" are replaced by the references "4, 5 and 6".

WOOD PRODUCTS – GENERAL

114 After existing schedule on WOOD PELLETS, a new schedule on Wood products – General is added, as follows:

"Wood products – General

(See Bulk Cargo Shipping Names below)

LOGS PULP WOOD
TIMBER ROUNDWOOD
SAW LOGS

DESCRIPTION

This schedule only applies to wood products transported in bulk, i.e. loaded and discharged by such means as elevator or grab and which are not specifically referred to in a separate schedule.

CHARACTERISTICS

ANGLE OF REPOSE	BULK DENSITY (kg/m ³)	STOWAGE FACTOR (m ³ /t)
Not applicable	250 to 500	2 to 4
SIZE	CLASS	GROUP
-	MHB	B

HAZARD

These cargoes are liable to cause oxygen depletion and increase of carbon dioxide in the cargo space and adjacent spaces.

These cargoes are non-combustible or have a low fire-risk.

STOWAGE & SEGREGATION

No special requirements.

HOLD CLEANLINESS

No special requirements.

WEATHER PRECAUTIONS

No special requirements.

LOADING

Trim in accordance with the relevant provisions required under sections 4 and 5 of the 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 enclosed 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

Ventilation of enclosed spaces adjacent to a cargo hold before entry may be necessary even if these spaces are apparently sealed from the cargo hold.

CARRIAGE

No special requirements.

DISCHARGE

No special requirements.

CLEAN-UP

No special requirements.

EMERGENCY PROCEDURES

SPECIAL EMERGENCY EQUIPMENT TO BE CARRIED

Self-contained breathing apparatus and an oxygen meter should be available.

EMERGENCY PROCEDURES

Nil

EMERGENCY ACTION IN THE EVENT OF FIRE

Batten down; use ship's fixed fire-fighting installation if fitted. Exclusion of air may be sufficient to control fire.

MEDICAL FIRST AID

Refer to Medical First Aid Guide (MFAG), as amended.

WOOD PULP PELLETS

115 The existing schedule on WOOD PULP PELLETS is deleted in its entirety.

APPENDIX 3***Properties of solid bulk cargoes***

116 In subsection 1.1, the following bulk cargo shipping names are deleted:

CASTOR BEANS
SODIUM NITRATE

117 In subsection 1.1, the following bulk cargo shipping names are added:

GRANULAR FERROUS SULPHATE
MAGNESIUM SULPHATE FERTILIZERS
TAPIOCA
WOOD PELLETS

APPENDIX 4

Index

118 The BCSN "FLY ASH" is replaced by "FLY ASH, DRY".

119 The following rows are added in the table:

MATERIAL	GROUP	REFERENCES
DISTILLERS DRIED GRAINS WITH SOLUBLES	C	
FERROUS SULPHATE HEPTAHYDRATE	C	
FLY ASH, WET	A	
GRANULAR FERROUS SULPHATE	C	
LOGS	B	see Wood Products – General schedule
MAGNESIUM SULPHATE FERTILIZERS	C	
PULP WOOD	B	see Wood Products – General schedule
ROUNDWOOD	B	see Wood Products – General schedule
SAW LOGS	B	see Wood Products – General schedule
TIMBER	B	see Wood Products – General schedule
Wood Products – General	B	

120 The words "WOOD PULP PELLETS" and "Pellets, wood pulp" are deleted.

第 116/2015 號行政長官公告

Aviso do Chefe do Executivo n.º 116/2015

中華人民共和國是國際海事組織的成員國及一九七四年十一月一日訂於倫敦的《國際海上人命安全公約》（下稱“公約”）的締約國；

國際海事組織海上安全委員會於一九八三年六月十七日對公約第VII章作出修正，將有關國際散裝運輸液化氣體船舶構造和設備規則的規定作為公約的強制性規定，並透過第MSC.5(48)號決議通過了《國際散裝運輸液化氣體船舶構造和設備規則》（IGC規則）；

中華人民共和國於一九九九年十二月十三日以照會通知聯合國秘書長，經修訂的公約自一九九九年十二月二十日起適用於澳門特別行政區；

基於此，行政長官根據第3/1999號法律《法規的公佈與格式》第六條第一款的規定，命令公佈包含上指規則的第MSC.5(48)號決議的中文及英文文本。

二零一五年七月二十二日發佈。

行政長官 崔世安

Considerando que a República Popular da China é um Estado Membro da Organização Marítima Internacional e um Estado Contratante da Convenção Internacional para a Salvaguarda da Vida Humana no Mar, concluída em Londres em 1 de Novembro de 1974, adiante designada por Convenção;

Considerando igualmente que, em 17 de Junho de 1983, o Comité de Segurança Marítima da Organização Marítima Internacional procedeu a emendas ao capítulo VII da Convenção para tornar as disposições relativas ao Código Internacional para a Construção e Equipamento de Navios que Transportam Gases Liquefeitos a Granel obrigatórias nos termos da Convenção, e que, através da resolução MSC.5(48), adoptou o Código Internacional para a Construção e Equipamento de Navios que Transportam Gases Liquefeitos a Granel (Código IGC);

Considerando ainda que a República Popular da China, por nota datada de 13 de Dezembro de 1999, notificou o Secretário-Geral das Nações Unidas sobre a aplicação da Convenção, tal como emendada, na Região Administrativa Especial de Macau a partir de 20 de Dezembro de 1999;

O Chefe do Executivo manda publicar, nos termos do n.º 1 do artigo 6.º da Lei n.º 3/1999 (Publicação e formulário dos diplomas), a resolução MSC.5(48), que contém o referido Código, nos seus textos em línguas chinesa e inglesa.

Promulgado em 22 de Julho de 2015.

O Chefe do Executivo, *Chui Sai On*.