# Transportstyrelsens författningssamling

## Föreskrifter om ändring i Transportstyrelsens föreskrifter och allmänna råd (TSFS 2014:136) om transport till sjöss av skadliga flytande kemikalier i bulk (IBC-koden);

TRANSPORT STYRELSEN

**TSFS 2017:14** 

Utkom från trycket den 24 mars 2017

SJÖFART

beslutade den 10 mars 2017

Transportstyrelsen föreskriver med stöd av 2 kap. 1 och 4 §§ och 3 kap. 2 och 4 §§ fartygssäkerhetsförordningen (2003:438) att 1 och 2 §§ samt bilagan till styrelsens föreskrifter och allmänna råd (TSFS 2014:136) om transport till sjöss av skadliga flytande kemikalier i bulk (IBC-koden) ska ha följande lydelse.

1 § Som Transportstyrelsens föreskrifter ska gälla den internationella koden för konstruktion och utrustning av fartyg som till sjöss transporterar skadliga flytande kemikalier i bulk (IBC-koden), antagen av den internationella sjöfartsorganisationen (IMO) den 17 juni 1983 genom resolution MSC.4(48)<sup>1</sup>, senast ändrad genom IMO-resolutionerna MSC.369(93)<sup>2</sup> och MEPC.250(66)<sup>3</sup>.

IBC-kodens engelska text i dess gällande lydelse efter ändringar antagna genom resolutionerna MSC.176(79) och MEPC.119(52), MSC.219(82) och MEPC.166(56), MSC.340(91) och MEPC.225(64), samt MSC.369(93) och MEPC.250(66) finns i bilagan till dessa föreskrifter.

2 § För fartyg byggda den 1 juli 1986 eller senare, ska IBC-kodens krav uppfyllas vid transport av skadliga flytande kemikalier i bulk på kemikalietankfartyg inom Sveriges sjöterritorium och av svenska kemikalietankfartyg utanför sjöterritoriet.

<sup>&</sup>lt;sup>1</sup> MSC.4(48), Adoption of the International Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk (IBC Code). <sup>2</sup> MSC.369(93), Amendments to the International Code for the Construction and

Equipment of Ships Carrying Dangerous Chemicals in Bulk (IBC Code). <sup>3</sup> MEPC.250(66), Amendments to the International Code for the Construction and

Equipment of Ships Carrying Dangerous Chemicals in Bulk (IBC Code).

## TSFS 2017:14

Denna författning träder i kraft den 15 april 2017.

På Transportstyrelsens vägnar

JONAS BJELFVENSTAM

Tatjana Olson (Sjö- och luftfartsavdelningen)

### Bilaga

General

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#### 1.3 Definitions

1.3.36 *Void space* is an enclosed space in the cargo area external to a cargo tank, other than a hold space, ballast space, oil fuel tank, cargo pump-room, pump-room, or any space in normal use by personnel.

1.3.37 *Purging* means the introduction of inert gas into a tank which is already in an inert condition with the object of further reducing the oxygen content; and/or reducing the existing hydrocarbon or other flammable vapours content to a level below which combustion cannot be supported if air is subsequently introduced into the tank.

1.3.38 *Gas-freeing* means the process where a portable or fixed ventilation system is used to introduce fresh air into a tank in order to reduce the concentration of hazardous gases or vapours to a level safe for tank entry.

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#### Chapter 2

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#### 2.2 Freeboard and stability

2.2.5 The master of the ship shall be supplied with a loading and stability information booklet. This booklet shall contain details of typical service and ballast conditions, provisions for evaluating other conditions of loading and a summary of the ship's survival capabilities. In addition, the booklet shall contain sufficient information to enable the master to load and operate the ship in a safe and seaworthy manner.

2.2.6 All ships, subject to the Code, shall be fitted with a stability instrument, capable of verifying compliance with intact and damage stability requirements, approved by the Administration having regard to the performance standards recommended by the Organization<sup>\*</sup>:

.1 ships constructed before 1 January 2016 shall comply with this requirement at the first scheduled renewal survey of the ship on or after 1 January 2016 but not later than 1 January 2021;

.2 notwithstanding the requirements of 2.2.6.1, a stability instrument fitted on a ship constructed before 1 January 2016 need not be replaced provided it is capable of verifying compliance with intact and damage stability, to the satisfaction of the Administration; and

.3 for the purposes of control under regulation 16 of MARPOL Annex II, the Administration shall issue a document of approval for the stability instrument.

2.2.7 The Administration may waive the requirements of paragraph 2.2.6 for the following ships provided the procedures employed for intact and damage stability verification maintain the same degree of safety, as being loaded in accordance with the approved conditions<sup>\*\*</sup>. Any such waiver shall be duly noted on the International Certificate of Fitness referred to in paragraph 1.5.4:

.1 ships which are on a dedicated service, with a limited number of permutations of loading such that all anticipated conditions have been approved in the stability information provided to the master in accordance with the requirements of paragraph 2.2.5;

.2 ships where stability verification is made remotely by a means approved by the Administration;

.3 ships which are loaded within an approved range of loading conditions; or

.4 ships constructed before 1 January 2016 provided with approved limiting KG/GM curves covering all applicable intact and damage stability requirements.

\*\* Refer to operational guidance provided in part 2 of the Guidelines for verification of damage stability requirements for tankers (MSC.1/Circ.1461).

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### Chapter 8

#### 8.1 Application

8.1.4 Ships constructed on or after 1 July 1986 but before 1 January 1994 which fully comply with the requirements of the Code applicable at that time may be regarded as complying with the requirements of SOLAS regulations II-2/4.5.3, 4.5.6 to 4.5.8, 4.5.10 and 11.6.

8.1.5 For ships to which the Code applies, the requirements of this chapter shall apply in lieu of SOLAS regulations II-2/4.5.3, 4.5.6 and 16.3.2.

8.1.6 Ships constructed on or after 1 July 1986, but before 1 July 2002 shall comply with the requirements of 8.3.3.

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#### 8.5 Cargo tank purging

When the application of inert gas is required by 11.1.1, before gas-freeing, the cargo tanks shall be purged with inert gas through outlet pipes with cross-sectional area such that an exit velocity of at least 20 m/s can be maintained when any three tanks are being simultaneously supplied with inert gas. The outlets shall extend not less than 2 m above the deck level. Purging shall continue until the concentration of hydrocarbon or other

<sup>\*</sup> Refer to part B, chapter 4, of the International Code on Intact Stability, 2008 (2008 IS Code), as amended; the Guidelines for the Approval of Stability Instruments (MSC.1/Circ.1229), annex, section 4, as amended; and the technical standards defined in part 1 of the Guidelines for verification of damage stability requirements for tankers (MSC.1/Circ.1461).

flammable vapours in the cargo tanks has been reduced to less than 2% by volume.

#### 8.6 Cargo tank gas-freeing

8.6.1 The arrangements for gas-freeing cargo tanks used for cargoes other than those for which open venting is permitted shall be such as to minimize the hazards due to the dispersal of flammable or toxic vapours in the atmosphere and to flammable or toxic vapour mixtures in a cargo tank. Accordingly, gas-freeing operations shall be carried out such that vapour is initially discharged:

.1 through the vent outlets specified in 8.3.4 and 8.3.5; or

.2 through outlets at least 2 m above the cargo tank deck level with a vertical exit velocity of at least 30 m/s maintained during the gas-freeing operation; or

.3 through outlets at least 2 m above the cargo tank deck level with a vertical exit velocity of at least 20 m/s which are protected by suitable devices to prevent the passage of flame. When the flammable vapour concentration at the outlets has been reduced to 30% of the lower flammable limit and, in the case of a toxic product, the vapour concentration does not present a significant health hazard, gas-freeing may thereafter be continued at cargo tank deck level.

8.6.2 The outlets referred to in 8.6.1.2 and 8.6.1.3 may be fixed or portable pipes.

8.6.3 In designing a gas-freeing system in conformity with 8.6.1, particularly in order to achieve the required exit velocities of 8.6.1.2 and 8.6.1.3, due consideration shall be given to the following:

.1 materials of construction of system;

.2 time to gas-free;

.3 flow characteristics of fans to be used;

.4 the pressure losses created by ducting, piping, cargo tank inlets and outlets;

.5 the pressure achievable in the fan driving medium (e.g. water or compressed air); and

.6 the densities of the cargo vapour/air mixtures for the range of cargoes to be carried.

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### Chapter 9

#### 9.1 General

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9.1.2 There are four different types of control for cargo tanks, as follows:

.1 *Inerting*: by filling the cargo tank and associated piping systems and, where specified in chapter 15, the spaces surrounding the cargo tanks, with a gas or vapour which will not support combustion and which will not react with the cargo, and maintaining that condition.

.2 *Padding*: by filling the cargo tank and associated piping systems with a liquid, gas or vapour which separates the cargo from the air, and maintaining that condition.

.3 *Drying*: by filling the cargo tank and associated piping systems with moisturefree gas or vapour with a dewpoint of -40°C or below at atmospheric pressure, and maintaining that condition.

.4 Ventilation: forced or natural.

9.1.3 Where inerting or padding of cargo tanks is required by this Code in column "h" of chapter 17:

.1 An adequate supply of inert gas for use in filling and discharging the cargo tanks shall be carried or shall be manufactured on board unless a shore supply is available. In addition, sufficient inert gas shall be available on the ship to compensate for normal losses during transportation.

.2 The inert gas system on board the ship shall be able to maintain a pressure of at least 0.007 MPa gauge within the containment system at all times. In addition, the inert gas system shall not raise the cargo tank pressure to more than the tank's relief-valve setting.

.3 Where padding is used, similar arrangements for supply of the padding medium shall be made as required for inert gas in 9.1.3.1 and 9.1.3.2.

.4 Means shall be provided for monitoring ullage spaces containing a gas blanket to ensure that the correct atmosphere is being maintained.

.5 Inerting or padding arrangements or both, where used with flammable cargoes, shall be such as to minimize the creation of static electricity during the admission of the inerting medium.

9.1.4 Where drying is used and dry nitrogen is used as the medium, similar arrangements for supply of the drying agent shall be made to those required in 9.1.3. Where drying agents are used as the drying medium on all air inlets to the tank, sufficient medium shall be carried for the duration of the voyage, taking into consideration the diurnal temperature range and the expected humidity.

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### Chapter 11

#### **11.1 Application**

11.1.1 The requirements for tankers in SOLAS chapter II-2 shall apply to ships covered by the Code, irrespective of tonnage, including ships of less than 500 tons gross tonnage, except that:

.1 regulations 10.8 and 10.9 shall not apply;

.2 regulation 4.5.1.2 (i.e. the requirements for location of the main cargo control station) need not apply;

.3 regulations 10.2, 10.4, and 10.5 shall apply as they would apply to cargo ships of 2,000 tons gross tonnage and over;

.4 regulation 10.5.6 shall apply to ships of 2,000 gross tonnage and over;

.5 the provisions of 11.3 shall apply in lieu of regulation 10.8;

.6 the provisions of 11.2 shall apply in lieu of regulation 10.9;

.7 regulation 4.5.10 shall apply to ships of 500 gross tonnage and over, replacing "hydrocarbon gases" by "flammable vapours" in the regulation; and

.8 regulations 13.3.4 and 13.4.3 shall apply to ships of 500 gross tonnage and over.

11.1.2 Notwithstanding the provisions of 11.1.1, ships engaged solely in the carriage of products which are non-flammable (entry NF in column i of the table of minimum requirements) need not comply with requirements for tankers specified in SOLAS chapter II-2, provided that they comply with the requirements for cargo ships of that chapter, except that regulation 10.7 need not apply to such ships and 11.2 and 11.3, hereunder, need not apply.

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### Chapter 15

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#### 15.13 Cargo protected by additives

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15.13.2 Ships carrying these cargoes shall be so designed as to eliminate from the cargo tanks and cargo-handling system any material of construction or contaminants which could act as a catalyst or destroy the inhibitor.

15.13.3 Care shall be taken to ensure that these cargoes are sufficiently protected to prevent deleterious chemical change at all times during the voyage. Ships carrying such cargoes shall be provided with a certificate of protection from the manufacturer, and kept during the voyage, specifying:

.1 the name and amount of additive present;

.2 whether the additive is oxygen-dependent<sup>\*</sup>;

.3 date additive was put in the product and duration of effectiveness;

.4 any temperature limitations qualifying the additives' effective lifetime; and

.5 the action to be taken shall the length of voyage exceed the effective lifetime of the additives.

15.13.4 Ships using the exclusion of air as the method of preventing oxidation of the cargo shall comply with 9.1.3.

15.13.5 When a product containing an oxygen-dependent inhibitor is to be carried:

.1 in a ship for which inerting is required under SOLAS regulation II-2/4.5.5, as amended, the application of inert gas shall not take place before loading or during the voyage, but shall be applied before commencement of unloading<sup>\*</sup>;

.2 in a ship to which SOLAS regulation II-2/4.5.5, as amended, does not apply, the product may be carried without inertion (in tanks of a size not greater than 3,000 m<sup>3</sup>). If inertion is to be applied on such a ship, then the application of inert gas shall not take place before loading or during the voyage, but shall be applied before commencement of unloading<sup>\*</sup>.

15.13.6 Venting systems shall be of a design that eliminates blockage from polymer build-up. Venting equipment shall be of a type that can be checked periodically for adequacy of operation.

\* Refer to MSC-MEPC.2/Circ.14 on Products requiring oxygen-dependent inhibitors.

Tank vents	Cont.: controlled venting	
(column g)	Open: open venting	
Tank environmental control	Inert: inerting (9.1.2.1) Pad: liquid or gas padding (9.1.2.2) Dry: drying (9.1.2.3)	
(corumn n)	Vent: natural or forced ventilation (9.1.2.4)	
	No: no special requirements under this Code (inerting may be required under SOLAS)	
Electrical equipment	Temperature classes (i') T1 to T6	
(column i)	<ul> <li>indicates no requirements</li> </ul>	
	blank no information	
	Apparatus group (i") IIA, IIB or IIC:	
	<ul> <li>indicates no requirements</li> </ul>	
	blank no information	
	Flashpoint (i''')	
	Yes: flashpoint exceeding 60°C (10.1.6)	
	No: flashpoint not exceeding 60°C (10.1.6)	
	NF: non-flammable product (10.1.6)	

## Chapter 17<sup>\*</sup>

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\* Ändringen innebär även att texten närmast före rubriken tas bort.

### TSFS 2017:14 Bilaga

#### Appendix

#### MODEL FORM OF INTERNATIONAL CERTIFICATE OF FITNESS FOR THE CARRIAGE OF DANGEROUS CHEMICALS IN BULK

### INTERNATIONAL CERTIFICATE OF FITNESS FOR THE CARRIAGE OF DANGEROUS CHEMICALS IN BULK *(Official seal)*

Issued under the provisions of the INTERNATIONAL CODE FOR THE CONSTRUCTION AND EQUIPMENT OF SHIPS CARRYING DANGEROUS CHEMICALS IN BULK (resolutions MSC.176(79) and MEPC.119(52))

under the authority of the Government of

.....

(full official designation of country)

by.....

(full designation of the competent person or organization recognized by the Administration)

Particulars	of	ship <sup>1</sup>
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Name of ship .	
Distinctive number or letters	
IMO Number <sup>2</sup>	
Port of registry	
Gross tonnage	
Ship type (Code paragraph 2.1.	
Date on which keel was laid or o was at a similar stage of construct (in the case of a converted ship) conversion to chemical tanker was	n which the ship tion or date on which as commenced
The ship also complies fully with	
The ship also complies fully with	the following amendments to the Code:
The sinp also complex funy with	n the following amendments to the Code:

<sup>1</sup> Alternatively, the particulars of the ship may be placed horizontally in boxes. 2 In accordance with IMO ship identification number scheme adopted by the Organization by resolution A.600(15).

### **TSFS 2017:14** *Bilaga*

The ship is exempted from compliance with the following provisions of the Code:

#### THIS IS TO CERTIFY:

- 1. That the ship has been surveyed in accordance with the provisions of section 1.5 of the Code;
- 2. That the survey showed that the construction and equipment of the ship and the condition thereof are in all respects satisfactory and that the ship complies with the relevant provisions of the Code;
- 3. That the ship has been provided with a Manual in accordance with Appendix 4 of Annex II of MARPOL 73/78 as called for by regulation 14 of Annex II, and that the arrangements and equipment of the ship prescribed in the Manual are in all respects satisfactory;
- 4. That the ship meets the requirements for the carriage in bulk of the following products, provided that all relevant operational provisions of the Code and Annex II of MARPOL73/78 are observed:

Product	Conditions of carriage (tank numbers etc.)	Pollution Category
Continued on attac	hment 1 additional signed and dated shee	ts <sup>3</sup>

Tank numbers referred to in this list are identified on attachment 2, signed and dated tank plan.

5. That, in accordance with  $1.4 / 2.8.2^3$ , the provisions of the Code are modified in respect of the ship in the following manner:

.....

- 6. That the ship must be loaded:
  - .1 \* only in accordance with loading conditions verified compliant with intact and damage stability requirements using the approved stability instrument fitted in accordance with paragraph 2.2.6 of the Code;
  - .2 \* where a waiver permitted by paragraph 2.2.7 of the Code is granted and the approved stability instrument required by paragraph 2.2.6 of the Code is not fitted, loading shall be made in accordance with one or more of the following approved methods:

<sup>3</sup> Delete as appropriate.

(i) <sup>\*</sup>in accordance with the loading conditions provided in the approved loading manual, stamped and dated ..... and signed by a responsible officer of the Administration, or of an organization recognized by the Administration; or

(ii) \* in accordance with loading conditions verified remotely using an approved means .....; or

(iii)  $^*$  in accordance with a loading condition which lies within an approved range of conditions defined in the approved loading manual referred to in (i) above; or

(iv) \* in accordance with a loading condition verified using approved critical KG/GM data defined in the approved loading manual referred to in (i) above;

.3 \* in accordance with the loading limitations appended to this Certificate.

Where it is required to load the ship other than in accordance with the above instruction, then the necessary calculations to justify the proposed loading conditions shall be communicated to the certifying Administration who may authorize in writing the adoption of the proposed loading condition.

This Certificate is valid until ......<sup>5</sup> subject to surveys in accordance with 1.5 of the Code.

Issued at .....(Place of issue of certificate)

(Date of issue)

Duie of issue)

(Signature of authorized official issuing the certificate)

(Seal or stamp of the authority, as appropriate)

Notes on completion of Certificate:

1. The Certificate can be issued only to ships entitled to fly the flags of States which are both a Contracting Government to the 1974 SOLAS Convention and a Party to MARPOL73/78.

- 2. Ship Type: Any entry under this column must relate to all relevant recommendations, e.g. an entry "Type 2" means Type 2 in all respects prescribed by the Code.
- 3. Products: Products listed in chapter 17 of the Code, or which have been evaluated by the Administration in accordance with 1.1.6 of the Code, shall be listed. In respect of the latter "new" products, any special requirements provisionally prescribed shall be noted.
- 4. Products: The list of products the ship is suitable to carry shall include the Noxious Liquid Substances of Category Z which are not covered by the Code and shall be identified as "chapter 18 Category Z".

<sup>4.</sup> Instead of being incorporated in the Certificate, this text may be appended to the Certificate if signed and stamped.

<sup>5</sup> Insert the date of expiry as specified by the Administration in accordance with 1.5.6.1 of the Code. The day and the month of this day correspond to the anniversary date as defined in 1.3.3 of the Code, unless amended in accordance with 1.5.6.8 of the Code.

### ENDORSEMENT FOR ANNUAL AND INTERMEDIATE SURVEYS

THIS IS TO CERTIFY that at a survey required by 1.5.2 of the Code the ship was found to comply with the relevant provisions of the Code.

Annual survey:	Signed(Signature of duly authorized official)
	Place
	Date (dd/mm/yyyy)
(Seal or stamp of the Authority, as approp.	riate)
Annual/Intermediate <sup>3</sup> survey:	Signed
	(Signature of any authorized official)
	Place
	Date (dd/mm/yyyy)
(Seal or stamp of the Authority, as approp.	riate)
Annual/Intermediate <sup>3</sup> survey.	Signed
initial internetative survey.	(Signature of duly authorized official)
	Place
	Date ( <i>dd/mm/yyyy</i> )
(Seal or stamp of the Authority, as approp.	riate)
Annual survey:	Signed
	Place
(Seal or stamp of the Authority, as approp	Date (dd/mm/yyyy) oriate)

<sup>3</sup> Delete as appropriate.

#### ANNUAL/INTERMEDIATE SURVEY IN ACCORDANCE WITH PARAGRAPH 1.5.6.8.3

THIS IS TO CERTIFY that, at an annual/intermediate<sup>3</sup> survey in accordance with paragraph 1.5.8.6.3 of the Code, the ship was found to comply with the relevant provisions of the Convention:

Place.....

Date (*dd/mm/yyyy*) .....

(Seal or stamp of the Authority, as appropriate)

#### ENDORSEMENT TO EXTEND THE CERTIFICATE IF VALID FOR LESS THAN 5 YEARS WHERE PARAGRAPH 1.5.6.3 APPLIES

The ship complies with the relevant provisions of the Convention, and this Certificate shall, in accordance with paragraph 1.5.6.3 of the Code, be accepted as valid until ......

Signed
(Signature of duly authorized official)
Place
Date ( <i>dd/mm/yyyy</i> )

(Seal or stamp of the Authority, as appropriate)

#### ENDORSEMENT WHERE THE RENEWAL SURVEY HAS BEEN COMPLETED AND PARAGRAPH 1.5.6.4 APPLIES

The ship complies with the relevant provisions of the Convention, and this Certificate shall, in accordance with paragraph 1.5.6.4 of the Code, be accepted as valid until......

Annual survey:

Signed
(Signature of duly authorized official)

Place.....

Date (*dd/mm/yyyy*) .....

(Seal or stamp of the Authority, as appropriate)

3 Delete as appropriate.

### ENDORSEMENT TO EXTEND THE VALIDITY OF THE CERTIFICATE UNTIL REACHING THE PORT OF SURVEY OR FOR A PERIOD OF GRACE WHERE PARAGRAPH 1.5.6.5 OR 1.5.6.6 APPLIES

This Certificate shall, in accordance with paragraph 1.5.6.5/1.5.6.63 of the Code, be accepted as valid until .....

Signed......(Signature of duly authorized official)

Place.....

Date (*dd/mm/yyyy*) .....

(Seal or stamp of the Authority, as appropriate)

#### ENDORSEMENT FOR ADVANCEMENT OF ANNIVERSARY DATE WHERE PARAGRAPH 1.5.6.8 APPLIES

In accordance with paragraph 1.5.6.8 of the Code, the new anniversary date is .....

Place.....

Date (*dd/mm/yyyy*) .....

(Seal or stamp of the Authority, as appropriate)

In accordance with paragraph 1.5.6.8, the new anniversary date is .....

Signed......(Signature of duly authorized official)

Place.....

Date (*dd/mm/yyyy*) .....

(Seal or stamp of the Authority, as appropriate)

3. Delete as appropriate.

### ATTACHMENT 1 TO THE INTERNATIONAL CERTIFICATE OF FITNESS FOR THE CARRIAGE OF

### DANGEROUS CHEMICALS IN BULK

Continued list of products to those specified in section 4, and their conditions of carriage.

Products	Conditions of carriage	Pollution
	(tank numbers etc.)	Category

Date	
(dd/mm/yyyy)	(Signature of official issuing the Certificate
(as for Certificate)	and/or seal of issuing authority)

#### **ATTACHMENT 2**

#### TO THE

MERNATIONAL CERTIF	SICATE OF FILLESS FOR THE CARRIAGE O
DANGER	ROUS CHEMICALS IN BULK
T	ANK PLAN (specimen)
ame of shin.	
istinctive number or letters:	
<	——————————————————————————————————————
(Disgram	matic tank plan to be drawn in this area)
ate	
(dd/mm/yyyy)	(Signature of official issuing the Certificate
(as for Certificate)	and/or seal of issuing authority)"

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