



भारत सरकार / GOVERNMENT OF INDIA

पोत परिवहन मंत्रालय / MINISTRY OF SHIPPING

नौवहन महानिदेशालय / DIRECTORATE GENERAL OF SHIPPING

“बिटा बिल्डिंग”, 9 वी मंजिल / “BETA BUILDING”, 9th FLOOR

आई-थिंक टेक्नो कैम्पस / I-THINK TECHNO CAMPUS

कांजुर गाँव रोड / KANJUR VILLAGE ROAD

कांजुर मार्ग (ईस्ट) / KANJUR MARG (EAST)

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F. No. 86-NT(7)/2015

Date - 25.07.2018

MERCHANT SHIPPING NOTICE No. 04 of 2018

Sub.: Process for approval of Dangerous Goods Packaging Test Centre's as per the provisions of International Maritime Dangerous Goods Code - reg.

1. The carriage of dangerous goods in packaged form on merchant ships is governed by International Convention for the Safety of Life at Sea (SOLAS), 1974 as amended under chapter VII - Part A 'Carriage of dangerous goods in packaged form' of the SOLAS Convention. Regulation 3 of the aforesaid chapter specifies that the carriage of dangerous goods in packaged form is required to be in compliance with the relevant provisions of International Maritime Dangerous Goods (IMDG) Code.
2. Section 331 of the MS Act, 1958 as amended, deals with safe carriage of dangerous goods. Under the provisions of the said Act, MS 'Carriage of Cargo Rules' 1995 was notified on 27.12.1995 and specifies the requirement to comply with the provisions of the IMDG Code.
3. In accordance with Chapter 4.1 of the IMDG Code (unless provided elsewhere in the IMDG Code), each packaging including IBC and large packaging needs to conform to a design type, successfully tested in accordance with the provisions under Part 6 of the Code. Part 6 of the IMDG Code lays down the provisions for the construction, testing and approval of the packages to be used for carriage of IMDG Cargo.
4. It is the therefore essential to ensure that the packaging, type, the material used and the testing are carried out in accordance with the provisions under the code at an approved IMDG packaging Test Centre. The approved IMDG packaging Test Centre is required to issue a certificate with regards to the conformance of the packaging, type and material, after the conduct of the test, as per the requirements of the IMDG Code.
5. This Directorate has been approached by organisations desirous of seeking approval as an IMDG packaging testing centre. To standardise the process for inspection and to obtain approval of Directorate General of Shipping by the IMDG packaging Test Centre, the requirements stipulated in the enclosed inspection scrutiny sheet needs to be followed (copy enclosed as Annexure - I).
6. The IMDG packaging test centre complying with the relevant provisions of the Code may approach the jurisdictional Mercantile Marine Department (under this office) of the Govt. of India for an inspection & approval of their respective testing centres.

7. The fee for an inspection of test centre may be charged as per item No. 33 (fee for miscellaneous surveys per visit) of this office DGS Circular No. 13 of 2010 (F. No. F&A - 12(3)/97-III) dated 06.09.10.

8. This MS Notice shall come into force with immediate effect and is issued with the approval of the Director General of Shipping and Secretary to Government of India.

(Capt. Anish Joseph)
Nautical Surveyor
-cum-
Dy. Director General of Shipping (Tech)

Encl: Annexure - I (Scrutiny Sheet)

SCRUTINY SHEET FOR ASSESSMENT AND APPROVAL OF IMDG PACKAGING TEST CENTRE'S

Annexure I to MS Notice No. 04 of 2018

Sr. No.	Requirements	Compliance (IMDG Code)	Remarks (Documentary evidence to be attached)	Annexure No. & Page No. of Documentary
A	BASIC REQUIREMENTS			
1	Name of the Organization [Packaging Test Centre's]			
2	Names of the Owners/Directors/Proprietor/Trustees etc., of the organization owning the IMDG packaging testing centre			
3	Date of Registration of the Organization [Company/Society etc.,]		1. Copy of certificate incorporation of the organization to be attached. 2. Copy of Memorandum and Articles of Association/other equivalent documents to be attached [as applicable]	
4	Fees: Online payment details vide Bharatkosh for Rs. 3000/- per visit in favour of the Jurisdictional MMD	Ref item No. 33 (fee for miscellaneous surveys per visit) of this office DGS Circular No. 13 of 2010 (or as amended)		
5	Address for Communication 1)Telephone 2) Fax 3) E-Mail			

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6	Address of the Packaging Test Centre's 1) Telephone 2) Fax 3) E-Mail		
7	Layout of the premises with relevant documents	Copy of the layout plan to be attached	
8	Ownership details of the premises of the packaging testing centre leased/owned etc	Lease deed valid upto: _____ Whether lease deed has enabling provision for renewal of lease for a further period?	If owned: copy of the ownership documents to be attached If leased: copy of the leased deed duly registered with the appropriate authority to be attached
9	The packaging testing centre premises to have necessary permissions from the concerned local authorities (Municipal /Panchayat /Industrial etc. as applicable).		Shop and Establishment registration, Municipality licence, etc as applicable to be attached
B	PERSONNEL (Qualification, Training and Practical Experience)		
1	<u>Competent Person</u> [Team Leader of the Packaging Test Centre's] Qualification and Experience – a. 2 nd Mate FG COC holder or Graduate in Physics or Engineering with 5 years Experience. b. Completed course on IMDG. c. Atleast five years experience in testing of IMDG packages.	Name _____ Experience _____	Copy of Certificates to be attached.

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2	<u>Technical Head</u> Qualification and Experience – 1. Graduate in Science or Engineering – 2. Completed course on IMDG 3. Atleast two years experience in testing of IMDG packages.	Name _____ Experience _____	Copy of Certificates to be attached.	
3	<u>Staff list with the training details</u> Centre to have adequate number of technically qualified laboratory personnel who have completed the course IMDG.	refer IMDG Code chapter 1.3.1 & chapter 1.4.	Copy of Certificates to be attached.	
C	INFRASTRUCTURE			
1	The premises to have permanent construction with proper and permanent roofing and not be a temporary structure/ temporary roof.		Photograph to be attached, structure to be approved by any government organization.	
2	The walls of the premises are to be properly coated / painted			
3	The premises to have modern flooring of granite or mosaic or cement concrete or similar material			
4	The premises to have adequate lighting.			
5	The premises to be adequately ventilated / air condition.			
6	The testing centre shall have the following updated/amended publications/standards as required: 1. Quality Manual and <u>Standard Operating Procedures</u> for the various processes associated with the testing. 2. International Maritime Dangerous Goods (IMDG) Code, as amended.		Complete list of publications & standards to be attached	

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	<p>3. United Nations Recommendations on the Transport of Dangerous Goods - Manual of Tests and Criteria, as amended.</p> <p>4. Chapter VII of International Convention for the Safety of Life at Sea (SOLAS) 1974, as amended.</p> <p>5. Annex II of International Convention for the Prevention of Pollution from Ships 1973 as modified by the Protocol of 1978 (MARPOL 73/78), as amended.</p> <p>6. Updated ISO Documents for relevant tests as applicable:- ISO 2248, ISO 2234, ISO 535, ISO 2247</p>	<p>Relevant Pages</p> <p>Relevant Pages</p>		
7	The testing centre to be accredited by the National Accreditation Board for Testing & Calibration Laboratories (NABL) with scope to mention the tests being conducted.	Certificate valid till ____	Certificate of Accreditation by NABL is to be attached	
8	The testing centre to be in possession of quality certification under ISO 9001:2015 and ISO/IEC 17025	Certificate valid till ____	Certificate is to be attached	
9	The testing centre needs to have necessary fire-fighting equipment and approval of the relevant local body if required.			
10	Annual maintenance contract for regular and established preventive, breakdown and for the testing centre equipment.			
11	Record of periodic calibration of various equipment and its accessories like load cell, gauges, measuring equipment, temperature controllers.	Certificate valid till ____	Calibration is to be done from duly approved organizations	
12	The UN certificate to be issued by the laboratory should contain a number of security features to avoid counterfeit		Sample of certificate attached containing the	

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	and authenticity of all certificates to be verified online on website of testing centre.		link of website to check certificate authenticity	
Note (if any):				
<u>CHECKLIST FOR TESTS CONDUCTED AT THE IMDG PACKAGING TEST CENTRE</u>				
Sl. No.	Item	Applicable IMDG provisions to check compliance with	Whether Complying Yes/No/NA	Remarks
D	TEST			
D1	DROP TEST	6.1.5.3		
1	Mechanical Drop Tester should be capable of lifting packaging to a height of 2.5 meters and a minimum SWL of 500 kgs			Height to be specified. Photograph of the equipment to be attached.
2	Lifting arrangement should not damage the test packing during release			
3	Test package prior to release in predetermined attitude of minimum 2.5 meters			

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4	Release mechanism to release the test packing in such a way that its fall is not obstructed by any way before falling to impact surface			
5	Impact surface should be massive enough to be immovable and rigid enough to be non-deformable under test condition			
D2	LEAKPROOFNESS TEST	6.1.5.4		
1	Bath Size (water Tank) of capacity not less than 1.3 m x 0.80 m x 1 m		Actual size ____	
2	Air compressor should have a minimum capacity of 30 kpa		Capacity of air compressor ____	Photograph to be attached.
D3	INTERNAL PRESSURE (HYDRAULIC/HYDROSTATIC) TEST	6.1.5.5		
1	Capacity of Pressure Tester machine should be able to do testing not less than 350 kpa		Capacity of Pressure Tester machine _____	Photograph to be attached.
D4	STACKING TEST	6.1.5.6		
1	Temperature control chamber should maintain minimum temperature of 40 deg cels			Photograph to be attached.

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2	Temperature control chamber size should be of minimum dimensions of 130 cm x 190 cm x 200 cm		Actual size ____	
D5	COBB TEST	6.1.4.12.1		
1	Check Cobb test apparatus:- The apparatus consists of a rigid base with a smooth, planar surface, and a rigid metal cylinder of 112,8 mm \pm 0,2 mm internal diameter (corresponding to a test area approximately 100 cm ²) and with a means of clamping it firmly to the base plate. The edge of the cylinder in contact with the test piece shall be flat and machined smooth with a thickness sufficient to prevent the cylinder cutting into the test piece. The height of the cylinder is not important provided it is sufficient to contain a water depth of 10 mm.			Photograph to be attached.
2	Timer (stop watch with capability of timing atleast 30 min)			Photograph to be attached.
3	Weighing machine / Balance (with accuracy of 1mg)			Certificate to be attached.
4	Measuring beaker / Graduated Cylinder for measuring			Photograph to be attached.
5	Metal roller, with a smooth face, 200 mm wide, a diameter of 90 mm \pm 10 mm and a mass of 10 kg \pm 0,5 kg.			Photograph to be attached.

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Below items are only to be filled if IBC packaging testing is carried out in the facility.				
D6	TEST PROVISIONS FOR IBCS	6.5.6		Photographs to be attached.
1	Tests to be carried out :- Vibration, Bottom lift, Top lift, Stacking, Leak-proofness test, Hydraulic pressure, Drop, Tear, Topple, Righting.	6.5.6.3.5		
2	Fork Lift of SWL (min 10 T SWL)			
3	Vibration test to have a machine platform with a vertical sinusoidal, double amplitude (peak-to-peak displacement) of 25 mm \pm 5%. If necessary, restraining devices shall be attached to the platform to prevent the specimen from moving horizontally off the platform without restricting vertical movement.			
4	Metal shim used for Vibration test shall be at least 1.6 mm thick, 50 mm wide, and be of sufficient length to be inserted between the IBC and the test platform a minimum of 100 mm to perform the test.			

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5	Drop test equipment to be same as D1 above with SWL of 10 tonnes			
D7	TEST REPORT FORMAT	6.1.5.7 Or 6.5.6.14 (for IBC)		Sample certificate to be attached.

Recommendations / Comments of MMD Surveyor:

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Surveyor of MMD
(Signature & Stamp)

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List of enclosures: -

- 1.
- 2.
- 3.
- 4.
- 5.
- 6.
- 7.

Recommendations / Comments of Principal Officer:

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Principal Officer, MMD
(Signature & Stamp)

Note:- The scrutiny sheet is to be forwarded through the jurisdictional Principal Officer.