Dangerous Goods Container

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Recommendations on the Transport of Dangerous Goods (UN Recommendations Chapter 9) were issued by the United Nations, the Committee of Experts on the Transport of Dangerous Goods, to secure the safe transport of dangerous goods in packages where they are packed in containers for transport. Based on these recommendations, the IMDG Code was formulated to specify containers suitable for the international sea transportation on dangerous goods. These container specifications are also adopted in Japanese laws and therefore must be applied to dangerous goods containers for international transport. Similar container specifications have been also adopted for domestic transport of dangerous goods.

International System of Laws and Regulations for the Transport of Dangerous Goods

United Nations.
The Committee of Experts on the Transport of Dangerous Goods.

Recommendations on the Transport of Dangerous Goods. Chapter 9

Transport by Air

ICAO International Civil Aviation Organization.

Technical Instruction for the Safe Transport Dangerous Goods by Air.

Transport by Sea

IMO International Maritime Organization.

IMDG Code Annex 1
International Maritime Dangerous Goods Code.

Inland (Road) Transport

ITC Inland Transport Committee.

ADR
European Agreement Concerning the International Carriage of Dangerous Goods by Road.

Inland (Rail) Transport

OCTI Central Office for the International Transport by Rail.

RID
International Regulations Concerning the Carriage of Dangerous Goods by Rail.

Japanese Legal System for the Transport of Dangerous Goods

Type of Transport	Competent Authorities	Laws and Regulations
Air Transport	Ministry of Land, Infrastructure and Transport Civil Aviation Bureau	1. Air Navigation Law Enforcement Regulations 2. Notification for determining the criteria for the transport of explosive, etc., by air
Sea Transport	Ministry of Land, Infrastructure and Transport Maritime Technology and Safety Bureau	1. Dangerous Goods Ship Transport and Storage Regulations 2. Criteria for the transport of dangerous goods by sea
Land Transport and storage	Ministry of Home Affairs Fire and Disaster Management Agency	1. Regulations concerning the control of dangerous substances 2. Notification for determining the details of technical criteria for the control of dangerous substances
	Ministry of Health, Labour and welfare Pharmaceutical Affairs Bureau	1. Ordinance for designating poisonous and deleterious substances 2. Poisonous and Deleterious Substances Control Law Enforcement Regulations

Containers and Packagings

The type of containers and packagings are drum, wooden barrel, box, jerrican, bag and composite containers. The necessary performance items required for containers alone are specified as control items, and although there is a simple construction specification, there are no shape or dimensional specifications.
Three different performance specifications have been set up, and the proper selection must be made according to the class of dangerous goods to be transported. Since the class of container and the type container and packagings are specified for each type of goods, reference to the IMDG Code is requested for sea transport, and to the Dangerous Goods Regulations in Fire Service Law for domestic transport.

1) High level dangerous goods……Packing Group Ⅰ
2) Medium level dangerous goods……Packing Group Ⅱ
3) Low level dangerous goods……Packing Group Ⅲ

All containers and packagings for dangerous goods must be tested for performance, and required markings must be put on containers and packagings that have passed the test.

UN Recommendations

Inspection organization		The Ship Equipment Inspection Society of Japan*1
Type of steel drum		Marking
Tight head drum for liquids		(un) 1A1 / X1.8 / 300 / YR*2 / J / ND*3
Open head drum for solids		(un) 1A2 / Y280 / S / YR*2 / J / ND*3
Open head drum for liquids		(un) 1A2 / Y / 100 / YR*2 / J / ND*3
Composite drum	Universal closure type	(un) 6HA1 / Y1.5 / 150 / YR*2 / J / ND*3
	ICI closure type	(un) 6HA1 / X1.2 / 250 / YR*2 / J / ND*3

Fire Defense Agency Specification

Voluntary		
Drum Manufacturers' Association		
Tight head drum	Open head drum	
Liquid	Solid	Liquid
L−X JSDA ND*3	S−Y JSDA ND*3	L−Y JSDA ND*3

*1 Approved by Ministry of Land, Infrastructure and Transport
*2 YR: last two numbers of AD
*3 Initial of manufacturer

NIPPON STEEL & SUMIKIN DRUM CO.,LTD.