

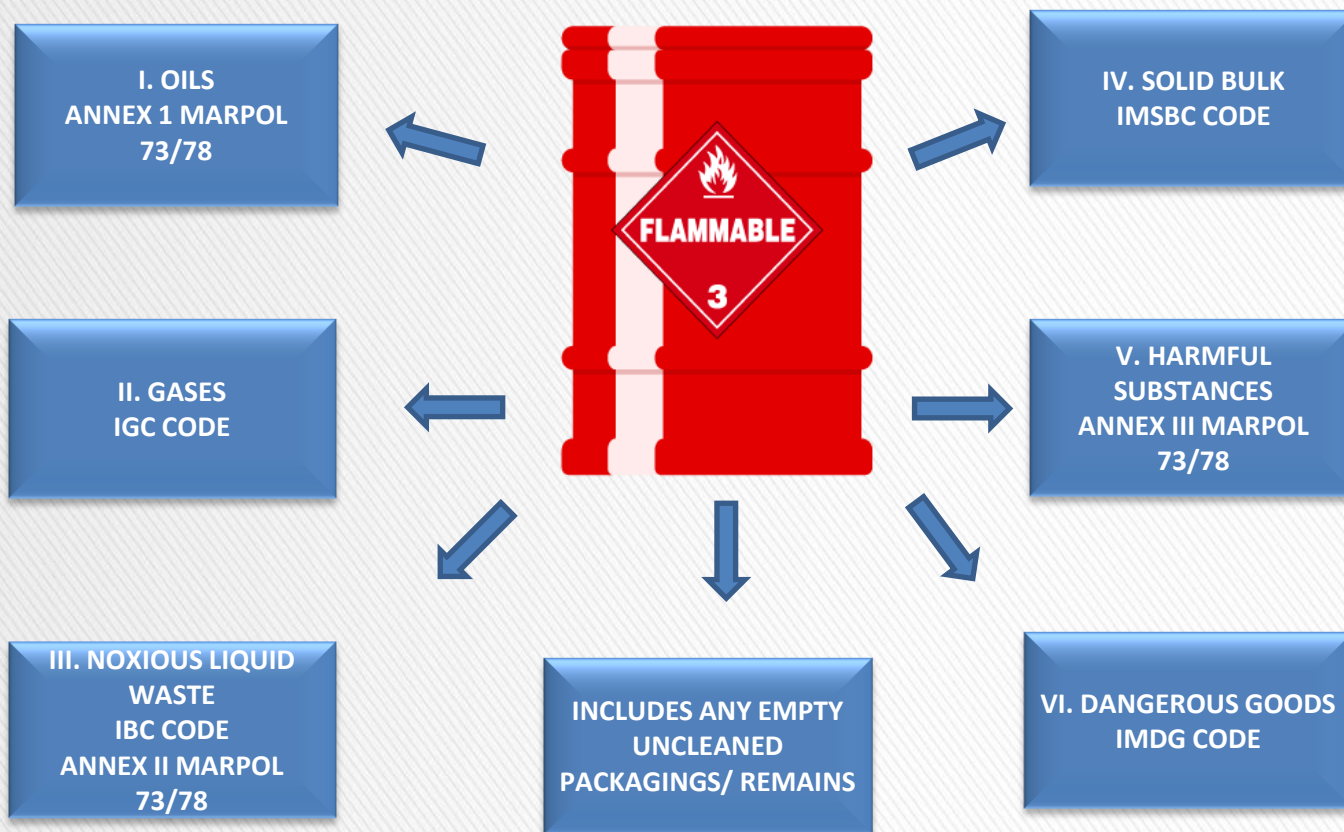


HANDLING OF DANGEROUS CARGOES AT PORT KLANG

QUAK SIOW CHIN
Dangerous Goods Department
31 October 2017 (Tuesday)

IMO DEFINITIONS OF DANGEROUS CARGOES

DANGEROUS CARGOES



Source: Recommendations on the safe transport of dangerous cargoes and related activities in port area, 2007 edition



WHAT ARE DANGEROUS GOODS?



Substances and articles when transported by air, sea, road and rail that are:



potentially dangerous,



pose significant risk to



Health, Safety, Property, Environment & Security

Dangerous goods are classified into 9 classes according to properties. The way in which different classes of dangerous goods are handled in transport will depend upon these properties and hazards ie:



- **The type of packaging that can be used.**
- **What classes of DG can be transported together in freight containers.**
- **Where the goods can be stored within the port and on the ship.**

CLASSIFICATION OF DANGEROUS GOODS

These 9 hazard classes have been established internationally by a United Nations (UN) Committee to ensure that all modes of transport (road, rail, air and sea) classify dangerous goods in the same way.



CLASS 1: EXPLOSIVES. Divided into 6 divisions: 1.1, 1.2, 1.3, 1.4, 1.5 and 1.6 i.e. **UN 0333 / FIREWORKS**



Class 2.1 : FLAMMABLE GASES i.e. **UN 1057 / LIGHTERS**



CLASS 2.2 : NON-FLAMMABLE, NON-TOXIC GASES. i.e. **UN 1066/ NITROGEN**



Class 2.3 : TOXIC GASES. i.e. **UN 1017 / CHLORINE**



Class 3 : FLAMMABLE LIQUIDS. i.e. **UN 1203 / GASOLINE**



Class 4.1: FLAMMABLE SOLID AND SELF-REACTIVE SUBSTANCES. i.e. **UN 1350 / SULPHUR**



Class 4.2 : SUBSTANCES LIABLE TO SPONTANEOUS COMBUSTION. i.e. **UN 1362 / ACTIVATED CARBON**



Class 4.3 : SUBSTANCES, WHICH IN CONTACT WITH WATER EMIT FLAMMABLE GASES. i.e. UN1402 / CALCIUM CARBIDE



Class 5.1 : OXIDIZING SUBSTANCES i.e. UN 1942 / AMMONIUM NITRATE



Class 5.2 : ORGANIC PEROXIDES i.e. UN 3101 / ORGANIC PEROXIDE TYPE B



Class 6.1 : TOXIC SUBSTANCES i.e. UN 1654 / NICOTINE



Class 6.2 : INFECTIOUS SUBSTANCES i.e. UN 3291 / CLINICAL WASTE



Class 7: RADIOACTIVE MATERIALS i.e. UN 2977 / RADIOACTIVE MATERIAL, URANIUM HEXAFLUORIDE



Class 8 : CORROSIVE SUBSTANCES i.e. UN 2790 / ACETIC ACID



Class 9: MISCELLANEOUS DANGEROUS SUBSTANCES AND ARTICLES. i.e. UN 2590 / ASBESTOS WHITE



MHB : MATERIAL HAZARDOUS ONLY IN BULK. i.e. WOODCHIPS



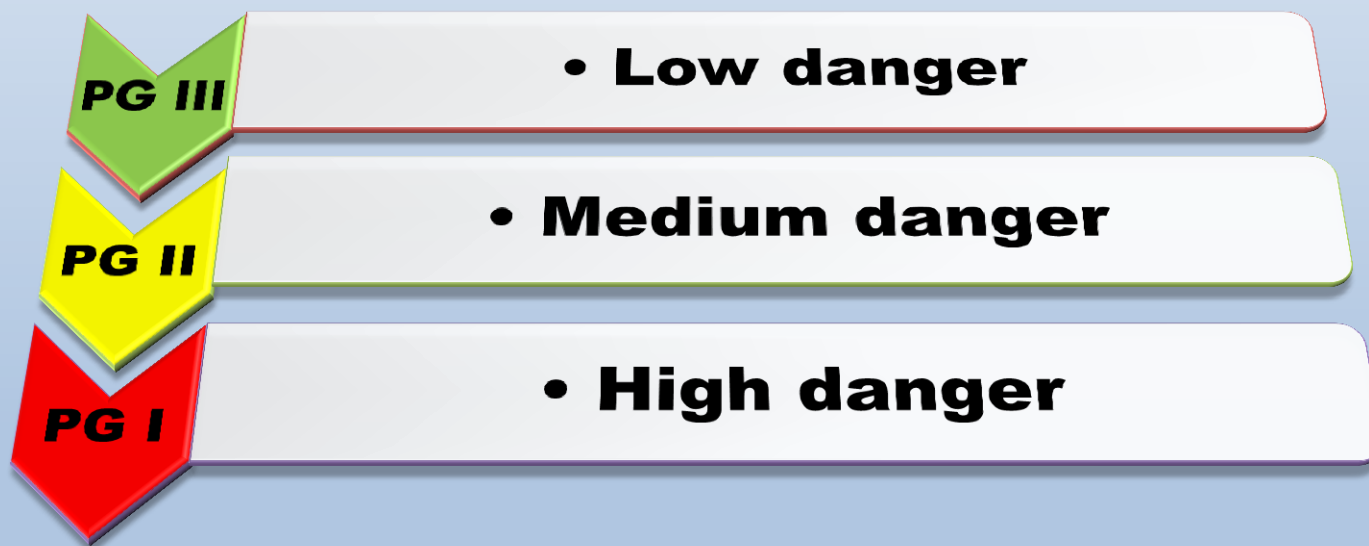
LIMITED QUANTITY



MARINE POLLUTANT

PACKING GROUP (PG)

There are 3 Packing Group (PG) in accordance with the degree of danger presented by the substance:



No Packing Group for IMD Class 1, 2, 5.2, 6.2 and 7.

DANGEROUS GOODS HANDLING GROUP

- 9 IMO CLASSES REGROUPED INTO 3 PORT KLANG AUTHORITY GROUPS BASED ON DEGREE OF HAZARD:



GENERAL PROVISIONS FOR HANDLING AT PORT KLANG

PKA GROUP 1

- **Direct Delivery
Ex-Ship / Direct
Loading**
- **Shall comply
with cond. set
out by Port
Authority**
- **([Appendix 1](#))**

PKA GROUP 2

- **Direct Delivery/
Loading**
- **On case to case
basis, may
allowed for
storage in port
area**

PKA GROUP 3

- **Acceptable for
storage in port
area**

HANDLING OF TRANSHIPMENT

PKA GROUP 1

- NOT ALLOWED FOR TRANSHIPMENT

PKA GROUP 2

- NOT ALLOWED FOR PG I

PKA GROUP 3

- ALLOWED FOR TRANSHIPMENT

HANDLING OF TRANSIT (ROB)

PKA GROUP 1

- REMAIN ON BOARD & FOLLOW [APPENDIX 2](#)

PKA GROUP 2

- REMAIN ON BOARD

PKA GROUP 3

- REMAIN ON BOARD

NOTIFICATION VIA eDCFZ

- 48 HOURS PRIOR VESSEL ARRIVAL
- SUBMIT BY MASTER, OWNER SHIPPER OR AGENT

- CPC FOR EXPORT CONTAINER
- OGA PERMIT FROM AELB, PDRM, DOE & MOH

OGA PERMIT & CPC

PKA REGULATIONS



- MUST BE PACKED, LABELLED & MARKED AS PER IMDG CODE REQUIREMENTS & KPA BY LAWS

PACKAGING, LABELLING & MARKING

DESIGNATED STORAGE FACILITIES

- STORED AT DESIGNATED WAREHOUSES AND YARDS

TRANSPORT OF WASTE

HARMFUL TO ENVIRONMENT

UN3077

- ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.

UN3082

- ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.



TRANSPORT OF WASTE

BASEL CONVENTION

UN3077

ENVIRONMENTALLY
HAZARDOUS
SUBSTANCE, SOLID,
N.O.S.

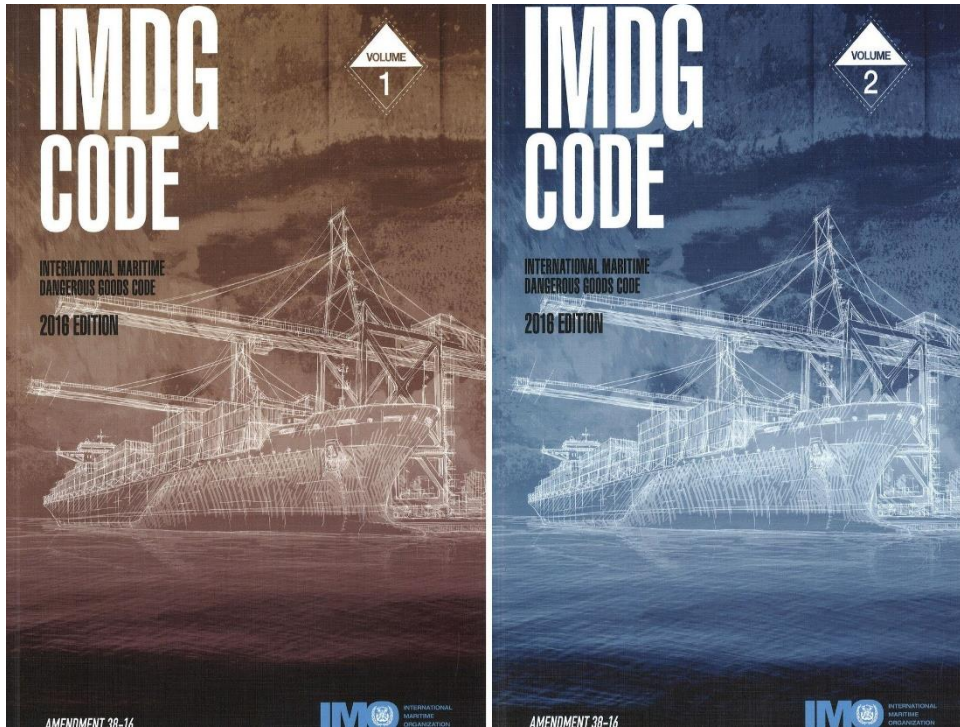
UN3082

ENVIRONMENTALLY
HAZARDOUS
SUBSTANCE,
LIQUID, N.O.S.



For waste dangerous goods (other than radioactive wastes) which are being transported for disposal, or for processing for disposal, the Proper Shipping Name shall be added with the word **"WASTE"**, unless this is already a part of the Proper Shipping Name.

IMDG CODE 38-16



- ✓ **Published – 2016**
- ✓ **Recommendatory – 1 January 2017**
- ✓ **Mandatory – 1 January 2018**

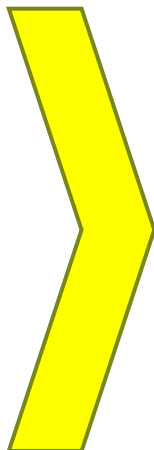
(Both 37-14th and 38-16th Amendments are valid during transition period.)

The objective of the International Maritime Dangerous Goods (IMDG) Code is to:

- **Enhance the safe transport of dangerous goods**
- **Protect the marine environment**
- **Facilitate the free unrestricted movement of dangerous goods**

9 New entries

- UN0510
- UN3527
- UN3528
- UN3529
- UN3530
- UN3531
- UN3532
- UN3533
- UN3534



UN No.	Proper Shipping name	Class	Subsidiary Risk	Packing Group	Properties and Observation
0510	ROCKET MOTORS	1.4C	-	-	
3527	POLYESTER RESIN KIT, solid base material	4.1	-	II/III	Polyester resin kits consist of two components: a base material (flammable solid) and an activator (organic peroxide), each separately packed in an inner packaging.
3528	ENGINE, INTERNAL COMBUSTION, FLAMMABLE LIQUID POWERED or ENGINE, FUEL CELL, FLAMMABLE LIQUID POWERED or MACHINERY, INTERNAL COMBUSTION, FLAMMABLE LIQUID POWERED or MACHINERY, FUEL CELL, FLAMMABLE LIQUID POWERED	3	-	-	Types of articles transported under this entry include engines or machinery, powered by fuels classified as dangerous goods via internal combustion systems or fuel cells (e.g. combustion engines, generators, compressors, turbines, heating units, etc.).
3529	ENGINE, INTERNAL COMBUSTION, FLAMMABLE GAS POWERED or ENGINE, FUEL CELL, FLAMMABLE GAS POWERED or MACHINERY, INTERNAL COMBUSTION, FLAMMABLE GAS POWERED or MACHINERY, FUEL CELL, FLAMMABLE GAS POWERED	2.1	-	-	Types of articles transported under this entry include engines or machinery, powered by fuels classified as dangerous goods via internal combustion systems or fuel cells (e.g. combustion engines, generators, compressors, turbines, heating units, etc.).
3530	ENGINE, INTERNAL COMBUSTION or MACHINERY, INTERNAL COMBUSTION	9	P	-	Types of articles transported under this entry include engines or machinery, powered by fuels classified as dangerous goods via internal combustion systems or fuel cells (e.g. combustion engines, generators, compressors, turbines, heating units, etc.).
3531	POLYMERIZING SUBSTANCE, SOLID, STABILIZED N.O.S.	4.1	-	III	Polymerizes at elevated temperatures or in a fire. Burns vigorously. Insoluble in water. Contact with alkalis or acids may cause dangerous polymerization. The products of combustion or self-accelerating polymerization may be toxic by inhalation.
3532	POLYMERIZING SUBSTANCE, LIQUID, STABILIZED, N.O.S.	4.1	-	III	Polymerizes at elevated temperatures or in a fire. Burns vigorously. Immiscible with water. Contact with alkalis or acids may cause dangerous polymerization. The products of combustion or self-accelerating polymerization may be toxic by inhalation.
3533	POLYMERIZING SUBSTANCE, SOLID, TEMPERATURE CONTROLLED, N.O.S.	4.1	-	III	Polymerizes at temperatures higher than the self-accelerating polymerization temperature or in a fire. Burns vigorously. Insoluble in water. Contact with alkalis or acids may cause dangerous polymerization. The products of combustion or self-accelerating polymerization may be toxic by inhalation. Control and emergency temperatures can be found in the transport document as required in 5.4.1.5.5. The temperature must be checked regularly.
3534	POLYMERIZING SUBSTANCE, LIQUID, TEMPERATURE CONTROLLED, N.O.S.	4.1	-	III	Polymerizes at temperatures higher than the self-accelerating polymerization temperature or in a fire. Burns vigorously. Immiscible with water. Contact with alkalis or acids may cause dangerous polymerization. The products of combustion or self-accelerating polymerization may be toxic by inhalation. Control and emergency temperatures can be found in the transport document as required in 5.4.1.5.5. The temperature must be checked regularly.



Amendments to the Special Provisions and Entry for UN₃₁₆₆

- ✓ **Fourth** in this series is changes to Vehicles and Engines.
- ✓ Separating Engines from UN 3166
- ✓ Allocating **new UN Numbers for engines and machineries** which **require labels and placards** depending on fuel it contains or the capacity of fuel tanks.

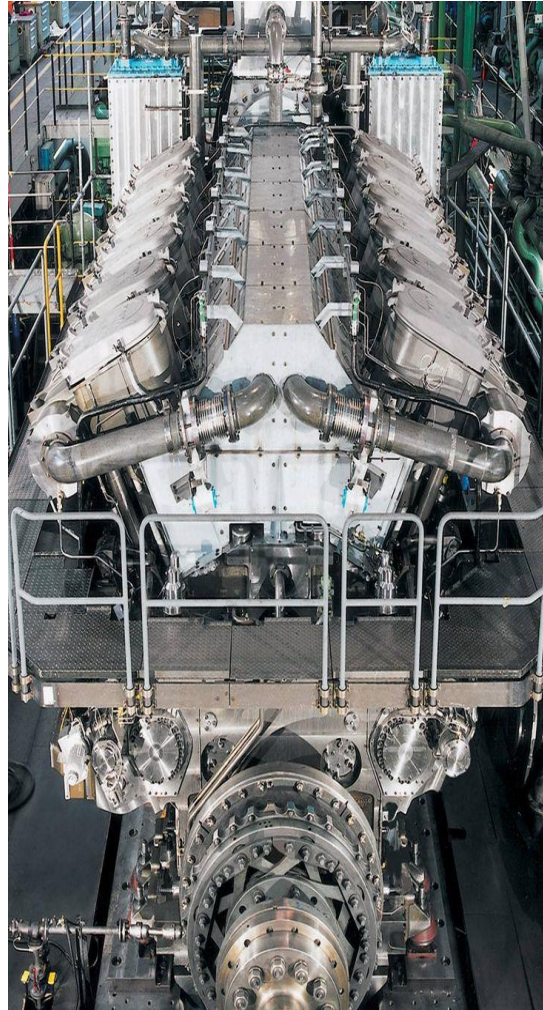


△ 3166	VEHICLE, FLAMMABLE GAS POWERED or VEHICLE, FLAMMABLE LIQUID POWERED or VEHICLE, FUEL CELL, FLAMMABLE GAS POWERED or VEHICLE, FUEL CELL, FLAMMABLE LIQUID POWERED	9	-	-	312 356 380 385 961 962
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NON DG!
Guna LOI baru.

- ✓ This entry applies to vehicles powered by flammable liquid or gas internal combustion engines or fuel cells. **Engines must not be consigned under this entry.**

New Entries and Provisions for **ENGINES AND MACHINES** (UN3528 ~ UN3530)



UN3528 / UN3530

- > 60 L of liquid fuel
< 450 L Capacity = **Label**
- > 60 L of liquid fuel
< 3,000 L = **2 sides Label**
- > 60 L of liquid fuel
> 3,000 L = **2 sides Placard**

UN3529

Fuel tank water capacity

< 450 L = **Label**

➤ 450 L < 1,000 L = **2 Label**

> 1,000 L = **2 Placard**



New CLASS 9 label (SP384) and Lithium Batteries mark have been adopted for Lithium Batteries shipments (see 5.2.1.10.2)

Non DG
(SP 188)



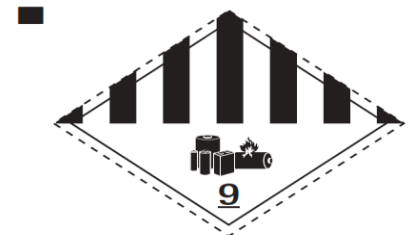
Lithium battery mark

* Place for UN number(s)

** Place for telephone number for additional information



DG



(No. 9A)

Symbol (seven vertical stripes in upper half; battery group, one broken and emitting flame in lower half): black.
Background: white.
Figure '9' underlined in bottom corner.



During the transitional period from 1 Jan 2017 to 31 Dec 2018, either the Class 9 Miscellaneous Dangerous Goods hazard label or the new Class 9 Lithium Battery hazard label can be used.

<http://pkapp.pka.gov.my/dg/unno.php>

DANGEROUS GOODS INQUIRY

www.pka.gov.my

Main | Search

Please enter your UN Number to search. (eg. UN Number : 3322) :

NO.	PROPER SHIPPING NAME	UNNO	IMO	SUB. RISK	PG	LPK GROUP	IMPORT	EXPORT	T/S
1	SODIUM CYANIDE, SOLID	1689	6.1	P	I	2	✓	✓	X

<http://www.pka.gov.my/>


PORT KLANG
malaysia

Port Klang Authority's Official Portal
Portal Rasmi Lembaga Pelabuhan Kelang
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Publications | Tender | Job Vacancy | FZ Update | DG Update | Port Tariff | SOLAS-VGM

[Storage Period of Dangerous Goods](#) | [Manual Processing - Dangerous Goods Declaration](#) | [Dangerous Goods Customer Inquiry](#) | [Notices](#) | [List Of Competent Person \(CPC\) - \(New\)](#) | [DG Appendixes : Appendix 1](#) , [Appendix 2](#) , [Appendix 3](#) , [Appendix 4\(i\)\(New\)](#) , [Appendix 5 \(New\)](#) | [DG Guidelines \(New\)](#)

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eDCFZ.pka.gov.my



PKA HOME

LOGIN



User ID

quak

Password

.....

SUBMIT

Announcements

Implementation Of Perintah Duti Kastam (PDK) 2017 - Customs Duti Order 2017

The attached letter from Royal Malaysia Customs Department is referred.

Royal Malaysia Customs Department had reviewed the current Customs Duty Order 2012 (PDK 2012) to be in line with the tariff codes changes done by the World Customs Organization (WCO) which happens in every five years. This new Customs Duty Order will replace the PDK 2012 currently in use. The new Customs Duty Order will involve the changes in the number of digits from 9 digits to 10 digits as well as the tariff structure.

This Customs Duty Order was gazetted on 3rd January 2017 and will be fully enforced on 1 April 2017. All declarations for importations and exportations previously used the PDK 2012 and ASEAN Harmonised Tariff Nomenclature 2012 (AHTN 2012) will be replaced with PDK 2017.

THANK YOU

**DANGEROUS GOODS DEPT.
PORT KLANG AUTHORITY**

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