

KEMENTERIAN PERHUBUNGAN REPUBLIK INDONESIA DIREKTORAT JENDERAL PERHUBUNGAN LAUT



MINISTRY OF TRANSPORTATION OF THE REPUBLIC OF INDONESIA
DIRECTORATE GENERAL OF SEA TRANSPORTATION

# SERTIFIKAT KETERAMPILAN CERTIFICATE OF PROFICIENCY

Nomor Seri / Serial No.

Nomor Sertifikat / Certificate No.

6200383721370721

CP4309029

Dengan ini dinyatakan bahwa This is to certify that:

Nama Name JOKO SUTRISNO

Tempat dan tanggal lahir BANGKA

BANGKALAN, 14 August 1989

Place and date of birth

telah menyelesaikan pelatihan dan lulus evaluasi : has completed approved training and passed the assessment of

### BASIC TRAINING FOR LIQUEFIED GAS TANKER CARGO OPERATIONS Revalidation

yang dilaksanakan oleh : Pertamina Maritime Training Center - Jakarta which has held by

di : Jakarta

at 07 May 2015 to 13 May 2015

Sesual ketentuan STCW 1978 beserta dengan amandemennya, Peraturan: Chapter V, Section A-V/1-2-1 STCW 2010 in accordance with the provisions of STCW 1978 as amanded, Regulation Chapter V, Section A-V/1-2-1 STCW 2010 yang telah mendapat pengesahan dari Direktorat Jenderal Perhubungan Laut selaku Administrasi.

which has been approved by the Directorate General of Sea Transportation as Administration.

Tandatangan Pemilik.
Signature of the Holder



Jakarta, 26 May 2021

AMAR Direktur Jenderal Perhubungan Laut
O.D. Surector General of Sea Transportation

(Ketua/Direktur/Kepala
Phillipal/Director/Head

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Sertifikat ini berlaku untuk 5 (lima) tahun sejak tanggal diterbitkan

This Cartificate is valid for 5 (five) years commenced from the date of issuance

#### BASIC TRAINING FOR LIQUEFIED GAS TANKER CARGO OPERATIONS

Subject Area
Based on Reg. V/1-2 and STCW 2010 Code Section A-V/1-2-1

#### 1. Contribute to the Safe Operation of a Liquefled Gas Tanker

- 1.1 Basic knowledge of liquefied gas tankers
  - 1.1.1 Types of liquefied gas tankers
  - 1.1.2 General arrangement and contribution
- 1.2 Basic knowledge of cargo operation
  - 1.2.1 Piping systems and values
  - 1.2.2 Cargo handling equipment
  - 1.2.3 Loading, unloading and care in transit
  - 1.2.4 Emergency shutdown (ESD) system
  - 1.2.5 Tank cleaning, paring, gas-freeing and inerting
- 1.3 Basic knowledge of the physical properties of liquefied gases
  - 1.3.1 Properties and characteristics
  - 1.3.2 Pressure and temperature, including vapour pressure/ temperature relationship
  - 1.3.3 Types of electrostatic charge generation
  - 1.3.4 Chemical symbols
- 1.4 Knowledge and understanding of tanker safety culture and safety management

#### 2. Take Precaution to Prevent Hazard

- 2.1 Basic knowledge of the hazards associated with tanker operation
  - 2.1.1 Health hazard
  - 2.1.2 Environmental hazards
  - 2.1.3 Reactivity hazards
  - 2.1.4 Corrosion hazards
  - 2.1.5 Explosion and flammability hazards
  - 2.1.6 Sources of ignition
  - 2.1.7 Electrostatic hazards
  - 2.1.8 Toxicity hazards
  - 2.1.9 Vapour leaks and clouds
  - 2.1.10 Extremely low temperatures
  - 2.1.11 Pressure hazards
- 2.2 Basic knowledge of hazards controls
  - 2.2.1 Inerting, drying and monitoring techniques
  - 2.2.2 Anti-static measures
  - 2.2.3 Ventilation
  - 2.2.4 Segregation
  - 2.2.5 Cargo inhibition

- 2.2.6 Importance of cargo compatibility
- 2.2.7 Atmospheric control
- 2.2.8 Gas testing
- 2.3 Understanding of information on a Material Safety Data Sheet (MSDS)

#### 3. Apply Occupation health and Safety Precautions and measures

- 3.1 Function and proper use of gas-measuring instruments and similar equipment
- 3.2 Proper use of safety equipment and protective devices
- 3.3 Basic knowledge of safe working practices and procedures in accordance with legislation and industry guidelines and personal shipboard safety relevant to liquefied gas takers
- 3.4 Basic knowledge of first aid with reference to Material Safety Data Sheet (MSDS)

#### 4. Carry out Fire-Fighting Operation

- 4.1 Tanker fire organization and action to be taken
- 4.2 Special hazards associated with cargo handling and transportation of liquefied gases in bulk
- 4.3 Fire-fighting agents used to extinguish gas fires
- 4.4 Fixed fire-fighting foam system operation
- 4.5 Portable fire-fighting foam operations
- 4.6 Fixed dry chemical system operations
- 4.7 Basic knowledge of spill containment in relation to fire-fighting operations

#### 5. Respond to Emergencies

5.1 Basic knowledge of emergency procedures, including emergency shutdown

## 6. Take Precautions to Prevent pollution of the environment from the release of Liquefled Gases

6.1 Basic knowledge of the effects of pollution on human and marine life

Basic knowledge of shipboard procedures to prevent pollution Basic knowledge of measures to be taken in the event of shillage

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