



LNG Standard Specification

LNG Quality Specifications

Value	Unit	Specification	Notes
Wobbe Index	KWh/Nm ³	13.066-16.328	
Gross Calorific Value (GCV)	KWh/Nm ³	11.131-12.647	The Operator may consider the possibility of accepting a cargo with GCV in the range 11.011 KWh/Nm ³ to 11.131 KWh/Nm ³ or 12.647 KWh/Nm ³ to 12.986 KWh/Nm ³ , if after unloading this cargo and mixing with the stored LNG in terminal tanks, the GCV of the resulting LNG will be within the mentioned range.
LNG Density	Kg/m ³	430-478	The Operator may consider the possibility of accepting a cargo in the range 420.3 Kg/m ³ to 430 Kg/m ³ or 478 Kg/m ³ to 483.1 Kg/m ³ , if after unloading this cargo and mixing with the stored LNG in terminal tanks, the Density of the resulting LNG will be within the mentioned range.
Molecular Weight	Kg/Kmol	16.52 - 18.88	
Methane	% mol	85.0 min 97.0 max	The Operator may consider the possibility of accepting a cargo with Methane concentration in the range 80 to 85 [% mole] or 97 to 99.8 [% mole], if after unloading this cargo and mixing with the stored LNG in terminal tanks, the value of Methane concentration of the resulting LNG will be within the mentioned range.
i-Butane & n- Butane	% mol	4 max	
i- Pentane & n-Pentane	% mol	2 max	
Nitrogen	%mole	1.24 max	
Hydrogen sulfide (H ₂ S)	mg/Nm ³	5.0 max	
Total sulphur	mg/Nm ³	30.0 max	
Temperature	°C	-158 max	The average temperature of LNG in all tanks of LNG vessel before discharging should not be greater than -158°C. For LNG temperatures higher than -158°C the



method KMK, for the calculation of LNG density, is not valid.

**Normal Cubic Meter or Nm³ shall mean the quantity of Natural Gas, which at conditions of absolute pressure 1.01325 bar and temperature zero (0) degree Celsius, occupies volume of one (1) cubic meter.*

**Gross Calorific Value (GCV): The amount of heat produced by the complete stoichiometric combustion of one (1) normal cubic meter of Natural Gas at a constant absolute pressure of 1,01325 bar when the initial temperature of the fuel mixture and the final temperature of the products of combustion is considered to be twenty-five (25) degrees Celsius and the combustion produced is concentrated in the liquid state. Normal cubic meter means the amount of Natural Gas mass which, under absolute 1.01325 bar conditions and zero (0) degrees Celsius, occupies a volume of one (1) cubic meter.*