

Table 1 – Quality Specifications for the Cargo (liquefied CO₂)

Component	Unit	Limit for CO ₂ Cargo within Reference Conditions
Carbon dioxide (CO ₂)	mol-%	Balance (Minimum 99.81%)
Water (H ₂ O)	ppm-mol	≤ 30
Oxygen (O ₂)	ppm-mol	≤ 10
Sulphur oxides (SO _x)	ppm-mol	≤ 10
Nitrogen oxides (NO _x)	ppm-mol	≤ 1.5
Hydrogen Sulfide (H ₂ S)	ppm-mol	≤ 1
Amine	ppm-mol	≤ 10
Ammonia (NH ₃)	ppm-mol	≤ 10
Formaldehyde (CH ₂ O)	ppm-mol	≤ 20
Acetaldehyde (CH ₃ CHO)	ppm-mol	≤ 20
Mercury (Hg)	ppm-mol	≤ 0.0003
Carbon Monoxide (CO)	ppm-mol	≤ 100
Hydrogen (H ₂)	ppm-mol	≤ 50
Methane (CH ₄)	ppm-mol	≤ 100
Nitrogen (N ₂)	ppm-mol	≤ 50
Argon (Ar)	ppm-mol	≤ 100
Methanol (CH ₃ OH)	ppm-mol	≤ 30
Ethanol (C ₂ H ₅ OH)	ppm-mol	≤ 1
Total Volatile Organic Compounds ¹	ppm-mol	≤ 10
Mono-Ethylene Glycol (MEG)	ppm-mol	≤ 0.2
Tri-Ethylene Glycol (TEG)	ppm-mol	≤ 0.2
BTEX ²	ppm-mol	≤ 0.5
Ethylene (C ₂ H ₄)	ppm-mol	≤ 50
Hydrogen Cyanide (HCN)	ppm-mol	≤ 100
Aliphatic Hydrocarbons (C ₃ +) ³	ppm-mol	≤ 1,100
Ethane (C ₂ H ₆)	ppm-mol	≤ 75
Solids, particles and/or dust	µm	≤ 1.0

¹ Total Volatile Organic Compounds (VOC) are VOC in addition to the ones listed separately in this specification, i.e., Ethanol, Methanol, Formaldehyde, Acetaldehyde, and BTEX, and includes the following components: 1-propanol < 1 ppm-mol, 2-butanol < 1 ppm-mol, 1,2,4-trimethylbenzene < 5 ppm-mol.

² BTEX refers to the following chemical compounds: Benzene, Toluene, Ethylbenzene and Xylene.

³ Total amount of hydrocarbons not to exceed 1,100 ppm-mol. Individual limits for groups of HCs: C₃ < 1,100 ppm-mol, C₄-C₅ < 815 ppm-mol, C₆-C₇ < 75 ppm-mol, C₈-C₉ < 8 ppm-mol.