

## LNG SPECIFICATIONS :

### Chemical Composition:

| ELEMENT     | WET   | DRY   |
|-------------|-------|-------|
| Methane     | 84.6% | 96.0% |
| Ethane      | 6.4%  | 2.0%  |
| Propane     | 5.3%  | 0.6%  |
| Iso-Butane  | 1.2%  | 0.18% |
| N-Butane    | 1.4%  | 0.12% |
| Iso-Pentane | 0.4%  | 0.14% |
| N-Pentane   | 0.2%  | 0.06% |
| Hexanes     | 0.4%  | 0.10% |
| Heptanes    | 0.1%  | 0.80% |

|                   |                                 |
|-------------------|---------------------------------|
| Carbon Di-Oxide   | 0 ~ 5%                          |
| Helium            | 0 ~ 5%                          |
| Hydrogen Sulphide | 4.8 mg/Nm <sup>3</sup> maximum  |
| Total Sulphur     | 28.0 mg/Nm <sup>3</sup> maximum |
| Nitrogen          | 2 ~ 10%                         |
| Argon             | 0 ~ 0.1%                        |

|                 |                                   |                                     |
|-----------------|-----------------------------------|-------------------------------------|
| Specific Energy | Minimum 1050 Btu/SCF              | Maximum 1150 Btu/SCF                |
|                 | Minimum 9532 Kcal/Nm <sup>3</sup> | Maximum 10,440 Kcal/Nm <sup>3</sup> |
| Calorific Value | Minimum 36.4 MJ/m <sup>3</sup>    | Maximum 40.9 MJ/m <sup>3</sup>      |

|                              |                 |
|------------------------------|-----------------|
| Chemical Symbol:             | CH4             |
| Molecular Weight:            | 16              |
| Normal Boiling Point:        | -161 oCelsius   |
| Freezing Temperature:        | -183 oCelsius   |
| Critical Temperature:        | -82 oCelsius    |
| Critical Pressure:           | 47 bar absolute |
| Density of Saturated Liquid: | 424 kg/m3       |
| Relative Gas Density:        | 0.56 kg/m3      |
| Latent Heat of Vaporization: | 512.4KJ/kg      |
| Flame Temperature:           | 1880 oCelsius   |
| Limiting Oxygen Index:       | 11.5% by volume |

a) GROSS HEATING VALUE (VOLUME BASED):

|                 |             |
|-----------------|-------------|
| <b>MINIMUM:</b> | 1050Btu/SCF |
| <b>MAXIMUM:</b> | 1170Btu/SCF |

b) HYDROCARBON COMPOSITION AND NITROGEN CONTENT WITHIN THE FOLLOWING RANGE :

|                              |                     |
|------------------------------|---------------------|
| <b>METHANE:</b>              | 85.00 MOL % MINIMUM |
| <b>BUTANES AND HEAVIER:</b>  | 2.0 MOL % MAXIMUM   |
| <b>PENTANES AND HEAVIER:</b> | 0.10 MOL % MAXIMUM  |
| <b>NITROGEN:</b>             | 1.00 MOL % MAXIMUM  |

c) IMPURITIES WITH THE FOLLOWING RANGE :

|                           |                    |
|---------------------------|--------------------|
| <b>HYDROGEN SULPHIDE:</b> | 4.8MG/Nm3 MAXIMUM  |
| <b>TOTAL SULPHUR :</b>    | 28.0MG/Nm3 MAXIMUM |