

ISO 6578:2017-10 (E)

Refrigerated hydrocarbon liquids - Static measurement - Calculation procedure

| Contents | | Page |
|--|---|-------------|
| Foreword | | iv |
| Introduction | | v |
| 1 | Scope | 1 |
| 2 | Normative references | 1 |
| 3 | Terms, definitions and symbols | 1 |
| 3.1 | Terms and definitions | 1 |
| 3.2 | Symbols | 2 |
| 4 | Outline of calculation | 3 |
| 4.1 | LPG | 3 |
| 4.2 | LNG | 4 |
| 4.3 | Data for calculation | 4 |
| 5 | Mass | 5 |
| 5.1 | Mass of liquid phase | 5 |
| 5.2 | Correction for vapour phase | 6 |
| 5.3 | Mass in vacuum to mass in air | 8 |
| 6 | Energy content (calorific content) | 8 |
| 7 | Inter-conversion of liquid mass and vapour volume at standard conditions | 11 |
| 8 | Calculation of liquid density from composition | 12 |
| 8.1 | General | 12 |
| 8.2 | LPG | 12 |
| 8.3 | LNG | 13 |
| 9 | Calculation of calorific value from composition | 14 |
| 9.1 | Volumetric basis | 14 |
| 9.2 | Mass basis | 14 |
| Annex A (informative) Characteristics of static measurement of refrigerated hydrocarbon liquids ... | | 16 |
| Annex B (normative) Molar volume of individual component | | 17 |
| Annex C (normative) Correction factors for volume reduction of LNG mixtures | | 18 |
| Annex D (normative) Gross calorific values for individual components | | 19 |
| Annex E (normative) Molar mass, compression factor and summation factor of individual component | | 20 |
| Annex F (informative) Boiling point of individual component | | 21 |
| Annex G (informative) Alternative procedure to calculate liquid density from composition | | 22 |
| Bibliography | | 25 |