

ISO 17507-2:2025-12 (E)

Natural gas - Calculation of methane number of gaseous fuels for reciprocating internal combustion engines - Part 2: PKI method

Contents		Page
Foreword		iv
Introduction		v
1	Scope	1
2	Normative references	1
3	Terms and definitions	1
4	Abbreviated terms	2
5	PKI method	2
5.1	Introduction	2
5.2	Applicability	2
5.2.1	Standard gaseous fuel composition range	2
5.2.2	Handling of other gaseous fuel components	3
5.3	Methodology to calculate the MNPKI	4
5.3.1	General	4
5.3.2	Step 1: Calculation of the PKI	4
5.3.3	Step 2: Calculation of the MNPKI	5
5.4	Expression of results	5
5.5	Uncertainty error and bias	5
6	Example calculations	6
6.1	Example calculation 1	6
6.2	Example calculation 2	6
Annex A (normative) Listing of coefficients used in Formula (1) and Formula (4)		9
Annex B (informative) PKI and MNPKI values for selected gaseous fuel compositions		13
Annex C (informative) Tools for users of the MNPKI method		15
Annex D (normative) Uncertainty error and bias		16
Annex E (informative) Natural gas-based fuels for reciprocating internal combustion engines		18
Annex F (informative) Basis of the PKI method		19
Bibliography		22