



proficiency testing

Proficiency testing (PT) schemes provide an objective way of assessing the performance (bias, stability, and repeatability) of laboratories by a series of regular inter-laboratory comparisons.

EffectTech® is accredited by UKAS to provide the Global Gas and LNG PT scheme. The scheme is operated in accordance with ISO 17043 (ISO Guide 43) and focuses on the natural gas and LNG industries. Between 1 and 4 different ISO 17025 accredited synthetic gases (see table) are sent to the participating laboratories for analysis up to four times per year. Each laboratory reports their analytical results, which are compared to the reference values. The closeness of each laboratory's results to the reference values forms the basis of a quantitative assessment of their capability and performance. The full set of results for all laboratories are reported anonymously to the entire group, with each participant being made aware of the identity of their own results. Participation in this PT scheme provides laboratories with an objective means of assessing and demonstrating the reliability of their measurements. This may identify potential commercial risks and staff training requirements. In addition, participants are able to assess their performance in relation to other laboratories. Indeed, regular participation in PT schemes is required by accreditation bodies when assessing laboratories against ISO 17025.

The GGLNG PT scheme has been provided by EffectTech® for 3 years. Over this period as many as 50 laboratories participating in the scheme have been able to demonstrate improved performance.

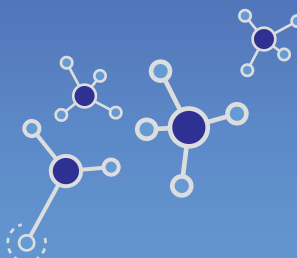


For more information regarding proficiency testing visit our website

w: www.effecttech.co.uk/proficiencytesting

e: info@effecttech.co.uk
w: www.effecttech.co.uk
t: +44 (0)1889 569229
f: +44 (0)1889 569220

EffectTech (United Kingdom)
 Dove House, Dove Fields, Uttoxeter,
 Staffordshire, ST14 8HU United Kingdom
 EffectTech also operates laboratories in
 key locations in India and Qatar.



Component	Mixture 1 LNG Composition (%mol/mol)	Mixture 2 Propane Composition (%mol/mol)	Mixture 3 Mixed Refrigerant (%mol/mol)	Mixture 4 Sulphur in Methane (ppm)
ethane	0.1 - 14	0.25 - 3	20 - 35	
propane	0.05 - 5	Balance	5 - 15	
iso-butane	0.01 - 1	0.03 - 1		
n-butane	0.01 - 1	0.03 - 1		
iso-pentane	0.005 - 0.35	0.02 - 0.08		
n-pentane	0.005 - 0.35	0.02 - 0.08		
n-hexane	0.001 - 0.35			
nitrogen	0.1 - 8	0.1 - 3	4 - 16	
carbon dioxide	0.05 - 8			
methane	balance		balance	balance
hydrogen sulphide				0.2 to 40
carbonyl sulphide				0.2 to 40
methyl mercaptan				0.2 to 40
ethyl mercaptan				0.2 to 40
dimethyl sulphide				0.2 to 40

