


Schedule of Accreditation

issued by

United Kingdom Accreditation Service

2 Pine Trees, Chertsey Lane, Staines-upon-Thames, TW18 3HR, UK

 <p>UKAS TESTING 2770</p> <p>Accredited to ISO/IEC 17025:2017</p>	<h3>INEOS Chemicals Grangemouth Limited</h3> <p>Issue No: 022 Issue date: 23 December 2024</p>	
	<p>PO Box 21 Bo'ness Road Grangemouth Stirlingshire FK3 9XH</p>	<p>Contact: Mrs G Davis Tel: +44 (0)1324 493134 E-Mail: gayle.davis@ineos.com Website: www.ineos.com/grangemouth</p>
<p>Testing performed at the above address only</p>		

DETAIL OF ACCREDITATION

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used
FINAL EFFLUENT	<p><u>Chemical and Physical Tests</u></p> <p>pH</p> <p>Total Suspended Solids</p> <p>Chemical Oxygen Demand</p> <p>Oil in Water</p>	<p>Documented In-House Method LM-Water-29 to BS EN 10523:2012</p> <p>Documented In-House Method LM-HSE-10 to BS EN 872:2005</p> <p>Documented In-House Method LM-HSE-28 based on ISO 6060:1989</p> <p>Documented In-House Method LM-HSE-26 based on SCA Blue Book No. 77 (ISBN 0117517275)</p>
LIQUIFIED PETROLEUM GAS	Propane and butane	BS EN 27941 - 1994 (Modified) supported by Documented In-House Method LM-GC-03
NATURAL GAS	C ₁ - C ₅ alkanes, > C ₅ alkanes, air (oxygen not quantified), CO ₂	ASTM D 1945-19 (Modified) supported by Documented In-House Method LM-GC-01
PETROLEUM and PETROLEUM PRODUCTS including LUBRICANTS	Determination of: Carbon (75-87%mass),	ASTM D5291-21 using ThermoFlash 2000 Analyser CHN
PETROLEUM and PETROLEUM PRODUCTS	Ash content	IP 4/05(12) EN ISO 6245:02
	Density and relative density of liquids by digital density meter	IP 365/97(20) EN ISO 12185:96



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PETROLEUM and PETROLEUM PRODUCTS (cont'd)	<u>Chemical and Physical Tests cont</u> Sulphur in petroleum products by energy dispersive X-ray fluorescence Water content - distillation method	IP 336/04(22) EN ISO 8754:03 IP 74/00(14) ISO 3733:99																																																				
REFINERY GAS	Determination of Composition of Fuel Gas Streams Chemical composition: Amount fraction (% mol/mol and % m/m) <table border="1"><thead><tr><th>Component</th><th>(% mol)</th></tr></thead><tbody><tr><td>Methane</td><td>0.01 to 91.1</td></tr><tr><td>Ethane</td><td>0.01 to 99.9</td></tr><tr><td>Ethene</td><td>0.01 to 36.3</td></tr><tr><td>Propane</td><td>0.01 to 99.9</td></tr><tr><td>Propene</td><td>0.01 to 20.0</td></tr><tr><td>n-Butane</td><td>0.01 to 23.4</td></tr><tr><td>iso-Butane</td><td>0.01 to 10.2</td></tr><tr><td>trans-2-Butene</td><td>0.01 to 4.0</td></tr><tr><td>iso-Butene</td><td>0.01 to 2.0</td></tr><tr><td>1-Butene</td><td>0.01 to 4.1</td></tr><tr><td>cis-2-Butene</td><td>0.01 to 2.0</td></tr><tr><td>1,3 Butadiene</td><td>0.01 to 5.8</td></tr><tr><td>n-Pentane</td><td>0.01 to 3.1</td></tr><tr><td>iso-Pentane</td><td>0.01 to 4.2</td></tr><tr><td>Cyclopropane</td><td>0.01 to 0.09</td></tr><tr><td>Propadiene</td><td>0.01 to 1.9</td></tr><tr><td>Acetylene</td><td>0.01 to 2.0</td></tr><tr><td>>n-Pentane</td><td>0.01 to 4.0</td></tr><tr><td>Hydrogen Sulphide</td><td>0.1 to 2.0</td></tr><tr><td>Hydrogen</td><td>0.01 to 99.9</td></tr><tr><td>Helium</td><td>0.01 to 99.9</td></tr><tr><td>Carbon Dioxide</td><td>0.02 to 10.0</td></tr><tr><td>Carbon Monoxide</td><td>0.02 to 6.2</td></tr><tr><td>Nitrogen</td><td>0.02 to 75</td></tr><tr><td>Oxygen</td><td>0.02 to 20.0</td></tr></tbody></table>	Component	(% mol)	Methane	0.01 to 91.1	Ethane	0.01 to 99.9	Ethene	0.01 to 36.3	Propane	0.01 to 99.9	Propene	0.01 to 20.0	n-Butane	0.01 to 23.4	iso-Butane	0.01 to 10.2	trans-2-Butene	0.01 to 4.0	iso-Butene	0.01 to 2.0	1-Butene	0.01 to 4.1	cis-2-Butene	0.01 to 2.0	1,3 Butadiene	0.01 to 5.8	n-Pentane	0.01 to 3.1	iso-Pentane	0.01 to 4.2	Cyclopropane	0.01 to 0.09	Propadiene	0.01 to 1.9	Acetylene	0.01 to 2.0	>n-Pentane	0.01 to 4.0	Hydrogen Sulphide	0.1 to 2.0	Hydrogen	0.01 to 99.9	Helium	0.01 to 99.9	Carbon Dioxide	0.02 to 10.0	Carbon Monoxide	0.02 to 6.2	Nitrogen	0.02 to 75	Oxygen	0.02 to 20.0	Documented in-house method LM-GC-11 using gas chromatography
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