Schedule of Accreditation

issued by

United Kingdom Accreditation Service

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

1677

Accredited to ISO/IEC 17025:2017

Tun Abdul Razak Research Centre

Issue No: 038 **Issue date:** 23 February 2026

Brickendonbury
Hertford
Hertfordshire
SG13 8NL

Contact: Ms J Patel
Tel: +44 (0)1992 584966
Fax: +44 (0)1992 554837
E-Mail: jpatel@tarrc.co.uk
Websites: www.tarrc.co.uk
www.rubberconsultants.com

Testing performed at the above address only

DETAIL OF ACCREDITATION

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used
RUBBERS/ELASTOMERS, RUBBER/ELASTOMER PRODUCTS AND MATERIALS IN CONTACT WITH RUBBER	<u>Chemical Tests</u>	
	Aromaticity of oils extracted from rubbers/rubber compounds	Documented In-House Method 093a using NMR according to ISO 21461:2012
	Nitrosamine testing of rubber	Documented In-House Method 051 using Gas Chromatography with Nitrogen Chemiluminescence Detection, covering BS EN 12868:1999 and BS ISO 29941:2010
	Qualitative and Quantitative Analysis for rubber identification and content	Documented In-House Methods using: - Thermogravimetric Analysis (TGA): method 011 - Differential Scanning Calorimetry (DSC): method 012a - FT-IR Spectroscopy: Method 031a - Pyrolysis with Infra-Red (PIR) including surface ATR Spectroscopy: method 031b - TG-IR interface Method 031c (IR interfaced to TGA)

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used
RUBBERS/ELASTOMERS, RUBBER/ELASTOMER	<u>Chemical Tests</u> (cont'd)	Documented In-House Methods using:
RUBBER, POLYMERS, PLASTICS, ELASTOMERS		Documented In-House Methods using:
RUBBER, POLYMER, PLASTIC, ELASTOMER PRODUCTS MATERIALS IN CONTACT WITH RUBBERS, POLYMERS, PLASTICS, ELASTOMERS	Identification of elements for composition analysis, reverse engineering filler type, or contamination	Scanning Electron Microscopy (SEM) with Energy Dispersive X-ray Spectrometry (EDS), Line-scans and X-ray Mapping Spectrometry: methods 072b and 072d
MATERIALS IN CONTACT WITH RUBBERS, POLYMERS, PLASTICS, ELASTOMERS	<u>Chemical and Physical Test</u>	Documented In-House Methods using:
RUBBER, POLYMERS, PLASTICS, ELASTOMERS RUBBER, POLYMER, PLASTIC, ELASTOMER PRODUCTS	Qualitative scanning electron microscopy (SEM) using magnifications in the range 1.5x to 300,000x Quantitative measurement of length using magnifications in the range 50x to 30,000x	- Scanning Electron Microscopy (SEM): method 072c
	Sample preparation for scanning electron microscopy (SEM)	- Sample preparation for scanning electron microscopy (SEM); method 072a
RUBBERS, POLYMERS, PLASTICS, ELASTOMERS	<u>Physical Tests</u>	
RUBBER, POLYMER, PLASTIC, ELASTOMER PRODUCTS MATERIALS IN CONTACT WITH RUBBERS, POLYMERS, PLASTICS, ELASTOMERS	Optical Microscopy/Qualitative Analysis Quantitative measurement of length using magnifications in the range: 200xto 500x for phase contrast and 100x to 500x for transmitted, incident, bright field, and dark field imaging (using compound optical microscope)	Documented In House Method using: - Compound Optical Microscope including phase contrast, transmitted and incident light, bright field and dark field imaging, Method 071a
	4x to 112x using stereo optical microscope	- Stereo Optical Microscope with digital camera: Method 071c - Zoom lens with digital camera for low magnification imaging: method 071b

1677 Accredited to ISO/IEC 17025:2017	**Schedule of Accreditation** **issued by** **United Kingdom Accreditation Service** 2 Pine Trees, Chertsey Lane, Staines-upon-Thames, TW18 3HR, UK
	Tun Abdul Razak Research Centre **Issue No:** 038 **Issue date:** 23 February 2026
Testing performed at main address only	

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used
TYRES - COMMERCIAL AND PASSENGER VEHICLES	Performance Test Endurance 200 - 5000 kgf	Documented In-House Method based on, and meeting the requirements of, ECE 30, 54, 108 and 109 (TTL 002)
END		