

Technology Centre

Sappi Manufacturing (Pty) Ltd
(Reg. No. 1951/003180/07)
PO Box 6
The Innovation Hub
0087 Pretoria
South Africa
Tel +27 (0)12 844 9400
Fax +27 (0)12 844 9444

**INTERNATIONAL STANDARDS CONFORMANCE
CERTIFICATE
FOOD CONTACT APPROVAL**

PRODUCT Cape Liner, Kraft Liner Board

MANUFACTURER Sappi Kraft (Pty) Ltd
Cape Kraft Mill
PO Box 185
7435 Milnerton
South Africa

In July 2009 a sample, representative of the product above, was tested and examined and found to be compliant with the current statutory and official environmental and product safety standards listed below:

- 1. German Federal Institute for Risk Assessment (BfR) Recommendation XXXVI – Paper and Board for Food Contact.** The product was tested for the metals lead, cadmium, chromium (vi) and mercury in a cold water extract and found to be less than permissible limits. All additives used in the manufacture of the product were examined and found to be compliant with the Recommendation.
- 2. DIN EN 71 part 3 – Safety of Toys, Migration of Certain Elements.** The product was tested for the metals lead, cadmium, mercury, chromium, antimony, arsenic, barium and selenium. The metals were found to be less than permissible limits.
- 3. European Parliament and Council Directive 94/62/EC on Packaging and Packaging Waste.** The total metals lead, cadmium, mercury and chromium (vi) were determined in the product and found to be less than permissible limits.
- 4. German Federal Institute for Risk Assessment (BfR) Recommendation XLVII – Toys made from Plastics and other Polymers, and from Paper and Paperboard.** Migration of elements according to DIN EN 71 part 3 is compliant (see 2).

This Certificate is valid for two years.



Dr M D BIRKETT CSci CChem MRSC
(Chartered Scientist, Chartered Chemist, Member of the Royal Society of Chemistry)

The Sappi SA Technology Centre is accredited according to the ISO/IEC 17025 Standard for the tests listed on the attached schedule.

The accredited tests were selected according to Sappi mill requirements for which the Technology Centre is the central reference laboratory. All testing conducted at the Technology Centre is carried out according to the same quality standards.

The Technology Centre operates as an independent testing facility which manages an inter-laboratory testing scheme and quality auditing protocol for the Sappi mill laboratories.



CERTIFICATE OF ACCREDITATION

This is to certify that:

**SAPPI TECHNOLOGY CENTRE
PRETORIA**

Facility Accreditation Number: **T0080**

is a South African National Accreditation System accredited Testing laboratory
provided that all SANAS conditions and requirements are complied with.

This certificate is valid as per the scope on the accompanying schedule of accreditation bearing
the above accreditation number for

CHEMICAL & PHYSICAL ANALYSIS

The facility complies with the general requirements of

ISO/IEC 17025:2005

*A laboratory's fulfilment of the requirements of ISO/IEC 17025:2005 means the laboratory
meets both the technical competence requirements and management system requirements*

*The management system requirements in ISO/IEC 17025 (Section 4) meet the principles of
ISO 9001:2000 and are aligned with its pertinent requirements*

While this certificate remains valid, the Accredited Facility named above is authorised to use
the relevant SANAS logo to issue facility reports and/or certificates



Chief Executive Officer

Initial Accreditation: January 1999

Certificate Commences: April 2007

Certificate Expires: April 2012

*"Recognised as the official national accreditation body by the Department of Trade and Industry of the
Republic of South Africa"*

This certificate is only valid when accompanied by its schedule of accreditation.



SCHEDULE OF ACCREDITATION

Testing Laboratory Number: T0080

<p>Permanent Address of Laboratory: SAPPI Technology Centre Innovation Hub 1 Sydney Brenner Road Lynnwood Pretoria</p> <p>Postal Address: P O Box 6 The Innovation Hub 0087</p> <p>Tel : (012) 844-9400 Fax : (012) 844-9444 E-mail : michelle.allaway@sappi.com</p>	<p>Management Signatory : Mrs V Bheem : Dr C Clarke : Dr A Leske</p> <p>Technical Signatories : Mrs K Kruger (Paper) : Mrs H du Toit (Paper) : Mrs V Jokoo (Paper) : Mr A Smith (Paper)</p> <p>: Mr C Pearcey (Pulp) : Mr R Braunstein (Pulp) : Mr H Twayi (Pulp) : Mr J Mokgoatle (Pulp) : Ms H Msibi (Pulp) : Mrs H Maringa (Pulp) : Ms P Mogoregi (Pulp M002 only)</p> <p>: Dr M Birkett - Chemical (excl M101 & M102) : Dr N Sefara - Chemical (excl M101 & M102) : Mrs H Huhlwane - Chemical (excl M101 & M102) : Ms T Matona - Chemical (excl M101 & M102) : Mr R Lax - Chemical : Mr A Schooler - Chemical</p> <p>Nominated Representative : Mrs M Allaway</p> <p>Issue No. : 09 Date of issue : June 2007 Expiry Date : April 2012</p>	
Materials/Products Tested	Types of Tests/Properties Measured, Range of Measurement	Standard Specifications, Equipment/Techniques Used
CHEMICAL SCIENCES		
Potable water Ground water Boiler water Waste water Process water	pH (Electrometric) Conductivity (Conductometric) Chemical oxygen demand	In-house method Reference LQM/CHEM/M001 APHA 4500 H ⁺ B LQM/CHEM/M002 APHA 2510 B LQM/CHEM/M003 APHA 5220 B


Field Manager



Materials/Products Tested	Types of Tests/Properties Measured, Range of Measurement	Standard Specifications, Equipment/Techniques Used
CHEMICAL SCIENCES continued		
Pulp	Anions (Ion Chromatography) (Chloride, sulphate)	LQM/CHEM/M006 APHA 4110 B
	Cations Na, Ca, K, Mg, Al, Mn, Fe, Co, Ni, Cu, Zn, Cd, by Atomic Absorption Spectroscopy	LQM/CHEM/M007 APHA 3111 B/D
	Low level Iron (Phenanthroline method)	LQM/CHEM/M011 APHA 3500-Fe B
	Total Alkalinity (Titrimetric)	LQM/CHEM/M045 APHA 2320 B
	Total dissolved solids	LQM/CHEM/M044 SABS 213: 1990
	Determination of Phenolphthalein Alkalinity (Titrimetric)	LQM/CHEM/M046 APHA 2320 B
	Determination of Ortho-Phosphate (SnCl ₂ – Spectroscopic)	LQM/CHEM/M047 APHA 4500-P D
	Determination of Hardness (Atomic Absorption and Calculation Method)	In-house method LQM/CHEM/M048 Reference APHA 2340 B
	Determination of Cations Na, Ca, K, Mg, Al, Ba, Be, Cd, Cr, Co, Cu, Fe, Pb, Ni, Mn, Si, Sr, Zn, by ICP - OES	LQM/CHEM/M050 APHA 3120 B
	Determination of Silica (ANSA Spectroscopic)	LQM/CHEM/M049 APHA 4500-SiO ₂ D
	Determination of Alkali solubility of Pulp – S ₁₀ and S ₁₈ (Titrimetric)	LQM/CHEM/M101 TAPPI T235 cm-00
	Determination of the Copper Number of Pulp – Braidy's Method (Titrimetric)	LQM/CHEM/M102 TAPPI T430 cm-99 APHA Standard Methods for the "Examination of Water and Wastewater" APHA, AWWA, WEF, 20 th Edition 1998

Field Manager



Materials/Products Tested	Types of Tests/Properties Measured, Range of Measurement	Standard Specifications, Equipment/Techniques Used	
PAPER SCIENCES			
Paper and Paper Board	Bursting strength Brightness (ISO) Grammage Opacity Tearing resistance Tensile properties Thickness Whiteness Colour Determination (D65/10°) Air Permeance Ring Crush Roughness	LQM/PT/M.020A LQM/PT/M.022A LQM/PT/M.070A LQM/PT/M.150A LQM/PT/M.200A LQM/PT/M.201A/.301A LQM/PT/M.202A LQM/PT/M.030A LQM/PT/M.030A LQM/PT/M.010A LQM/PT/M.180A LQM/PT/M.181A	ISO 2758 ISO 2470 ISO 536 ISO 2471 ISO 1974 ISO 1924-2 ISO 534 ISO 11475 SCAN P72 ISO 5636-3 TAPPI T822 ISO 8791-2
PULP & BLEACHING			
Pulp	Viscosity of Cuprammonium / Pulp Dispersion Alkaline Cooking and Spent Liquor Analysis Kappa Number Micro Kappa Number Chlorine Consumption Viscosity of cellulose in cupriethylenediamine solution	LQM/PULP/M001 LQM/PULP/M002 LQM/PULP/M003 LQM/PULP/M004 LQM/PULP/M005 LQM/PULP/M006	TAPPI T206 os-63 TAPPI T230 Lab Test 026 & Lab Prep 003 SCAN – N22, SCAN – N30, SCAN – N32, SCAN – N33, SCAN – N22, TAPPI T610, TAPPI T624, TAPPI T625 TAPPI T236 FDJ 12-019 ISO 3260 ISO 5351

Original date of accreditation: January 1999

Page 3 of 3

ISSUED BY THE SOUTH AFRICAN NATIONAL ACCREDITATION SYSTEM

Field Manager