SRI LANKA STANDARD 72:1985

UDC 678 4.032

SPECIFICATION FOR

TECHNICALLY SPECIFIED RAW NATURAL RUBBER (THIRD REVISION)

SRI LANKA STANDARDS INSTITUTION

D1 1 D

SPECIFICATION FOR TECHNICALLY SPECIFIED RAW NATURAL RUBBER (THIRD REVISION)

SLS 72:1985

(Attached AMD 136)

Gr. 8

Copyright Reserved SRI LANKA STANDARDS INSTITUTION 53, Dharmapala Mawatha, Colombo 3, Sri Lanka. SLS 72:1985

CONSTITUTION OF THE DRAFTING COMMITTEE

CHAIRMAN REPRESENTING Mr. S.W. Karunaratne Rubber Research Institute MEMBERS Mr. N. Dias Abeysinghe Sri Lanka State Plantation Corporation Mr. H.S. de Silva Sherman Sons Limited K. Jayasuriya Mr. Ceylon Rubber Traders' Association Mr. E.G. Mendis C.W. Mackie & Company Limited Suresh Kumar Mr. Ceylon Institute of Scientific and Industrial Research Mr. L. Paranawithana Sri Lanka Rubber Manufacturing Corporation Limited L.M.K. Tillekaratne Dr. Rubber Research Institute Mr. I.A. Wickramaratne Sri Lanka Tyre Corporation D.C. Wickramasinghe Mr. Dynamic Natural Rubber (Ceylon) Ltd. Mr. M. Nadarajah Personal Capacity

TECHNICAL SECRETARIAT SRI LANKA STANDARDS INSTITUTION

Sri Lanka Standards are subject to periodical revision in order to accommodate the progress made by industry. Suggestions for improvement will be recorded and brought to the notice of the Committees to which the revisions are entrusted.

This standard does not purport to include all the necessary provisions of a contract.

SRI LANKA STANDARD SPECIFICATION FOR TECHNICALLY SPECIFIED RAW NATURAL RUBBER

(THIRD REVISION)

FOREWORD

This Sri Lanka Standard was authorized for adoption and publication by the Council of the Sri Lanka Standards Institution on 1985-11-20, after the draft, finalized by the Drafting Committee on Natural Rubber, had been approved by the Technical Advisory Committee on Rubber and Rubber Products and the Chemicals Divisional Committee.

This specification was first published in 1970 and the first revision was made in 1973 with a view to bringing the specification in line with international trends at that time. Requirements for copper and manganese were deleted, as an international test programme showed that plasticity retention index (PRI) adequately indicates any potential oxidizability of raw rubber, should harmful copper and manganese be present. A producer limit was also introduced for PRI. Two new grades, SLR 5L and 10 were introduced. For the light coloured grade SLR 5L, a requirement on maximum Lovibond colour index was specified. The limit for nitrogen was lowered from 0.7 to 0.65 and a colour code on marking of bales was also introduced.

The second revision (1979) was necessitated as consumers wanted their rubber to process consistently in the various operations of mastication, mixing, extrusion and vulcanization. To achieve this, it was important to identify the source of raw material from which a particular grade is produced and also make firm restriction on indiscriminate downgrading. In this specification, a group of grades could only be made from a particular type of raw matrial, either latex crepe, latex sheet material, field grade material or field coagula and thus no indiscriminate down grading between any two types could be made. Down-grading could be made only within a particular type.

One of the improvements from the specification published in 1973 was that, from a particular grade the source of its raw material could be clearly identified.

In this third revision latex crepe grades designated as EQ(LC), 5WC(LC) and latex grades designated as WF and 5WF have been deleted, while viscosity stabilized rubber (CV) grades have been introduced.

3

Premastication can be reduced or even eliminated by use of CV rubber, giving direct savings in processing costs. CV rubber is extensively used for high quality engineering applications of rubber, including bridge bearings, engine mountings and vehicle suspension units and they are also prime choices for injection moulded or extruded industrial rubber products.

This specification also gives technical specification, to latex crepe which hitherto has been sold to visual specification. This grade of SLR is unique to Sri Lanka, which has the reputation of producing the best latex crepe in the world.

This specification defines limits for natural and adventitious contaminants usually present in raw rubber and which are known to affect the final properties of finished rubber products.

In this specification the chief basis on which Technically Specified Rubber (TSR) is classified is on the source of raw material. The dirt content is still an important criterion in the assessment of raw natural rubber. The ash content checks the adulteration of latex from substances of mineral nature such as talc, carbonates, clay or other mineral matter in the course of collection and preparation of rubber. The lower producer limit specified for nitrogen prevents adulteration of TSR with material such as skim rubber. Volatile Matter (VM) requirement ensures that rubber is adequately dried and thus it prevents any mould formation. The producer limit for VM are of two different levels for different grades of rubber. If the raw base material used to prepare a particular grade of rubber has been dried initially, a higher value for VM is specified; otherwise a low value is specified which would ensure that proper drying is done in the process of manufacture of this grade of TSR. A minimum limit for initial wallace plasticity ensures to a certain extent, that products made from this rubber will have good technological properties. PRI gives a measure of the resistance to oxidative degradation of the raw rubber and hence of its end product performance. For light coloured grades, a requirement for Lovibond colour index is specified.

As cure characteristic of rubber has a significant influence on vulcanization, consumers are consequently interested in cure test information. This specification gives provision for such information to be given for higher grades of TSR (that is; those made from latex crepe and latex), if a request for such is made by the purchaser. This specification also gives a colour coding system, by which a bale of a particular grade could be identified.

The grades of TSR could either be prepared by the comminuted process or by the older methods of sheeting or creping and then pressing to standard size. If the latter method is used it is indicated by the use of letters in parenthesis after the grade designation, for example : LC for latex crepe and RSS for sheet material made by pressing.

1.10.20

The methods of test for raw natural rubber which was earlier a part of this specification, will now be given in a separate standard.

All standard values are given in SI units.

For the purpose of deciding whether a particular requirement of this standard is complied with, the final value, observed or calculated, expressing the result of a test or analysis, shall be rounded off in accordance with CS 102. The number of significant figures to be retained in the rounded off value should be the same as that of the specified value in this specification.

In the preparation of this standard valuable assistance derived from the publications of the International Organization for Standardization, the British Standards Institution and the Rubber Research Institution of Malaysia is gratefully acknowledged.

1 SCOPE

1.1 This specification specifies requirements, methods of sampling and test for technically specified raw natural rubber, commonly known as *Standard Lanka Rubber (SLR)*.

2 REFERENCES

CS 102 Presentation of numerical values

CS 124 Test sieves

SLS 385 Code of practice for packaging of Standard Lanka Rubber

SLS 428 Random sampling methods

SIS 484 Methods of test for raw natural rubber.

3 DEFINITIONS

For the purpose of this specification the following definitions shall apply:

3.1 dirt: Foreign matter in natural rubber which fails to pass through a 45-µm sieve conforming to CS 124.

3.2 ash: The residue left on ignition of rubber sample at 550 ± 25 °C.

3.3 volatile matter: Essentially the moisture content of raw natural rubber, but also includes any other matter which the rubber may contain and which is volatile at 100 ± 5 °C.

3.4 plasticity retention index (PRI): The ratio of the plasticity numbers after heating at 140 $^{\circ}$ C for 30 minutes and before heating, multiplied by 100.

5

3.5 skim rubber: Rubber prepared from skim latex which is the residual liquid of very low dry rubber content, being the by-product of the process of concentration of normal liquid latex.

3.6 wet spots: Local patches of high moisture content in raw rubber.

NOTES

1 Wet spots tend to resist breakdown on mastication and not take up carbon black on mixing, as readily as the dry matrix (rubber).

2 White appecrance must not be confused with water contamination accidentally occuring in transit or storage.

3.7 whole field latex: Material derived from Hevea which may be diluted but not fractionated.

3.8 field coagula/field coagula material/field coagulum: Rubber coagulated in the tapping cup or spontaneously coagulated without any deliberate addition of coagulant.

3.9 field grade material: Rubber prepared from field coagulum or field coagulum plus substantial proportions of factory processed latex or sheet material or both.

3.10 CV rubber: Viscosity stabilised rubber in which storage hardening had been chemically inhibited.

3.11 sheet material: Rubber prepared from ribbed smoked sheets (RSS) only.

3.12 latex crepe: Rubber of high purity prepared by adequately diluting field latex which is then deliberately coagulated and converted to crepe latices. During the whole process the temperature shall not exceed 37 °C.

4 TYPES

The technically specified raw natural rubber shall be of four types. Each type indicates the raw material from which the type is derived. The types are as follows:

- a) Latex crepe;
- b) Latex;
- c) Sheet material; and
- d) Field grade material.

5 GRADES

NOTES

1. The letters in parenthesis in the nomenclature of grades indicate that the rubber has been pressed to standard size without undergoing the comminuted process. If there are no letters in parenthesis, it means that the rubber has undergone the comminuted process.

2 The numerals in these grades indicate the maximum dirt content.

3 If the numeral is eliminated from the nomenclature of a particular grade it emphasizes that these rubbers are now being graded according to their improved overall quality (dirt content less than 0.03 per cent).

5.1 Latex crepe

There shall be two latex crepe grades designated as SLR L (LC) and SLR L (LC) - CV. These grades could be made from fraction removed latex, but they could, also be made from whole field latex. In these grades both consumer and producer limits for PRI is the same.

5.2 Latex

There shall be five latex grades designated as SLR L, SLR 5L, SLR CV, SLR 5CV and SLR 5. These grades are made from whole field latex which is coagulated deliberately further processed within the factory (washed, crumbed, dried, etc.) to technically specified rubber.

5.3 Sheet material

These shall be made from ribbed smoked sheets (RSS) only. If the rubber is made from the heveacrumb/comminuted process there shall be two grades designated as SLR 5 and SLR 5 CV. If they are prepared by pressing dry sheet material into standard form, it shall be indented with respect to the types of sheet material. There shall be one such grade designated as SLR 5 (RSS).

5.4 Field grade material

There shall be six grades designated as SLR 10, SLR 20, SLR 50, SLR 10 CV, SLR 20 CV and SLR 50 CV. These grades shall be made from field grade material.

5.5 CV grades

For each CV grade there shall be three sub-grades designated as CV 50, CV 60 and CV 70.

6 REQUIREMENTS

6.1 The prepared rubber shall not contain skim rubber and shall be free from wet spots. However, white specks scattered in the rubber shall not be objected to (see 3.6).

6.2 The rubber must essentially be free from mould, but traces of dry mould shall not be objected to.

6.3 The rubber shall be free from any bale coating material.

6.4 The rubber shall comply with the appropriate requirements given in Table 1, in accordance with the relevant method specified.

6.5 For grades produced from latex crepe and latex, if required by the purchaser, the cure characteristics of rubber shall be indicated by means of a rheograph. The method of obtaining the rheograph shall be specified by the purchaser, until a Sri Lanka Standard is available.

6.6 The producer limits for Mooney Viscosity (ML 1 + 4, 100 $^{\circ}$ C) for the three sub-grades of CV rubber (see 5.5) shall be 50±5, 60±5 and 70±5, when tested in accordance with SLS 484:Part 8.

7 PACKAGING

7.1 Bale (block) mass and dimensions

The rubber shall be compressed into bales (blocks) of mass 33.3 kg and having nominal dimensions of either 350 mm x 570 mm or 330 mm x 670 mm.

7.2 Wrapping

The bales (blocks) shall be wrapped in the manner specified in SLS 385.

7.3 Palletizing

The wrapped bales (blocks) shall be palletized in the manner specified in SLS 385.

8 MARKING

8.1 The bales (blocks) and pallets shall be marked in the manner specified in SLS 385. The colour code for marking of different grades shall be as indicated in Table 1.

TABLE 1 - Requirements for technically specified raw natural rubber (TSR)

þ.

÷.

						CHARACTERISTICS	ISTICS	ren er vertransk franklive ander er vertransk av er seneret vertransk som er seneret			teren der der der der der der der der	nijelja – nor sama kola kola n orozania na svetena sveten stala	An and a first of the second
TYPES	SLR GRADE	Dirt, % (m/m) max.	Ash % (m/m) max.	Mi trogen	Nitrogen, (m/m)	Volatile matter, 5 (m/m)	astter,)	Initial wailace plasticty	Plasticity ret Index (PRI)	Plasticity retention index (PRI)	Lovibond colour index		Colour code
(1)	(3)	(3)	(4)	Consumer (5)	Producer (6)	Consumer max. (7)	Producer min. (8)	ain. (9)	Consumer #1n.	Producer min.		Karker	Polyethylene Strip colour
Latex crepe	L (LC)		0, 50	0,60	0.15-0.55	0.80	0.70	30	60	(TT) 60	6.0	Light green	(14) Transparent
	r (IC) -CV	0.03	0.50	0.60	0.15-0.55	0.80	0.70	4	90	ê0	6.0	Black/light green	Orange
1 1 1 1	ы 	0.03	0.50	0.60	0.15-0.55	0.80	0.50	30	60	70	5.0	Liaht areen	Transparent
Y 31 E 44	21	0.05	c.50	0.60	0.15-0.55	0.80	0.50	30	60	Č,	9.0	Licht creen	Transparent
	5	0.03	0.50	0.60	0.15-0.55	0 80	0.50	*	60	9	* · · · ·	Black/linght treet	Orange
Sheet material or	s.	0.05	0.60	0.60	0.15-0.55	0.80	0.70	00	. 60	0.	•		Overtie white
later	SCV	0.05	0,60	0.60	0.15-0.55	0.80	0.70	*	60	Ç	*	Black Light	Orange
Sheet material (by											and the second se	dreen	
pressed process)	5 (RSS)	0.05	0.60	0.60	0.15-0.55	0.80	0.70	30	9	70	*	Light green	Opeque white
	10	0.10	0.75	0.60	0.15-0.55	0.80	0.50	30	50	90	÷	с: 30 50 20 20 20 20 20 20 20 20 20 20 20 20 20	Opaque white
	100	0.10	0.75	0.60	0.15-0.55	0.80	0.50	*	50	60	4	Black/brown	Orange
Fleid grade material	20	0.20	1.00	0.60	0.15-0.55	0.30	0.50	30	40	50	*	Red	Opaque white
	20CV	0.20	1.00	0.60	0.15-0.55	0.30	0.50	*	40	50	*	Black/red	Orange
	20	0.50	1.50	0.60	0.15-0.55	0.80	0.50	30	30	0 ⁴	*	Yellow	Opaque white
	50CV	0.50	1.50	0.60	0.15-0.55	0.80	0.50	*	30	40	*	Black/yellow	Orange
Wethod of test Reference SLS 484		Part 1	Part 2	Part	3	Part	rt 4	Part 5	Part	9	Part		

*Not specified.

9

SLS 72:1985

8.2 The bales and pallets may also be marked with the Certification Mark of the Sri Lanka Standards Institution illustrated below on permission being granted for such marking by the Sri Lanka Standards Institution.



NOTE - The use of the Sri Lanka Standards Institution Certification Mark (SLS Mark) is governed by the provisions of the Sri Lanka Standards Institution Act and the regulations framed thereunder. The SLS mark on products covered by a Sri Lanka Standard is an assurance that they have been produced to comply with the requirements of that standard under a well defined system of inspection, testing and quality control, which is devised and supervised by the Institution and operated by the producer. SLS marked products are also continuously checked by the Institution for conformity to that standard as a further safeguard. Details of conditions under which a permit for the use of Certification Mark may be granted to manufacturers or processors may be obtained from the Sri Lanka Standards Institution.

9 METHODS OF TEST

Tests shall be carried out as specified in the relevant parts of SLS 484.

10 SAMPLING

Representative samples of rubber shall be drawn in accordance with Appendix A for testing.

11 CRITERIA FOR CONFORMITY

The lot shall be considered to be in conformity with the requirements of this specification if the conditions specified in 11.1 to 11.6 are satisfied. These conditions are applicable to both producers and consumers, unless otherwise stated.

11.1 Dirt, ash and volatile matter

In respect of each of the above characteristics, tested on the individual sample \bar{X} and R shall be calculated in accordance with A.1.7 and A.1.8 respectively. For each characteristic, the value of the expression \bar{X} + KR shall then be found using K from Column 3 of Table 2 for the

corresponding sample size. \bar{x} + KR shall be less than or equal to the limit specified in Table 1 for the particular grade. For volatile matter, for producers, the producer limit shall be taken while for consumers, the consumer limit shall be taken.

11.2 Nitrogen

For producers, values of all individual samples shall be between the limits 0.15 per cent and 0.55 per cent and for consumers, it shall be below 0.60 per cent.

11.3 Initial wallace plasticity

All values of individual samples of non CV grades rubber tested shall be above the limit of 30.

11.4 Plasticity retention index

For producers, all values of individual samples tested shall be above the consumer limit for a particular grade while the mean value shall be above the producer limit for the particular grade. For consumers, all values shall be above the consumer limit.

11.5 Lovibond colour index

All values of individual samples shall be less than or equal to the limit specified in Table 1 for the particular grade.

11.6 Mooney viscosity

The value of the composite sample of CV grade rubber shall be within the limits specified in 6.6.

APPENDIX A

SAMPLING

A.1 DEFINITIONS

For the purpose of the sampling scheme for this specification, the following definitions shall apply:

A.1.1 lot: All the bales (blocks) of rubber of the same grade, forming one consignment not exceeding 50 tonnes.

A.1.2 sample: A group of bales selected at random to represent the lot.

A.1.3 individual sample: Amount of rubber representing an individual bale in the sample.

SLS 72:1985

A.1.4 composite sample: Amount of rubber obtained by mixing together equal amounts from all the bales in the sample representing the lot as a whole.

A.1.5 piece: Rubber taken from a bale of the sample.

A.1.6 test portion: Rubber taken from a piece for subjection to a test.

A.1.7 mean: The sum of the test results divided by their number; if x_1, x_2, \ldots, x_n are n test results.

mean
$$(\vec{x}) = \frac{x_1 + x_2 + x_3}{n}$$

A.1.8 range: The difference between the largest and smallest test result; if x_1, x_2, \ldots, x_n are the test results arranged in the ascending order of magnitude,

range (R) =
$$x_n - x_1$$

A.2 SCALE OF SAMPLING

č.,

A.2.1 The samplesshall be taken and tested from each lot for ascertaining the conformity of the material to the requirements of this specification.

A.2.2 The number of bales to be selected from each lot shall depend on the size of the lot and shall be in accordance with Columns 1 and 2 of Table 2.

Number of bales in the lot (lot size) (1)	Number of bales to be selected (sample size) (2)	Multiple of R in criterion (3)
00 to 39	3	0.587
40 to 100	5	0.498
101 to 300	7	0.465
301 and above	10	0.579

TABLE 2 - Selection of sample

A.3 SELECTION OF BALES

A.3.1 Palletized

A.3.1.1 The lot size for selecting the sample shall be arrived at by multiplying the average number of bales in each pallet by the number of pallets.

A.3.1.2 From the lot size calculated above, bales equal to the corresponding number given in Column 2 of Table 2 shall be determined. The required number of bales shall then be selected at random from the lot. To ensure randomness of selection a random number table as specified in SLS 428 shall be used.

A.3.2 Non palletized

From the lot size determined, bales equal to the corresponding number given in Column 2 of Table 2 shall be selected at random from the lot. To ensure randomness of selection a random number table as specified in SLS 428 shall be used.

A.4 TESTING OF SAMPLE

A.4.1 Preparation of individual sample

In order to obtain a piece representative of a single bale in the sample, to constitute an individual sample method given in A.4.3 shall be adopted.

A.4.2 Preparation of composite sample

A piece weighing about 150 g shall be taken from each bale in the sample representing the lot by the method described in A.4.3. All the pieces so obtained from all the bales in the sample shall together constitute the composite sample.

A.4.3 Method of taking a piece

A.4.3.1 Two diagonally opposite corners of the selected bale shall be cut with a clean knife without the use of lubricants, through the entire bale, normal to the surface of largest area of the bale for block forms of rubber (see Figure) and normal to the surface of rubber sheets for other types. The outer wrapping sheets, polyethylene wrapping, bale coating or any other surface material shall be removed from the pieces in the sample.

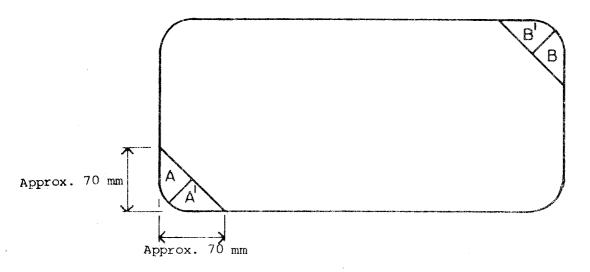


FIGURE - Sketch showing position of cuts of bales

(A + B) weigh approximately 360 g and this constitutes a piece. Unless the piece is tested immediately, the piece is inserted in a polyethylene bag marked SLR, the identification label complete with necessary details is inserted and the bag is heat-sealed immediately. (A' + B') shall be the reference sample and shall be stored in a manner as described above.

A.4.3.2 If testing for volatile matter only, the piece may, at the buyer's discretion be taken as a continuous piece of rubber of mass 600 g to 1000 g from any part of the bale.

A.4.4 Homogenization/blending of piece(s).

A.4.4.1 Weigh a piece from a single bale or several pieces of a sample to the nearest 0.1 g. Use a laboratory mill with rolls nominally 150 mm in diameter and 300 mm long; the friction ratio shall be 1 : 1.4 and roll speeds 22 rev/min (front) and 31 rev/min (back). Set the nip of the laboratory mill to 1.30 ± 0.15 mm and the roll temperature to 70 ± 5 °C and homogenize the rubber by passing it 10 times between the rolls. As the rubber passes through the mill, roll it into a cylinder and present it endwise to the mill for the next pass. Collect any solid matter parting from the rubber and re-incorporate it at the next pass. After the last pass do not roll the rubber, remove it as a sheet, allow it to cool, and weigh to the nearest 0.1 g.

A.4.4.2 Record the mass of the rubber before and after milling since these are required later for the calculation of volatile matter.

A.4.4.3 Store the rubber in an airtight container unless further testing can be carried out immediately.

A.4.5 Number of tests

A.4.5.1 Each individual sample bale obtained in A.4.1 shall be tested separately for dirt, ash, volatile matter, nitrogen, initial wallace plasticity, plasticity retention index and if required, for Lovibond colour index.

A.4.5.2 The composite sample shall be tested for Mooney viscosity and for cure characteristics, if required.

A.4.6 Allocation of test portion

A.4.6.1 Portions of the following approximate masses are cut from the blended piece for the various tests so as to allow sufficient material in hand for possible repeat tests:

Dirt	25	g	to	30	g
Volatile matter	25	g	to	30	g
Nitrogen and ash				20	g
Rapid plasticities and PRI	25	g	to	30	g
Lovibond colour index				30	g

A.4.6.2 The portion for determination of volatile matter shall be wrapped in a polyethylene bag which is folded repeatedly and secured with a clip to prevent exchange of moisture with the atmosphere.

D1 1 D

AMD 136

AMENDMENT NO. 01 APPROVED ON 1990-11-20

SLS 72 : 1985 SPECIFICATION FOR TECHNICALLY SPECIFIED RAW NATURAL RUBBER (Third Revision)

		Characteristic				
		Plasticity retention index (PRI				
Туре	SLR grade	Consumer	Producer			
		(min) (10)	(min) (II)			
(1)	(2)	(3)	(4)			
Latex	L	75	85			
	SL	75	85			
	CV	75	85			
Sheet material	5	75	85			
	5	15	83			
Or Latay	5CV	75	85			
Latex	3C V	15	83			
Sheet material						
(by pressed						
process)	5 (RSS)	75	85			

TABLE 1

AMD 136

AMENDMENT NO. 01 TO SLS 72 : 1985 SRI LANKA STANDARD SPECIFICATION FOR TECHNICALLY SPECIFIED RAW NATURAL RUBBER (3RD Revision)

EXPLANATORY NOTE

The major rubber producing countries in the world, eg : Malaysia and Indonesia are in the process of modifying their national standards on TSR, in order to upgrade the quality of their natural rubber. Accordingly Sri Lanka also has to change its TSR scheme wherever possible, to fall in line with the Indonesian and Malaysian schemes. If not our TSR with lower specifications such as PRI 60 will be considered an inferior quality products and we will lose our recognition in the world market.

Therefore it has been decided to change the PRI value of latex grades from 60 to 75.

SLS CERTIFICATION MARK

The Sri Lanka Standards Institution is the owner of the registered certification mark shown below. Beneath the mark, the number of the Sri Lanka Standard relevant to the product is indicated. This mark may be used only by those who have obtained permits under the SLS certification marks scheme. The presence of this mark on or in relation to a product conveys the assurance that they have been produced to comply with the requirements of the relevant Sri Lanka Standard under a well designed system of quality control inspection and testing operated by the manufacturer and supervised by the SLSI which includes surveillance inspection of the factory, testing of both factory and market samples.

Further particulars of the terms and conditions of the permit may be obtained from the Sri Lanka Standards Institution, 17, Victoria Place, Elvitigala Mawatha, Colombo 08.

Printed at SLSI (Printing Unit)

SRI LANKA STANDARDS INSTITUTION

The Sri Lanka Standards Institution (SLSI) is the National Standards Organization of Sri Lanka established under the Sri Lanka Standards Institution Act No. 6 of 1984 which repealed and replaced the Bureau of Ceylon Standards Act No. 38 of 1964. The Institution functions under the Ministry of Science & Technology.

The principal objects of the Institution as set out in the Act are to prepare standards and promote their adoption, to provide facilities for examination and testing of products, to operate a Certification Marks Scheme, to certify the quality of products meant for local consumption or exports and to promote standardization and quality control by educational, consultancy and research activity.

The Institution is financed by Government grants, and by the income from the sale of its publications and other services offered for Industry and Business Sector. Financial and administrative control is vested in a Council appointed in accordance with the provisions of the Act.

The development and formulation of National Standards is carried out by Technical Experts and representatives of other interest groups, assisted by the permanent officers of the Institution. These Technical Committees are appointed under the purview of the Sectoral Committees which in turn are appointed by the Council. The Sectoral Committees give the final Technical approval for the Draft National Standards prior to the approval by the Council of the SLSI.

All members of the Technical and Sectoral Committees render their services in an honorary capacity. In this process the Institution endeavours to ensure adequate representation of all view points.

In the International field the Institution represents Sri Lanka in the International Organization for Standardization (ISO), and participates in such fields of standardization as are of special interest to Sri Lanka.

Printed at the Sri Lanka Standards Institution, 17, Victoria Place, Elvitigala Mawatha, Colombo 08.