MALAYSIAN RUBBER BOARD (MRB) AS THE STANDARDS DEVELOPMENT AGENCY (SDA) & OVERVIEW OF MALAYSIAN STANDARDS (MS) FOR SMR/TSR

SEMINAR ON MS FOR SMR/TSR & LABORATORY INSPECTION: CURRENT STATUS
1 December 2016
Contents

• Malaysian Rubber Board (MRB) as the Standards Development Agency (SDA) for rubber and rubber products

• Malaysian Standards (MS) and other equivalent standards for SMR/TSR
Malaysian Rubber Board (MRB) as the Standards Development Agency (SDA) for rubber and rubber products
BACKGROUND – MALAYSIAN STANDARDS DEVELOPMENT INFRASTRUCTURE

Develop and promote Malaysian Standard (MS)

Source: Standards Malaysia
STANDARDS IMPLEMENTATION STRUCTURE

VOLUNTARY USE

1. STANDARDS MALAYSIA
   - Develop

2. MS
   - Voluntary Implementation

3. Industry/ Business/Consumers

MANDATORY USE

1. Regulatory Body
   - implement

2. Relevant Acts of Parliament
   - Supported by

3. Technical Regulation
   - a) Compliance/Reference to MS
   - b) Conformity assessment requirements – testing, inspection & certification
   - c) Penalty for non-compliance

4. Industry/ Business/Government
   - Complied by

* Not all standards can be made mandatory unless it affects safety of consumers, environment & health

Source: Standards Malaysia
Standards of Malaysia (Amendment) Act 2012

Section 10 (2)(aa)

......the Director General may....

“appoint, in accordance with the criteria approved by the Council, any organization in Malaysia to develop standards and to coordinate Malaysian representation in international standardization activities”
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Source: Standards Malaysia
MRB AS THE STANDARDS DEVELOPMENT AGENCY (SDA)

• MRB was appointed as the Standards Development Agency (SDA) for rubber and rubber products on the 22nd of January 2015
RESPONSIBILITIES OF MRB AS SDA

- Carrying out technical work with regards to standards development
- Producing the draft of the MS for the approval of the Government
- Establishing the infrastructure for standards development which may consists of technical committees which are represented by balanced stakeholders to ensure the credibility of the standards developed
- Managing Malaysia’s representation at the international and regional standardisation activities
- Reporting straight to National Standards Body (NSB)
1) Development of Malaysian Standard (MS) under the scope of rubber and rubber products
2) Manage, coordinate and monitor:
   - Industrial Standards Committee (ISC N)
   - National Mirror Committee (NMC)
   - Technical Committees (TCs)
   - Working Groups (WGs)

1) Secretary for the ASEAN Consultative Committee for Standards & Quality – Rubber based Product Working Group (ACCSQ-RBPWG)
2) To manage Malaysia’s participation at the meeting

1) Secretary for:
   - ISO/TC45
   - ISO/TC45/SC1 (Rubber and plastic hoses & hose assemblies),
   - ISO/TC 45/SC4 (Products other than hoses)
2) To manage Malaysia’s participation at the meeting
3) Management, maintenance of P membership
4) Management of voting documents for technical inputs
STRUCTURE OF STANDARDS DEVELOPMENT COMMITTEE (SDC) FOR RUBBER & RUBBER PRODUCTS

Industrial Standards Committee for Rubber and Rubber Products (ISC N)
Chairman – Director General Malaysian Rubber Board

TC on Rubber & Rubber Products

TC on Physical Test
TC on Latex Products
TC on Raw Materials & Chemical Test
TC on Engineering Rubber Products
TC on General Rubber Goods
TC on Tubing & Hoses

ISC = Approval Committee (AC)
TC = L1DC
SCOPE OF ISC N

- Standardisation of terms and definitions, test methods and specifications for rubber in any form, rubber products such as coated fabrics, flexible cellular materials, rubber gloves (except for medical purposes and for safety and protection), and hoses whether made of rubber or plastics, are dealt with in ISC N. Also included are major rubber compounding ingredients.
- Excluded: tyres and other automotive components (dealt with by ISC L); medical devices (dealt with by ISC R)

TCs under ISC N
www.lgm.gov.my/Services/SDA.aspx
MS STATISTICS (as of 30 Nov 2016)

ISC N – Rubber & Rubber Products

Total MS published: 166

- MS identical to ISO: 91
- MS adopt ISO with modification: 11
RECENTLY PUBLISHED MS (2016)

1) MS 2621:2016, Rubber and rubber products - Determination of polybrominated diphenyl ethers (PBDEs) by gas chromatography-mass spectrometry (GC-MS)

2) MS 2622:2016, Natural rubber (NR) latex foams – Specifications

3) MS 2623:2016, Rubber– Identification of β-sitosterol in natural rubber

4) MS 2625:2016, Rubber and rubber products - Determination of 2,2-bis (4-hydroxyphenyl)propane [Bisphenol A] (BPA) by high performance liquid chromatography (HPLC)
www.lgm.gov.my/Services/SDA.aspx

www.lgm.gov.my
Malaysian Standards (MS) and other equivalent standards for SMR/TSR
Standards for SMR/TSR
Sample Preparation

SMR Bulletin 7
- B.2 Homogenisation of Piece
- B.3 Allocation of Homogenised Piece for Testing

MS
- MS ISO 1795:2011 Rubber, Raw Natural And Raw Synthetic - Sampling And Further Preparative Procedures

ISO
- ISO 1795:2007 Rubber, raw natural and raw synthetic -- Sampling and further preparative procedures

ASTM
Malaysian Standards (MS) and other equivalent standards for SMR/TSR

Chemical test
Dirt

**SMR Bulletin 7**
- B.4 Determination of Dirt

**MS**
- MS 1542: 2002 Rubber, Raw Natural – Determination of Dirt Content

**ISO**
- ISO 249:2016 Rubber, raw natural -- Determination of dirt content

**ASTM**
### Volatile matter

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Ash

SMR Bulletin 7
• B.6 Determination of Ash

MS
• MS ISO 247:2001 Rubber - Determination Of Ash

ISO
• ISO 247:2006 Rubber - Determination of ash

ASTM
• ASTM D1278-91a (2011)
Nitrogen

- **SMR Bulletin 7**: B.7 Determination of Nitrogen
- **MS**: MS 281: PART 14: 2001 Natural Rubber Latex Concentrate: Part 14: Determination Of Nitrogen Content
- **ISO**: ISO 1656:2014 Rubber, raw natural, and rubber latex, natural -- Determination of nitrogen content
- **ASTM**: Nil
Malaysian Standards (MS) and other equivalent standards for SMR/TSR

Mechanical test
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Mooney Viscosity

**SMR Bulletin 7**
- B.9 Determination of Mooney Viscosity

**MS**

**ISO**

**ASTM**
Colour

SMR Bulletin 7
• B.10 Determination of Colour

MS
• MS 1359 Part 5:1994 Test Methods For Technically Specified Raw Natural Rubber: Part 5: Determination Of Colour

ISO
• ISO 4660:2011 Rubber, raw natural -- Colour index test

ASTM
• ASTM D3157 - 05 Standard Test Method for Rubber from Natural Sources—Color
Initiatives by MRB

• Working group (WG) on revision of SMR Bulletin No. 7
• To harmonise the requirements for SMR/TSR
• ISO standards will be revised incorporating our requirements.
• Direct use of ISO - once the ISO standards have been revised
THANK YOU