### **BUREAU OF INDIAN STANDARDS**

## Program of Work

### PCD 29: Methods of Test for Rubber and Rubber Products

Scope: To formulate Indian Standards for methods of sampling and test of rubber and rubber

products.

Liaison: **ISO TC-45 SC-2 (P):** *Testing and analysis* 

#### **Published Standards** S.No TITLE Reaffirm M-Y IS No. No. of Amds Eqv. IS 10016 (Part 1): Methods of test for polybutadiene January, 2019 Indigenous rubbers: Part 1 method of taking 1981 Reviewed In: 2019 out test portions from sample bales January, 2019 2 IS 10016 (Part 2): Methods of test for polybutadiene Indigenous rubbers: Part 2 determination of 1984 Reviewed In: 2019 ash IS 10016 (Part 4): Methods of test for polybutadiene January, 2019 Indigenous rubbers: Part 4 determination of 1984 Reviewed In: 2019 cis, trans and vinyl structure IS 10016 (Part 5): Methods of test for polybutadiene January, 2019 Indigenous rubbers: Part 5 determination of 1981 Reviewed In: 2019 gel content IS 10016 (Part 6): Methods of test for polybutadiene January, 2019 Not Equivalent rubbers: Part 6 evaluation of 2000 Reviewed In: 2019 vulcanization characteristics of ISO 2476:2014 polybutadiene rubbers (Br : 2) IS 11720 (Part 1): September, 2020 Not Equivalent 6 Methods of test for synthetic 1 rubber: Part 1 determination of 1986 Reviewed In: 2020 antioxidants ASTM D 1416:1983 IS 11720 (Part 2): Methods of test for synthetic January, 2019 Identical under dual rubber: Part 2 measurement of 2013 numbering ISO 3417:2008 vulcanization characteristics with Reviewed In: 2019 the oscillating disc curemeter ISO 3417:2008 (Second Revision) IS 11720 (Part 3): Methods of test for synthetic January, 2019 Not Equivalent 8 1993 rubber: Part 3 determination of Reviewed In: 2019 mooney viscosity ISO 289-1:2015 IS 11720 (Part 4): Methods of test for synthetic January, 2019 Not Equivalent rubber: Part 4 determination of 1993 Reviewed In: 2019 volatile matter ISO 248-1:2011 January, 2019 Not Equivalent 10 IS 11720 (Part 5): Methods of test for synthetic 1993 rubber: Part 5 determination of ash Reviewed In: 2019 ISO 247:2006

July, 2017

Not Equivalent

Methods of test for synthetic

IS 11720 (Part 6):

ı	2001	rubber: Part 6 determination of		1	1
	Reviewed In: 2017	solvent extract			
	ISO 1407:2011	Solvent extract			
12	IS 11720 (Part 11):	Methods of test for synthetic	July, 2017	_	Identical under dual
	, , ,	rubber: Part 11 rubber, raw styrene	, , , , , , , , , , , , , , , , , , ,		numbering
	ISO 7781	- Butadiene - Determination of			
	Reviewed In: 2017	soap and organic - Acid content			
	ISO 7781				
13	IS 11720 (Part 13):	Methods of test for synthetic	July, 2017	-	Not Equivalent
	2001	rubber: Part 13 determination of			
	Reviewed In: 2017	gel content			
	ASTM D 3616:1995				
14	13867 : 2021	Rubber - General Procedures for		-	Identical under dual
		Preparing and Conditioning Test			numbering
	ISO 23529:2016	Pieces for Physical Test Methods (			
		First Revision )			
15	IS 14788 : 2018	Styrene - Butadiene rubber (Sbr) -		-	Identical under dual
	ISO 2322 : 2014	Emulsion and solution -			numbering
	ISO 2322:2014	Polymerized types - Evaluation			
1.6	10 1 1700 2000	procedures (First Revision)	7 2010		71 1 1 1
16	IS 14789 : 2000	Rubber - Determination of styrene	January, 2019	-	Identical under dual
	ISO 5478 Reviewed In : 2019	content - Nitration method			numbering
	ISO 5478				
17	IS 14794 : 2022	ISOBUTENE-ISOPRENE			Identical under dual
1 1 /	ISO 2302:2020	RUBBER IIR EVALUATION		-	numbering
	ISO 2302:2020	PROCEDURES Third Revision			numbering
18	IS 15076 : 2018	Chloroprene Rubber CR - General	March, 2024	_	Identical under dual
	ISO 2475:2011	Purpose Types Evaluation	Waren, 202 i		numbering
	Reviewed In: 2024	Procedure First Revision			numeering
	ISO 2475:2011	11000000101100110011011			
19	IS 16705 : 2018	Reclaimed rubber derived from		-	Modified/Technically
	ISO/TS 16095	products containing mainly natural			Equivalent
		rubber Evaluation procedure			1
20	IS 16713 : 2018	Reclaimed isobutene - Isoprene		-	Modified/Technically
		(Iir) rubber - Evaluation procedure			Equivalent
	ISO/TS 16096				
21		Rubber - Recommendations for the		-	Identical under dual
	ISO 9691 : 1992	workmanship of pipe joint rings -			numbering
	ISO 9691:1992	Description and classification of			
		imperfections			
22	IS 16752 : 2018	Rubber - Tolerances for products -		-	Identical under dual
	ISO 3302-1 : 2014	Dimensional tolerances			numbering
22	ISO 3302-1:2014	Elevible cellular rathmania		1	Identical des desal
23	IS 16774 : 2018 ISO 2439 : 2008	Flexible cellular polymeric materials - Determination of		-	Identical under dual
	ISO 2439 : 2008 ISO 2439:2008				numbering
24	IS 16801 : 2018	hardness (Indentation Technique) Rubber - Identification - Infrared	March, 2024	_	Identical under dual
2+	ISO 4650 : 2012	spectrometric methods	iviaicii, 2024	]	numbering
	Reviewed In : 2024	spectrometric methods			numbering
	ISO 4650:2012				
25	IS 16848 : 2018	Rubber - Guide to the use of		-	Identical under dual
	ISO 6502 : 2016	curemeters			numbering
	ISO 6502:2016				
26		Rubberï; ½ Methods of Test Part 1		-	Identical under dual
	1):2024	Measurement of vulcanization			numbering
	6502-1: 2018	characteristics using curemeters			
	6502-1: 2018	Section 1 Introduction			
27	IS 16848 (Part 1/Sec	Rubber� Methods of Test Part 1		-	Identical under dual
I	I	ı		1	1

I	2):2024	Measurement of vulcanization		I	numbering
	6502-2:2018	characteristics using curemeters			numbering
	6502-2:2018	Section 2 Oscillating disc			
		curemeter			
28	IS 16848 (Part 1/Sec Rubber i; ½ Methods of Test Part 1			-	Identical under dual
	3): 2024	Measurement of vulcanization			numbering
	ISO 6502-3:2023	characteristics using curemeters			
	ISO 6502-3:2023	Section 3 Rotorless curemeter			
29	IS 17115 : 2019	Flexible cellular polymeric	March, 2024	-	Identical under dual
	ISO 3385 : 2014	materials - Determination of			numbering
	Reviewed In: 2024	fatigue by constant - Load			
	ISO 3385:2014	pounding			
30	IS 17159 : 2019	Hydraulic fluid power - Hoses and	March, 2024	-	Identical under dual
	ISO 6605 : 2017	hose assemblies - Test methods			numbering
	Reviewed In: 2024				
	ISO 6605:2017				
31	IS 17160 : 2019	Rubber compounding ingredients -	March, 2024	-	Identical under dual
	ISO 9298 : 2017	Zinc oxide - Test methods			numbering
	Reviewed In: 2024				
	ISO 9298:2017				
32	IS 3400 : 2021	Methods of Test for Vulcanized		-	Identical under dual
		Rubber Part 1 Tensile Stress-Strain			numbering
	ISO 37 : 2017	Properties			
33	IS 3400 (Part 2):	METHODS OF TEST FOR		-	Identical under dual
	2023	RUBBER, VULCANIZED OR			numbering
	ISO 48-2:2018	THERMOPLASTIC PART 2			
	ISO 48-2:2018	DETERMINATION OF			
		HARDNESS SECTION 2			
		HARDNESS BETWEEN 10 IRHD			
		AND 100 IRHD (Fifth Revision)			
34	IS 3400 (Part 2/Sec	METHODS OF TEST FOR		-	Identical under dual
	1): 2022	RUBBER, VULCANIZED OR			numbering
	ISO 48-1:2018	THERMOPLASTIC PART 2			
	ISO 48-1:2018	DETERMINATION OF			
		HARDNESS SECTION 1			
		INTRODUCTION AND			
		GUIDANCE			
35	IS 3400 (Part 2/Sec			-	Identical under dual
	3): 2022	RUBBER, VULCANIZED OR			numbering
	ISO 48-3:2018	THERMOPLASTIC PART 2			
	ISO 48-3:2018	DETERMINATION OF			
		HARDNESS SECTION 3 DEAD-			
		LOAD HARDNESS USING THE			
		VERY LOW RUBBER			
26	IC 2400 (David 249	HARDNESS (VLRH) SCALE			Identical and a dead
36	IS 3400 (Part 2/Sec	METHODS OF TEST FOR		-	Identical under dual
	4):2022	RUBBER, VULCANIZED OR			numbering
	ISO 48-4:2018	THERMOPLASTIC PART 2			
	ISO 48-4:2018	DETERMINATION OF			
1		HARDNESS SECTION 4			
		INDENTATION HARDNESS BY			
		DUROMETER METHOD			
		(SHORE HARDNESS) ( Second			
37	IS 3400 (Part 2/Sec	Revision ) METHODS OF TEST FOR			Identical under dual
31	5): 2022	RUBBER, VULCANIZED OR		_	
	ISO 48-5:2018	THERMOPLASTIC PART 2			numbering
	ISO 48-5:2018	DETERMINATION OF			
	150 40-5.2010	HARDNESS SECTION 5			
		III MONLOG SECTION 3			

1	1	Investor a month a posted by		I	1
		INDENTATION HARDNESS BY			
		IRHD POCKET METER			
		METHOD ( Second Revision )			
38	IS 3400 (Part 2/Sec	METHODS OF TEST FOR		-	Identical under dual
	6): 2023	RUBBER, VULCANIZED OR			numbering
	ISO 48-6:2018	THERMOPLASTIC PART 2			
	ISO 48-6:2018	DETERMINATION OF			
		HARDNESS SECTION 6			
		APPARENT HARDNESS OF			
		RUBBER-COVERED ROLLERS			
		BY IRHD METHOD			
39	IS 3400 (Part 2/Sec	METHODS OF TEST FOR		-	Identical under dual
	7): 2022	RUBBER, VULCANIZED OR			numbering
	ISO 48-7:2018	THERMOPLASTIC PART 2			
	ISO 48-7:2018	DETERMINATION OF			
		HARDNESS SECTION 7			
		APPARENT HARDNESS OF			
		RUBBER-COVERED ROLLERS			
		BY SHORE-TYPE DUROMETER			
		METHOD			
40	IS 3400 (Part 2/Sec			-	Identical under dual
	8): 2022	RUBBER, VULCANIZED OR			numbering
	ISO 48-8:2018	THERMOPLASTIC PART 2			
	ISO 48-8:2018	DETERMINATION OF			
	150 10 0.2010	HARDNESS SECTION 8			
		APPARENT HARDNESS OF			
		RUBBER-COVERED ROLLERS			
		BY PUSEY AND JONES			
		METHOD			
41	IS 3400 (Part 2/Sec	METHODS OF TEST FOR		_	Identical under dual
1	9): 2022	RUBBER, VULCANIZED OR		_	numbering
	ISO 48-9:2018	THERMOPLASTIC PART 2			numbering
	ISO 48-9:2018	DETERMINATION OF			
	150 40-7.2010	HARDNESS SECTION 9			
		CALIBRATION AND			
		VERIFICATION OF HARDNESS			
		TESTERS			
42	IS 3400 (Part 3):	Methods of Test for Vulcanized			Identical under dual
72	2021	Rubbers Part 3 Abrasion		-	numbering
	ISO 4649:2010	Resistance using a Rotating			numbering
	ISO 4649:2017	Cylindrical Drum Device (Third			
	130 4049.2017	Revision )			
43	IS 3400 (Part 4):	Methods of test for vulcanized	July, 2017	_	Identical under dual
43	2012	rubber: Part 4 accelerated ageing	July, 2017	_	numbering
	ISO 188 : 2011	and heat resistance (Third			numbering
	Reviewed In : 2017	Revision)			
	ISO 188 : 2011	Kevision)			
44	IS 3400 (Part 5):	METHODS OF TEST FOR			Identical under dual
44	2022	RUBBER, VULCANIZED OR		_	numbering
	ISO 36:2020	THERMOPLASTIC PART 5			numbering
	ISO 36:2020	ADHESION OF RUBBERS TO			
		TEXTILE FABRICS ( Fourth			
15	IC 2400 (Dart C)	Revision )			Idontical and a deal
45	IS 3400 (Part 6):	Methods of Test for Vulcanized	-	-	Identical under dual
	2018	Rubbers Part 6 Determination of			numbering
	ISO 1817 : 2015	the Effect of Liquids (Fourth			
4.6	ISO 1817:2015	Revision)			T4
46	IS 3400 (Part 7):	Methods of Test for Vulcanized		-	Identical under dual
	2021	Rubber Part 7: Determination of			numbering
-	-			-	-

ı	L x00 100 2015	la	1	I	1
	ISO 132 : 2017	flex cracking and crack growth De			
<u> </u>	ISO 132 : 2017	Mattia			
47	IS 3400 (Part 9):	Methods of Test for Vulcanized	-	-	Identical under dual
	2020	Rubber Part 9 Rubber, Vulcanized			numbering
	ISO 2781 : 2018	or Thermoplastic — Determination			
	ISO 2781:2018	of Density ( Fourth Revision )			
48	IS 3400 (Part 10/Sec			-	Identical under dual
	1): 2022	RUBBER, VULCANIZED OR			numbering
	ISO 815-1:2019	THERMOPLASTIC PART 10			
	ISO 815-1:2019	COMPRESSION SET SECTION 1			
		AT AMBIENT OR ELEVATED			
		TEMPERATURES (Third			
		Revision )			
49	IS 3400 (Part 10/Sec	METHODS OF TEST FOR		-	Identical under dual
	2): 2022	RUBBER, VULCANIZED OR			numbering
	ISO 815-2:2019	THERMOPLASTIC PART 10			
	ISO 815-2:2019	COMPRESSION SET SECTION 2			
		AT LOW TEMPERATURES (			
		Third Revision )			
50	IS 3400 (Part 11):	Methods of Test for Vulcanized	<u>-</u>	_	Not Equivalent
	2021	Rubber Part 11 Determination of			-1
	ISO 4662:1978	Rebound Resilience (Second			
	150 1002.1770	Revision)			
51	IS 3400 (Part 12):	Methods of test for vulcanized		_	Identical under dual
	2022	rubbers: Part 12 Tear strength-		_	numbering
	ISO 34-1:2015	crescent test piece First Revision			numbering
	ISO 34-1:2015	crescent test piece i iist Revision			
52	IS 3400 (Part 13) :	Methods of test for vulcanized			Identical under dual
32	2021	rubbers: Part 13 Tension Set		_	numbering
	ISO 2285 :2013	Second Revision			numbering
	ISO 2285 :2013	Second Revision			
52	IS 3400 (Part 14/Sec	Methods of test for Vulcanized			Identical under dual
53	,			-	
	1):2021	Rubbers: Part 14 Adhesion of			numbering
	ISO 813:2016	Rubber to Rigid Substrate Section			
- T 4	ISO 813:2016	1 90 peel method Second Revision			T1 ( 1 1 1 1
54	IS 3400 (Part 14/Sec			-	Identical under dual
	2):2021	Rubbers: Part 14 Adhesion of			numbering
	ISO 814 :2017	Rubber to Metal Section 2 Two-			
	ISO 814 :2017	plate method Second Revision			
55	IS 3400 (Part 14/Sec			-	Identical under dual
	3): 2020	Rubbers Part 14 Adhesion of			numbering
	ISO 5600 : 2017	Rubber to Rigid Material Section 3			
	ISO 5600 :2017	Using conical shaped parts (			
	77.7100 =	Second Revision )			
56	IS 3400 (Part 15):	METHODS OF TEST FOR		-	Identical under dual
	2022	RUBBER, VULCANIZED OR			numbering
	ISO 14309:2019	THERMOPLASTIC PART 15			
	ISO 14309:2019	DETERMINATION OF			
		VOLUME AND/OR SURFACE			
		RESISTIVITY (First Revision)			
57	IS 3400 (Part 16):	Methods of test for vulcanized	July, 2017	-	Not Equivalent
	1974	rubbers: Part xvi measurement of			
	Reviewed In: 2017	cut growth of rubber by the use of			
	ASTM D 1052	the ross flexing machine			
58	IS 3400 (Part 18):	Methods of Test for Vulcanized		-	Identical under dual
	2021	Rubbers - Part 18 : Stiffness at			numbering
	ISO 1432 : 2013	Low Temperature Gehman Test(			
L	ISO 1432 : 2013	Second Revision )			
59	IS 3400 (Part 19):	Methods of Test for Vulcanized	-		Identical under dual
I	I '	I		I	I

	2020	Rubbers Part 19 Permeability to			numbering
	ISO 2782-1 : 2016	Gases ( Constant Volume Method )			
	ISO 2782-1:2016	( First Revision )			
50	IS 3400 (Part 20):	Methods of Test for Vulcanized	-	_	Identical under dual
	2018	Rubbers - Part 20 : Resistance to			numbering
		Ozone Cracking - Static Strain Test			
	ISO 1431-1:2012	(Second Revision)			
51	IS 3400 (Part 21):	Methods of Test for Vulcanized		_	Identical under dual
,,	2020	Rubbers Part 21 Permeability to			numbering
	ISO 2782-2 : 2018	Gases — Constant Pressure			in manifesting
	ISO 2782-2:2018	Method ( First Revision )			
52	IS 3400 (Part 22):	Methods of test for vulcanized	January, 2019	_	Not Equivalent
,_	1984	rubber: Part 22 chemical analysis	January, 2017		110t Equivalent
	Reviewed In: 2019	1000ct. 1 art 22 chemical analysis			
	ASTM D 297				
53	IS 3400 (Part 23/Sec	Methods of test for vulcanized			Identical under dual
)3	2): 2018	rubbers: Part 23 rubber -		-	
	ISO 7619-2 : 2010	Determination of indentation			numbering
	ISO 7619-2:2010 ISO 7619-2:2010				
	150 /619-2:2010	hardness by means of pocket			
		hardness meters section 2 irhd			
		pocket meter method (First			
- 1	IC 2400 (D + 24)	Revision)			T1 2 1 1 1 1
64	IS 3400 (Part 24):	Methods for Test for Volcanized		-	Identical under dual
	2021	Rubbers - Part 24 Rubber and			numbering
	ISO 8033 : 2016	Plastics Hose - Determination of			
	ISO 8033 : 2016	Adhesion Between Components			
5	IS 3400 (Part 25):	METHODS OF TEST FOR		-	Identical under dual
	2022	RUBBER, VULCANIZED OR			numbering
	ISO 812 : 2017	THERMOPLASTIC PART 25			
	ISO 812 : 2017	DETERMINATION OF LOW-			
		TEMPERATURE BRITTLENESS			
		( First Revision )			
66	IS 3400 (Part 26):	Methods of test for vulcanized		-	Identical under dual
	2019	rubbers: Part 26 determination of			numbering
	ISO 1827 : 2016	shear modulus and adhesion to			
	ISO 1827:2016	rigid plates - Quadruple - Shear			
		methods			
57	IS 3400 (Part 27):	Methods of test for vulcanized	March, 2024	-	Identical under dual
	2019	rubbers: Part 27 resistance to ozone			numbering
	ISO 1431-3 : 2007	cracking - Reference and			
	Reviewed In: 2024	alternative methods for			
	ISO 1431-3:2017	determining the ozone			
		concentration in laboratory test			
		chambers			
68	IS 3400 (Part 28):	METHODS OF TEST FOR		-	Identical under dual
	2022	RUBBER, VULCANIZED OR			numbering
	ISO 3384-1:2019	THERMOPLASTIC PART 28			
	ISO 3384-1:2019	DETERMINATION OF STRESS			
		RELAXATION IN			
		COMPRESSION � TESTING			
		AT CONSTANT			
		TEMPERATURE ( First Revision			
		)			
59	IS 3400 (Part 29):	METHODS OF TEST FOR			Identical under dual
IJ	2022	RUBBER, VULCANIZED OR		1	
	ISO 6914:2021	THERMOPLASTIC PART 29			numbering
	ISO 6914:2021	DETERMINATION OF AGEING			
		CHARACTERISTICS BY			
	I	MEASUREMENT OF STRESS			

		RELAXATION IN TENSION ( First Revision )			
70	IS 3660 (Part 1):	Methods of test for natural rubber -	January, 2019	2	Not Equivalent
'	1999	Part 1 : determination of dirt	January, 2019	1 -	Tiot Equivalent
	Reviewed In: 2019	(Third Revision)			
	ISO 249:2014	(Time revision)			
71		Methods of test for natural rubber -	January, 2019	1	Not Equivalent
'1	1985	Part 2 : determination of volatile	January, 2019	1	Tiot Equivalent
	Reviewed In: 2019	matter (Second Revision)			
	ISO 248-1,ISO				
	248-2				
72		Methods of test for natural rubber:		-	Identical under dual
	2017	Part 4 determination of total			numbering
		copper - Photometric method [ nr :			
	ISO 8053:1995	4 ] (Third Revision)			
73	IS 3660 (Part 5):	Methods of test for natural rubber:	January, 2019	-	Not Equivalent
		Part 5 determination of manganese	<b>3</b> /		1
	Reviewed In: 2019	(Nr:5) (Second Revision)			
	ISO 7780:1998	, (,			
74	IS 3660 (Part 6):	Methods of test for natual rubber:	January, 2019	-	Not Equivalent
	1988	Part 6 determination of rubber	•		·
	Reviewed In: 2019	hydrocarbon [nr:7] (Second			
	ISO 5945:1982	Revision)			
75	IS 3660 (Part 7):	Methods of Test for Natural	January, 2019	-	Identical under dual
	2013	Rubber Part 7 : Determination of	•		numbering
	ISO289-1:2005	Mooney Viscosity			
	Reviewed In: 2019				
	ISO 289-1:2005				
76	IS 3660 (Part 8):	METHODS OF TEST FOR		-	Identical under dual
	2023	NATURAL RUBBER PART 8			numbering
	ISO 2393:2014	RUBBER TEST MIXES			
	ISO 2393:2014	PREPARATION MIXING AND			
		VULCANIZATION			
		EQUIPMENT AND			
		PROCEDURES NR: 9 Third			
		Revision of IS 3600 Part 8			
77	` /	Methods of test for natural rubber:	April, 2021	-	Identical under dual
	2016	Part 9 determination of solvent			numbering
	ISO 1407 : 2011	extract [ nr : 10 ] (Second			
	Reviewed In: 2021	Revision)			
	ISO 1407 : 2011				
78	` /		January, 2019	-	Not Equivalent
	2000	Part 10 determination of nitrogen			
	Reviewed In: 2019	content [nr:11] (First Revision)			
	ISO 1656:1996	Note that the second second		1	
79	IS 3660 (Part 11):	Methods of Test for Natural		-	Identical under dual
	2021	Rubber - Part 11 : Determination			numbering
	ISO 2007:2007	of Plasticity			
	ISO 4662 : 2017	ACCURAGE OF THE STATE OF THE ST			T1 (1 1 1 1 1
80	IS 3660 (Part 12):	METHODS OF TEST FOR		-	Identical under dual
	2022	NATURAL RUBBER PART 12			numbering
	ISO 2930:2017	DETERMINATION OF			
	ISO 2930:2017	PLASTICITY RETENTION			
		INDEX PRI NR: 13 Third			
01	IC 2660 (Dai: 12)	Revision  METHODS OF TEST FOR			Identical and a day
81	IS 3660 (Part 13):	METHODS OF TEST FOR		_	Identical under dual
	2023 ISO 4660:2020	NATURAL RUBBER PART 13 DETERMINATION OF COLOUR			numbering
	ISO 4660:2020	NR: 14 Second Revision of			
	150 4000:2020	TVK . 14 Second Revision of			

4 .		IS3660 Part 13			
82	IS 3708 (Part 1):	Methods of test for natural rubber	February, 2024	-	Identical under dual
	2013	latex: Part 1 determination of dry	<b>3</b> /		numbering
	ISO 126:2005	rubber content [nrl : 1] (Second			
	Reviewed In: 2024	Revision)			
	ISO 126:2005				
83	IS 3708 (Part 2):	NATURAL RUBBER LATEX-		-	Identical under dual
	2024	METHODS OF TEST PART 2			numbering
		DETERMINATION OF SLUDGE			
	2005:2014	CONTENT ( Second Revision )			
84	IS 3708 (Part 2):	Methods of test for natural rubber	January, 2019	_	Identical under dual
	1985	latex: Part 2 determination of	, , _ , _ , _ , _ , _ , _ , _ , _ , _ ,		numbering
	Reviewed In: 2019	sludge content (First Revision)			
	2005:2014				
85	IS 3708 (Part 3):	Methods of test for natural rubber		-	Identical under dual
	2018	latex: Part 3 determination of			numbering
	ISO 705 : 2015	density (Second Revision)			
	ISO 705:2015	, (a			
86	IS 3708 (Part 4):	METHODS OF TEST FOR		-	Identical under dual
	2023	NATURAL RUBBER LATEX			numbering
	ISO 125:2020	PART 4 NATURAL RUBBER			
	ISO 125:2020	LATEX CONCENTRATE			
	150 120,2020	DETERMINATION OF			
		ALKALINITY Fourth Revision			
87	IS 3708 (Part 5):	METHODS OF TEST FOR		_	Identical under dual
	2022	NATURAL RUBBER LATEX			numbering
	ISO 127:2018	PART 5 DETERMINATION OF			
	ISO 127:2018	KOH NUMBER Fourth Revision			
88	IS 3708 (Part 6):	Methods of test for natural rubber	January, 2019	_	Not Equivalent
	1985	latex: Part 6 determination of	variaary, 2019		Trot Equivalent
	Reviewed In: 2019	mechanical stability (First			
	ISO 35:2004	Revision)			
89	IS 3708 (Part 7):	METHODS OF TEST FOR		_	Identical under dual
	2022	NATURAL RUBBER LATEX			numbering
	ISO 506:2020	PART 7 DETERMINATION OF			
	ISO 506:2020	VOLATILE FATTY ACID			
		NUMBER Third Revision			
90	IS 3708 (Part 8):	Methods of test for natural rubber		-	Identical under dual
	2018	latex: Part 8 rubber, raw natural			numbering
	ISO 1656 : 2014	and rubber latex, natural -			
	ISO 1656:2014	Determination of nitrogen content			
		(Third Revision)			
91	IS 3708 (Part 9):	Methods of test for natural rubber		-	Identical under dual
	, ,	latex: Part 9 determination of total			numbering
	ISO 247 : 2006	ash (Third Revision)			
	ISO 247:2006				
92	IS 3708 (Part 10):	METHODS OF TEST FOR		-	Identical under dual
	2023	NATURAL RUBBER LATEX			numbering
	ISO 1802:1992	PART 10 NATURAL RUBBER			
	ISO 1802:1992	LATEX CONCENTRATE			
		DETERMINATION OF BORIC			
		ACID CONTENT			
93	IS 3708 (Part 11):	Methods of test for natural rubber	July, 2017	-	Indigenous
	2001	latex: Part 11 determination of	•		
	Reviewed In: 2017	magnesium (Direct Titration			
		Method) [nrl:18] (Second			
		Revision)			
	IC 422 (Dart 7)	METHODS OF TEST FOR		-	Identical under dual
94	IS 433 (Part 7):	METHODS OF TEST FOR			

			Ī		
	ISO 8033:2016	TUBING HOSES AND HOSE			
	ISO 8033:2016	ASSEMBLIES PART 7 RUBBER			
		AND PLASTICS HOSES			
		DETERMINATION OF			
		ADHESION BETWEEN			
		COMPONENTS			
95	IS 443 : 2022	METHODS OF TEST FOR		-	Identical under dual
	ISO 7326:2016	RUBBER AND PLASTICS �			numbering
	ISO 7326:2016	TUBING, HOSES AND HOSE			8
	150 7520.2010	ASSEMBLIES PART 1 RUBBER			
		AND PLASTICS HOSES "i,1/2			
		ASSESSMENT OF OZONE			
		RESISTANCE UNDER STATIC			
06	IC 442 (D- + 2)	CONDITIONS (Fourth Revision)			Tilanda alam dan daril
96	IS 443 (Part 2):	METHODS OF TEST FOR		-	Identical under dual
	2023	RUBBER AND PLASTICS			numbering
	6801:2021	TUBING HOSES AND HOSE			
	6801:2021	ASSEMBLIES PART 2 RUBBER			
		AND PLASTICS HOSES			
		DETERMINATION OF			
		VOLUMETRIC EXPANSION			
97	IS 443 (Part 3):	METHODS OF TEST FOR		-	Identical under dual
	2023	RUBBER AND PLASTICS			numbering
	1402:2021	TUBING HOSES AND HOSE			
	1402:2021	ASSEMBLIES PART 3 RUBBER			
		AND PLASTICS HOSES AND			
		HOSE ASSEMBLIES			
		HYDROSTATIC TESTING			
98	IS 443 (Part 4):	METHODS OF TEST FOR		-	Identical under dual
	2022	RUBBER AND PLASTICS �			numbering
	ISO 8031:2020	TUBING, HOSES AND HOSE			8
	ISO 8031:2020	ASSEMBLIES PART 4 RUBBER			
	150 0031.2020	AND PLASTICS HOSES AND			
		HOSE ASSEMBLIES ï;½			
		DETERMINATION OF			
		ELECTRICAL RESISTANCE			
		AND CONDUCTIVITY (Fourth			
00	TG 442 (D 5)	Revision)			
99	IS 443 (Part 5):	METHODS OF TEST FOR		-	Identical under dual
	2022	RUBBER AND PLASTICS			numbering
	7662:1988	TUBING HOSES AND HOSE			
	7662:1988	ASSEMBLIES PART 5 RUBBER			
		AND PLASTICS HOSES			
		DETERMINATION OF			
		ABRASION OF LINING First			
		Revision			
100	IS 443 (Part 6):	METHODS OF TEST FOR		-	Identical under dual
	2022	RUBBER AND PLASTICS			numbering
	6803 : 2017	TUBING HOSES AND HOSE			
	6803:2017	ASSEMBLIES PART 6 RUBBER			
		AND PLASTICS HOSES AND			
		HOSE ASSEMBLIES			
		HYDRAULIC PRESSURE			
		IMPULSE TEST WITHOUT			
		FLEXING First Revision			
101	IS 443 (Part 8):	METHODS OF TEST FOR		_	Identical under dual
101	2023	RUBBER AND PLASTICS		-	numbering
	4671:2022	TUBING HOSES AND HOSE			numbering
	4671:2022	ASSEMBLIES PART 8 RUBBER			
	40/1:2022	ASSEMBLIES PART & RUBBER			

		AND PLASTICS HOSES AND			
		HOSE ASSEMBLIES METHODS			
		OF MEASUREMENT OF THE			
		DIMENSIONS OF HOSES AND			
		THE LENGTHS OF HOSE			
		ASSEMBLIES ISO 4671 : 2022			
		IDT			
102	IC 442 (Dowt 0)	METHODS OF TEST FOR			Identical under dual
102	IS 443 (Part 9):			-	
	2023	RUBBER AND PLASTICS			numbering
	7233:2021	TUBING HOSES AND HOSE			
	7233:2021	ASSEMBLIES PART 9 RUBBER			
		AND PLASTICS HOSES AND			
		HOSE ASSEMBLIES			
		DETERMINATION OF			
		RESISTANCE TO VACUUM ISO			
		7233 : 2021 IDT			
103	IS 443 (Part 10):	METHODS OF TEST FOR		-	Identical under dual
	2023	RUBBER AND PLASTICS			numbering
	10619-1:2017	TUBING HOSES AND HOSE			
	10619-1:2017	ASSEMBLIES PART 10			
		RUBBER AND PLASTICS			
		HOSES AND TUBING			
		MEASUREMENT OF			
		FLEXIBILITY AND STIFFNESS			
		BENDING TESTS AT AMBIENT			
		TEMPERATURE ISO 10619-1:			
		2017 IDT			
104	IS 443 (Part 11):	METHODS OF TEST FOR			Identical under dual
104				-	
	2023	RUBBER AND PLASTICS			numbering
	10619-2:2021	TUBING HOSES AND HOSE			
	10619-2:2021	ASSEMBLIES PART 11			
		RUBBER AND PLASTICS			
		HOSES AND TUBING			
		MEASUREMENT OF			
		FLEXIBILITY AND STIFFNESS			
		BENDING TESTS AT SUB-			
		AMBIENT TEMPERATURES			
		ISO 10619-2 : 2021 IDT			
105	IS 4511 (Part 1):	Methods of test for styrene -	January, 2019	-	Indigenous
		Butadiene rubber (Sbr) latices: Part			
	Reviewed In: 2019	1 determination of dry polymer			
		content sbrl : 1 (First Revision)			
106	IS 4511 (Part 2):	Methods of test for styrene -	January, 2019	-	Indigenous
	1986	Butadiene rubber (Sbr) latices: Part			
	Reviewed In: 2019	2 determination of density sbrl:6			
		(First Revision)			
107	IS 4511 (Part 3):	Methods of test for styrene -	January, 2019	-	Not Equivalent
		Butadiene rubber (Sbr) latices: Part	_		1
	Reviewed In: 2019	3 determination of volatile			
		unsaturates [sbrl:8] (First Revision)			
108	IS 4511 (Part 4):	Methods of test for Styrene		_	Identical under dual
	2023	Butadiene Rubber SBR Latices			numbering
	ISO 3136:1983	Part 4 Determination of bound			
	ISO 3136:1983	Styrene			
109	IS 4511 (Part 5):	Method of test for styrene -	January, 2019	<del> </del> _	Identical under dual
109	2005	Butadiene rubber (Sbr), latices:	January, 2019	_	numbering
	2003 ISO 7781	Part 5 determination of soap and			numbering
	Reviewed In: 2019	-			
		organic - Acid content (Second			
$\vdash$	ISO 7781	Revision)		+	+

l 110	L 10 1511 (D		2010	1	l www.
110	IS 4511 (Part 6):	Methods of test for styrene -	January, 2019	-	Not Equivalent
	1987	Butadiene rubber (Sbr) latices: Part			
	Reviewed In : 2019	6 determination of high - Speed			
111	ISO 2006-1:2009	mechanical stability	Y 2010		N. D. J. J.
111	IS 4518 (Part 1):	Methods of tests for styrene -	January, 2019	-	Not Equivalent
	1967	Butadiene rubbers (Sbr): Part 1			
	Reviewed In: 2019	determlNatlOn of volatile matter,			
	ASTM D1416:1989	, 5			
		antioxidants, bound styrene and			
		mooney viscosity	* ***		
112	IS 4518 (Part 2):	Methods of test for styrene -	January, 2019	-	Not Equivalent
	1971	Butadiene rubbers: Part ii			
	Reviewed In: 2019	determination of solvent extract			
112	ASTM D 1416	and oil content	Y 2010		N. D. I. I.
113	IS 5599 : 1999	Rubber - Raw,naturaland synthetic	January, 2019	-	Not Equivalent
	Reviewed In: 2019	- Methods for sampling and sample			
	ISO 1795	preparation (First Revision)	Y 2010	ļ	
114	IS 6306 : 1971	Methods of test for reclaimed	January, 2019	2	Indigenous
117	Reviewed In : 2019	rubber	T-1 2017	1	T 1'
115	IS 7086 (Part 1):	Methods of sampling and test for	July, 2017	1	Indigenous
	1973	rubber compounding ingredients,:			
116	Reviewed In : 2017	Part 1	I. 1. 2017	1	T., 31
116	IS 7498 : 1985	Methods of sampling and test for	July, 2017	-	Indigenous
117	Reviewed In : 2017	carbon black (First Revision)			Identical under dual
117	IS 7499 : 2023 1658:2022	NATURAL RUBBER NR - EVALUATION PROCEDURE		-	Identical under dual
	1658:2022	(Third Revision)			numbering
118	IS 7888 : 1976	Methods of test for flexible	January, 2019		Not Equivalent
110	Reviewed In : 2019	polyurethane foam	January, 2019	_	Not Equivalent
	ASTM D1565,BS	poryuremane roam			
	3667 P-1and P-2 ,BS				
	3667 P-3and P-10,				
119	IS 8683 : 1977	Methods of test for raw	January, 2019	_	Not Equivalent
117	Reviewed In: 2019	acrylonitrile butadiene rubber	Junuary, 2019		Trot Equivalent
	ISO 247,ISO 289,				
	ISO 1407				
120	IS 9316 (Part 1):	METHODS OF TEST FOR		_	Identical under dual
	2023	RUBBER LATEX PART 1			numbering
	1409:2020	DETERMINATION OF			
	1409:2020	SURFACE TENSION RL : 1 ISO			
		1409:2020 IDT			
121	IS 9316 (Part 2):	Methods of test for rubber latex::	January, 2019	1	Identical under dual
	1987	Part 2 determination of viscosity	•		numbering
	Reviewed In: 2019	(Rl:2) (First Revision)			
	ISO 1652:2011				
122	IS 9316 (Part 2):	RUBBER LATEX �		-	Identical under dual
	2024	METHODS OF TEST PART 2			numbering
	ISO 1652:2011	DETERMINATION OF			
	ISO 1652:2011	VISCOSITY (Second Revision )			
123	IS 9316 (Part 3):	Methods of test for rubber latex:	January, 2019	1	Not Equivalent
	1987	Part 3 determination of coagulum			
	Reviewed In: 2019	content (Sieve Residue) [rl:3] (First			
L	ISO 706:1985	Revision)			
124	IS 9316 (Part 4):	METHODS OF TEST FOR		-	Identical under dual
	2023	RUBBER LATEX PART 4			numbering
	124:2014	DETERMINATION OF TOTAL			
	124:2014	SOLIDS CONTENT RL: 4 ISO			
		124:2014 IDT			
125	IS 9316 (Part 5):	Methods of test for rubber latex:	February, 2024	-	Identical under dual
I	I	ı		I	I

	2013 ISO 123:2001 Reviewed In : 2024	Part 5 drawing of samples [rl : 5] (Second Revision)			numbering
	ISO 123:2001				
126	IS 9316 (Part 6): 2017 ISO 976: 2013 ISO 976:2013	Methods of test for rubber latex: Part 6 determination of pH [ rl : 6 ] (Second Revision)		- Identical under dual numbering	
127	IS 9316 (Part 7): 1987 Reviewed In: 2019 ISO/R 1654:1971	Methods of test for rubber latex: Part 7 determination of total copper [rl:7]	January, 2019	-	Not Equivalent
128	IS 9316 (Part 8): 2023 1657:1986 1657:1986	METHODS OF TEST FOR RUBBER LATEX PART 8 DETERMINATION OF TOTAL IRON ISO 1657:1986 IDT		-	Identical under dual numbering
129	IS 9316 (Part 9): 1987 Reviewed In: 2019 ISO 1655:1975	Methods of test for rubber latex: Part 9 determination of total manganese [rl:9]	January, 2019	-	Not Equivalent

# **Standards under Development**

	Projects Approved				
SI. No.	Doc No.	Title			
	No Records Found				

Preliminary Draft Standards		
SI. No.	Doc No.	Title
No Records Found		

		Drafts Standards in WC Stage
SI. No.	Doc No.	Title
No Records Found		

Draft Standards Completed WC Stage		
SI. No.	Doc No.	Title
1	PCD 29 (24828)	METHODS OF TEST FOR VULCANIZED RUBBERS PART 20 RESISTANCE TO OZONE
		CRACKING STATIC STRAIN TEST
2	PCD 29 (24829)	METHODS OF TEST FOR VULCANIZED RUBBERS PART 26 DETERMINATION OF
		SHEAR MODULUS AND ADHESION TO RIGID PLATES QUADRUPLE-SHEAR
		METHODS
3	PCD 29 (24833)	STYRENE-BUTADIENE RUBBER SBR EMULSION AND SOLUTION-POLYMERIZED
		TYPES EVALUATION PROCEDURES
4	PCD 29 (24834)	RECLAIMED RUBBER DERIVED FROM PRODUCTS CONTAINING MAINLY NATURAL
		RUBBER EVALUATION PROCEDURE
5	PCD 29 (24835)	RECLAIMED ISOBUTENE-ISOPRENE IIR RUBBER EVALUATION PROCEDURE

Finalized Draft Indian Standard		
SI. No.	Doc No.	Title
No Records Found		

Finalized Draft Indian Standards under Print		
SI. No.	Doc No.	Title
1	PCD 29 (22802)	STYRENE BUTADIENE RUBBER METHODS OF TEST PART 4 DETERMINATION OF
		THE MICROSTRUCTURE OF SOLUTION-POLYMERIZED SBR Section 1 1H-NMR AND IR
		WITH CAST-FILM METHOD
2	PCD 29 (22803)	STYRENE BUTADIENE RUBBERS METHODS OF TEST PART 4 DETERMINATION OF
		THE MICROSTRUCTURE OF SOLUTION-POLYMERIZED SBR Section 2 FTIR WITH ATR
		METHOD
3	PCD 29 (22805) Revision	METHODS OF TEST FOR NATURAL RUBBER LATEX PART 6 DETERMINATION OF
	of: IS 3708:1985	MECHANICAL STABILITY second revision
4	PCD 29 (22807)	STYRENE BUTADIENE RUBBERS METHODS OF TEST PART 3 DETERMINATION OF
		BOUND STYRENE CONTENT REFRACTIVE INDEX METHOD
5	PCD 29 (22871)	Methods of Test for Rubber Part 2 Determination of styrene content Nitration method

Total Published Standards:124 Total Standards Under development:10

## **Aspect Wise Report**

Product: 0
Code of Practices: 0
Methods of Test: 125
Terminology: 0
Dimensions: 1
System Standard: 0
Safety Standard: 0
Others: 1

Service Specification : 0 Process Specification : 0 Unclassified : 0

## Annexure-I :List of Indian Standards Withdrawn/Superseded

IS 12656 : 2014	Rubber or plastics hoses and tubing - Bending tests First Revision
ISO 10619-1:2011	
Reviewed In: 2019 ISO	
10619-1 : 2011	
IS 12657: 2014	Rubber and plastics hoses - Subambient temperature flexibility tests First Revision
ISO10619-2:2011	
Reviewed In: 2019 ISO	
10619-2 : 2011	
IS 15913 : 2011	Rubber and plastics hoses and hose assemblies - Methods of measurement of the dimensions of
Reviewed In: 2021 ISO	hoses and the lengths of hose assemblies
4671:2007	
IS 16209: 2014	Rubber and plastics hoses and hose assemblies - Determination of resistance to vacuum
ISO 7233 : 2006	
Reviewed In: 2019 ISO	
7233 : 2006	
IS 3400 (Part 8): 1983	Methods of test for vulcanized rubbers Part 8 resistance to crack - Growth First Revision
Reviewed In: 2017	
IS 3400 (Part 10): 1977	Methods of test for vulcanized rubbers Part x compression set at constant strain First Revision
eviewed In: 2019 ISO 815	
IS 3400 (Part 14): 1984	Methods of test for vulcanized rubbers Part 14 adhesion of rubber to metal First Revision
Reviewed In: 2019 ISO	
813,ISO 814,ISO 5600	
IS 3400 (Part 17): 1974	Methods of test for vulcanized rubbers Part xvii tear strength - Angular test piece
Reviewed In: 2019 ASTM	
D 624	
•	Reviewed In: 2019 ISO

9	IS 3400 (Part 23): 2002	Methods of Test for Vulcanized Rubbers - Part 23 Rubber - Determination of Indentation
	ISO 7619	Hardness by Means of Pocket Hardness Meters
	Reviewed In: 2017	
10	IS 3400 (Part 23/Sec 1):	Methods of test for vulcanized rubbers Part 23 rubber - Determination of indentation hardness by
	2018	means of pocket hardness meters section 1 durometer method Shore Hardness First Revision
	ISO 7619-1 : 2010	
	ISO 7619-1:2010	
11	IS 7016 (Part 1): 1982	Methods of test for coated and treated fabrics Part 1 determination of roll characteristics First
	Reviewed In: 2019 ISO	Revision
	2286:1972	
12	IS 7016 (Part 3): 1981	Methods of test for coated and treated fabrics Part 3 determination of tear strength First Revision
	Reviewed In: 2019	
13	IS 7016 (Part 6): 1984	Methods of test for coated and treated fabrics - Part 6 determination of bursting strength First
	Reviewed In: 2019 ISO	Revision
	3303:1979	

Annexure-II :List of Indian Product Standards		
SI. No.	IS No. & Year	Title
51.110.	15 110. <b>&amp; 1</b> cui	
No Records Found		