DETAILS OF TEST FACILITIES AVAILABLE AT NTH (ER), KOLKATA

NAME OF	PRODUCT/	TEST/CALIBRATION	REMARKS
LABORATORY	MATERIAL OF	FACILITIES	
	TEST	AVAILABLE	

CHEMICAL – METAL Carbon Steel Carbon, Sulphur, Phosphorous, IS : 228

Silicon, Manganese.

Alloy Steel Carbon, Sulphur, Phosphorous, IS: 228

Manganese, Nickel, Chromium

Tungsten, Vanadium, Molybdenum, Cobalt,

Copper

Cast Iron, Pig Iron Total Carbon, Graphitic, IS:228

Carbon, Combined Carbon Silicon, Manganese, Sulphur,

Phosphorous

Ferro-Chrome Full tests IS:1170
Ferro-Manganese Full tests IS:1171
Ferro- Full tests IS:1469

Molybdenum

Ferro-Niobium Full tests IS:3014 Fero-Phosphorous Full tests IS:1471 Ferro-Silicon Full tests ls:1110 Ferro-Tungsten Full tests IS:1467 Ferro-Vanadium Full tests IS:1466 Aluminium, Full tests IS:20

Aluminium alloy like cast aluminium

for utensil

Wrought Full tests IS:21

aluminium for

utensil

Aluminium and Full tests IS:617

Aluminium alloy

Ingots and casting Full tests IS:737

for general engineering

purpose, Wrought Aluminium and Aluminium alloys plate for general engineering

purpose

Antimony metal Full tests IS:211 Brass & Bronzes Copper, Tin, Lead, Iron as per Zinc, Nickel, Manganese, standard Gun metal method of

test

NAME OF LABORATORY	PRODUCT/MATERIAL OF TEST	TEST/CALIBRATION FACILITIES AVAILABLE	REMARKS
Cupro- Manganese, Cupro-Nickel, Silicon-Bronze,	Aluminium, Silicon, Antimony, Phosphoro Arsenic	As per standard ous, method of test	

Aluminium-Bronze, Monel Metal, Bell-Metal, German

Silver		
Copper Alloys	Cadmium, Arsenic, Bismur Lead, Phosphorous, Silver.	•
Lead & Lead Alloys	Full tests	IS:27
Antimonial Lead	Full tests	IS:1654
Tin Metal	Full tests	IS:26
Tin Alloy	Full tests	IS:1357
Type Metal		
Soft Solder	Full tests	IS:193
Antifriction	Full tests	IS:25
Bearing Alloy		
White Metal,	Full tests	As per standard
Babbit-Metal,		method of test
wood's alloy		
Zinc Metal, Zinc	Full tests	IS:209
Alloys, Diecasting		
C'I	F. Harris	A

As per standard Silver Full tests

method of test Gold laces

Gold, Silver IS:9925 As per Gold Full tests standard

method of test

Iron Ores. Full tests As per manganese Ore. standard

Copper Ore, method of test

Galena, Bauxite Kyanite Silimanite, Illemenite, Quartz, Mica, Soapstone, Barytes, Talc, China Clay. Fullers, Earth, Pagmetite, Rock Silicate Lime Stone, Dolomite,	Full tests Full tests	As per standard method o	of test
Gypsum,			
Selenite Magnesium Metal	Full tests	As per sta	andard
Mercury Metal	Mercury and Vanadium content	method of As per Analaror B. P. Stan	of test
Rutile Galvanization test	Full tests Mass of zinc coating in g/	IS:4104	
Chemical,	Calorific value of		IS:1350(II)
OIL & FUEL	coal/coke Proximate analysis of	1970 Full tests 1984	IS :1350(I)
	coal/coke Determination of ulphur in coal/coke	Full tests 1969	IS:1350(III)
<u>Г</u> Р	Determination of Phosphorous in Coal/coke	Full tests 1979	IS;1350(V)
	Graphite, flake	Full tests	IS:495-1967
a	or Lubricants Graphite for use us foundry facing naterial	Full tests	IS:1305-1963
	retroleum coke	Full tests 1977	IS:85002-
Ir	aving Bitumen ndustrial	Full tests	IS:73-1992 IS:702-1988
В	itumen itumen mulsion for	Full tests	IS:8887-1995

roads (Cationic type) Bitumen Emulsion Full tests IS:3317-1965 Bitumen Mastic **Full Tests** IS: 1195-1978 for flooring Bitumen Mastic Full tests IS:3037-1986 for water proofing on roofs Bitumen Mastic IS:5317-1969 Full tests for Bridge Decking or roads Hot applied Full tests IS:1834-1984 sealing compounds for joints in concrete Sealing Full tests IS:3116-1965 compound for Lead Acid Batteries Creosote oil for Full tests IS:218-1983 use as wood preservatives (Type I & II) Crude coal tar for Full tests IS:212-1983 general use Road Tar Full tests IS:215-1981 Coal Tar pitch IS:216-1961 Full tests Cut back Bitumen Full tests IS:217-1961 Preformed fillers Full tests IS:1838-1983 for expansion joints Anthracene oil Full tests IS:218-1983 Linseed oil raw & Full tests IS:75-1973 refined Linseed Oil, Full tests IS:77-1976 boiled for paints Tung oil for Full tests IS:80-1991 paints Dehydrated Full tests IS:81-1989 Castor oil for paints Oil Cylinder Full tests IS:1589-1994 Automotive Full tests IS:8654-1986

hydraulic brake fluid		
Oil of Lemon grass	Full tests	IS:327-1991
Oil for	Full tests	IS:328-1992
Eucalyptus Oil of	Full tests	IS:329:1993
Sandalwoold New insulating	Full tests	IS:335-1993
oils Grease No. O,	Full tests	IS:408-1981
graphited Castrol oil	Full tests	IS:435-1973
General Purpose machinery and	Full tests	IS:493(I)- 1981
spindle oil General purpose	Full tests	IS:439(II)
machinery & spindle oil	. dii teete	1981
Internal combustion	Full tests	IS:13656- 1993
engine crankease		1993
(gasoline and diesel)		
Oil of citronella Palmarosa oil	Full tests Full tests	IS:512-1988 IS:526-1988
Oil of Terpentine	Full tests	IS:533-1973
Coconut oil	Full tests	IS:542-1968
Cottonseed oil	Full tests	IS:543:1968
Groundnut oil	Full tests	IS:544-1968
Mahua oil	Full tests	IS:545-1968
Mustard oil	Full tests	IS:546-1975
Sesame oil	Full tests	IS:547-1968
Geranium oil	Full tests	IS:587-1968
Mosquito	Full tests	IS:588-1988
larvicidal oil		
Blown rape (or	Full tests	IS:595-1954
mustard) oil		(Reaffirmed 1992)
Automotive and other general	Full tests	IS:506-1993
purpose General purpose grease for defence application		IS:507-1993
application		

\mathbf{C}	Grease, graphited	Full tests		IS:508-1993
Δ	Intifriction	Full tests		IS:719-1990
b	earing grease			
L	ocomotive	Full tests		IS:720-1986
9	rease			
C	Oil of ginger	Full tests	IS:761-1988	

NAME OF LABORATORY	PRODUCT/MATERIAL OF TEST	TEST/CALIBRATION FACILITIES	REMARKS
		AVAILABLE	
			<u>, </u>
Sealing wax	Full tests	IS:868-1956	
Animal tallow	Full tests	IS:887-1977	
Lithium base	Full tests	IS:7623-1993	
grease for			
industrial purpose		10 4040 4007	
Turbine	Full tests	IS:1012-1987	
Indicating oil	Full tooto	10.1002 1070	
Industrial white oil	Full tests	IS:1083-1978	
Lubricants for	Full tests	IS:1088-1987	
clock like	Tull (Csts	13.1000-1707	
mechanisms and			
precision			
instruments			
Cutting oil	Full tests	IS:1115-1994	
Soluble			
Gear lubricants	Full tests	IS:1116-1994	
Multripurpose			
gear lubricants			
multripurpose	E 11.	10.4440.4000	
Oil of vetiver	Full tests	IS:1118-1992	
roots Kerosine	Full tests	IS:1177-1996	
Diesel fuels	Full tests	IS:1459-1974	
Bess wax, crude	Full tests	IS:1460-1995	
& refined	i dii tosts	13.1400-1773	
Aviation turbine	Full tests	IS:1571-1992	
fuels, kerosine	. 3 10010		
type			
Motor gasoline	Full tests	IS:2796-1995	

Aviation turbine	Full tests	IS:1587-1984
fuels high flash		
point type		
Oil, cylinder	Full tests	IS:1589-1994
Fuel oils	Full tests	IS:1593-1982
Aviation gasoline	Full tests	IS:1604-1994
Axle oil	Full tests	IS:1628-1986
Stearic acid	Full tests	IS:1675-1971
technical		
Oleic acid,	Full tests	IS:1676-1960
technical		
Shoe polish, paste	Full tests	IS:1746-1992
Jute patching oil	Full tests	IS:1758-1986
Vegetable tallow	Full tests	IS:1780-1961
Citral Full tests	IS:1799-1981	

NAME OF LABORATORY	PRODUCT/MATERIAL OF TEST	TEST/CALIBRATION FACILITIES AVAILABLE	REMARKS
Geraniol	Full tests	IS:1800-1989	
Citronellol	Full tests	IS:1801-1989	
Cutting oil, neat	Full tests	IS:3065-1985	
Oil, hydraulic	Full tests	IS:3098-1983	
mineral oil type			
Terpineol	Full tests	IS:3124-1975	
Musk ambrette	Full tests	IS:3131-1986	
Menthol	Full tests	IS:3134-1965	
Musk xyol	Full tests	IS:3145-1986	
Oil of celery seed		IS:3146-1991	
Linalyl acetone	Full tests	IS:3180-1965	
Musk ketone	Full tests	IS:3228-1986	
Sorbitol solution	Full tests	IS:3987-1983	
(70 percent) for			
cosmetic industry		10.0044.4005	
Geranyl acetate	Full tests	IS:3241-1985	
Ricebran oil	Full tests	IS:3448-1984	
Sunflower oil	Full tests	IS:3491-1965	
Ghee	Full tests	IS:3508-1966	
Water soluble	Full tests	IS:3520-1979	
sodium			
Carboxymethyl cellulose			
Cellulose			

Oil mineral colza	Full tests		IS:3433-1965
Oil seeds	Full tests		IS:3579-1966
Camphor	Full tests		IS:3584-1984
Tea	Full tests		IS:3633-1972
Foundry core oils	Full tests		IS:3666-1966
requiring baking	i dii tests		13.3000 1700
Ball point pen	Full tests		IS:3707-1984
refils	i uli tests		13.3707-1704
	Full to ata		IC-20/E 1070
Beer	Full tests		IS:3865-1978
Methyl cinnamate			IS:3926-1986
Isobutyl phenyl	Full tests		IS:3927-1986
accetate			
Styraly acetate	Full tests		IS:3928-1986
Skin powder	Full tests		IS:3959-1966
Cutch	Full tests		IS:3967-1975
Sodium lauryl	Full tests		IS:3986-1988
sulphate for			
cosmetic industry			
Bees wax,	Full tests		IS:4028-1982
bleached for	Tan tests		13.1020 1702
cosmetic industry	Full tooto	IC. 40E 4 10//	
Neatsfoot oil	Full tests	IS:4054-1966	

NAME OF	PRODUCT/MATERIAL	TEST/CALIBRATION	REMARKS
LABORATORY	OF TEST	FACILITIES	
		AVAILABLE	
Kusum oil	Full tests	IS:4088-1977	
Dextrin for use in	Full tests	IS:4269-1981	
foundries			
Vanillin	Full tests	IS:4272-1986	
Soyabean oil	Full tests	IS:4276-1977	
Sunflower oil	Full tests	IS:4277-1975	
Kattha	Full tests	IS:4359-1967	
Lubricating oils	Full tests	IS:4578-1989	
for refrigeration			
machinery			
Phenyl ethyl	Full tests	IS:4603-1991	
alcohol			
Ethyl Para	Full tests	IS:4652-1987	
Hydroxybenzoate			
for cosmetic			
industry			

Paraffin wax Neem Kernal oil and depulped	Full tests Full tests		IS:4654-1993 IS:4765-1975
neem seed oil Leather sole and edge wax polished	Full tests		IS:4779-1985
Petrolium jelly for cosmetic industry	Full tests		IS:4887-1980
Honey	Full tests		IS:4941-1974
Household	Full tests		IS:4955-1993
laundry detergent			
powders	.		10 1000(1)
Foam concentrate	e Full tests		IS:4989(I) 1985
(compound) for producing			1985
mechanical foam			
for fire fighting,			
Part - I, Protein			
foam,			
Foam concentrate	e Full tests		IS:4989 (II)-
for producing			1984
mechanical foam			(Reaffirmed
for fire fighting			1995)
Part - 2, Aqueous			
film forming			
foam (AFFF)	S Full toots	IC. 4000/I	ш
Foam concentrate	e Full tests	IS:4989(I	11)-

NAME OF LABORATORY	PRODUCT/MATERIAL OF TEST	TEST/CALIBRATION FACILITIES AVAILABLE	REMARKS
(compound) for		1987	

producing mechanical foam for fire fighting part - 3 fluoro protein foam Phthalic anhydride Full tests

IS:5158-1987

technical

Chloroform, Pure Full tests IS:5296-1995

& Technical Floor polish,	Full tests	IS:5481-1992
liquid		
Metal polish,	Full tests	IS:5487-1992
liquid		
Ethylene oxide	Full tests	IS:5573-1984
Monochloro	Full tests	IS:5592-1981
acetic acid		
Tobacco seed oil	Full tests	IS:5614-1981
Oil of Pine	Full tests	IS:5757-1992
Antifreeze	Full tests	IS:5759-1992
coolant	Full to ata	IC.EO/O 1000
Metal polish, paste	Full tests	IS:5969-1992
Ball point pen	Full tests	IS:5805-1970
ink	Tull tests	13.3003-1770
Raw sugar	Full tests	IS:5975-1970
Plantation white	Full tests	IS:5982-1970
sugar for		
idenfication		
from other sugar		
Para-	Full tests	IS:5992-1970
Dichlorobenzene,		
technical		
Emulsifiable	Full tests	IS:6014-1978
larvicideal oil		
Pyrethrum based		10 5054 4004
Paraformal	Full tests	IS:5271-1984
dehyde	Full toots	IS.E207 1040
Country spirit Ethylene glycol	Full tests Full tests	IS:5287-1969 IS:5295-1985
Perchloro	Full tests	IS:5297-1969
ethylene	Tull tests	13.3277-1707
(Tetrachloro		
ethylene)		
Lanolin, Full tes	sts IS:5340-1969	

NAME OF	PRODUCT/MATERIAL	TEST/CALIBRATION	REMARKS
LABORATORY	OF TEST	FACILITIES	
		AVAILABLE	

anhydrous for cosmetic industry Full tests IS:5448-1969 Dextrine for use in textile industry Vegetable tanning Full tests IS:5466-1969 materials IS:5467-1969 Shellac wax Full tests Metal polish, Full tests IS:5487-1969 liquid Automobile Full tests IS:5480-1983 polish paste Full tests Silver polish IS:6271-1992 liquid Oil of terpentine, Full tests IS:6646-1972 solvent grade Oil of cinnamen Full tests IS:6699-1989 leaf Wax-Emulsion Full tests IS:6945-1994 sole leather polish IS:7101-1994 Coconut Full tests diethanolamide Hair oils Full tests IS:7123-1993 Henna powder Full tests IS:7159-1984 IS:7299-1974 Mineral oil for Full tests cosmetic industry Paraffin wax for Full tests IS:7401-1974 explosive and pyrotechnic industry Full tests IS:7523-1974 Soft soap Hexachloro ethaneFull tests IS: 7618-1974 Calcium propionate, Full tests IS:6031-1971 Food grade Scouring Powder IS: 6047-1970 Full tests Temporary corrosion Full tests IS: 6050-1971 preventive, Soft film hot dipping type Interfacial tension of Full tests IS: 6104-1971

IS: 6350-1985

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oil against water Shoe Cream

Full tests

NAME OF THE	PRODUCT/MATERIAL	TEST/C ALIBRATION	REMARKS
LABORATORY	OF TEST	FACILITIES AVAILABLE	

Tooth paste Neutral spirit for alcoholic drink	Full tests Full tests	IS:6356-1978 IS:6613-1972
Dimethyl Phthalate Plasticizer	Full tests	IS:6627-1972
Gear lubricants for enclosed industrial gear drives	Full tests	IS:8406-1985
Household laundry detergent bar	Full tests	IS:8180-1982
Balmolein 1977	Full tests	IS: 8361 E-
Alkayl benzene sulphonic acid	Full tests	IS:8401-1977
Glass cleaner, liquid	Full tests	IS:8540-1986
Polish, paste for floor and wooden furniture	Full tests	IS:8541-1993
Polish for wooden furniture, paste	Full tests	IS:8542-1977
Kokum fat	Full tests	IS:8591-1980
Neem cake for manuring	Full tests	IS:8558-1977
Automotive hydraulic brake fluid, heavy duty	Full tests	IS:8654-1986
Refined automotive internal combustion	Full tests	IS:9048-1982
engine lubricating oil		
Calcium complex grease	Full tests	IS:9136-1978
Lubricants for wire ropes and	Full tests 1979	IS:9182-(I)-

fibre cores		
Lubricants for	Full tests	IS:9182(II)-
wire ropes and	1979	
fibre cores		IS:9182(III)-
	1979	

	1	T	
NAME OF THE	PRODUCT/MATERIAL	TEST/C ALIBRATION	REMARKS
LABORATORY	OF TEST	FACILITIES AVAILABL	E
	Synthetic	Full tests	IS:9458-1980
	detergent for		
	washing woolen		
	& other delicate		
	fabrics		
	Industrial liquid	Full tests	IS:9466-1980
	lubricants		
	Lubricants for	Full tests	IS:9554-1980
	open gears		
	Cutting oil	Full tests	IS:9611-1980
	soluble, clear		
	Spent coffee	Full tests	IS:9616-1980
	grounds fat		
	Iso-Butyl alcohol		IS:9834-1981
	Glycerol	Full tests	IS:9953-1981
	monostearate,		
	food grade		10.00== 1.001
	Rubber seed oil		IS:9955-1981
	Sodium alkyl	Full tests	IS:9985-1981
	benzene		
	sulphonate,		
	technical		10.000.1001
	Grading for	Full tests	IS:9993-1981
	Dhupa Kernels		
	for oil milling		10.1000=
	Polish, liquid	Full tests	IS:10025-
	1981		
	(white), for		
	canvas foot wear	F 11	10 10001
	Lipsalve	Full tests	IS:10284-
	1982	E 11.	10.40057
	Automative	Full tests	IS:10356-
	1982		

internal

combustion		
engine lubricating		
oils from base		
stocks of mixed		
crude		
Para -	Full tests	IS:10377-
1982		
Phenylenediamine		
Fire resistant	Full tests	IS:10532(I)
hydraulic fluids		1983
Fire resistant	Full tests	IS:10532(II)
hydraulic fluids		1983
Fire resistant	Full tests	IS:10532(III)
hydraulic fluids		1983

NAME OF THE	PRODUCT/MATERIAL	TEST/C ALIBRATION	REMARKS
LABORATORY	OF TEST	FACILITIES AVAILABLE	
		·	

Fire resistant	Full tests	IS:10532(IV)
hydraulic fluids		1983
Vanaspati	Full tests	IS:10633-
1986		
Bakery	Full tests	IS:10634-
1986		
shortening		
Acctophenone	Full tests	IS:10634-
1986		
Lauric acid	Full tests	IS:10931-
1984		
Palmitic acid	Full tests	IS:10932-
1984	.	10.40000
Myristic acid	Full tests	IS:10933-
1984	F 11.	10.40000
Bindi (liquid)	Full tests	IS:10998-
1984	FII 44-	IC 10000
Kumkum power	Full tests	IS:10999-
1984	Full tooto	IC.11000
Borax for	Full tests	IS:11023-
1984		
cosmetic industry	Full tosts	IC.11040
Criteri for 1984	Full tests	IS:11068-
1704		

edibility of oil & fat (RBHWD) 1984	Full tests	IS:11069-
Soyabean oil Henna Powder 1984	Full tests	IS:11142-
Synthetic 1985	Full tests	IS:11186-
grinding fluid Phenyl 1984	Full tests	IS:11355-
Napthylamine Fuel oil for use in 1985	Full tests	IS:11488-
Marine diesel engines		
Heavy petroleum 1985	Full tests	IS:11489-
stocks Inhibited type 1986	Full tests	IS:11695-
machinery oils Inhibited type 1986	Full tests	IS:11696-
spindle oils Shoe polish 1987	Full tests	IS:12010-
liquid Semi-acid oil 1986	Full tests	IS:12030-

NAME OF THE LABORATORY	PRODUCT/MATERIA OF TEST	AL	TEST/C ALIBRATION FACILITIES AVAILA		REMARKS
	Soap stock	Full te	2545	IS·12(031-1986
	Palm fatty acids Ricebran fatty acid	Full te	ests	IS:120	067-1987 068-1987
	Coconut fatty acids	Full te	ests	IS:120	069-1987
	Aluminimum polish for liquid for	Full te	ests	IS:12	123-1987

	air craft Rubber seed fatty acids Lithium base	Full tests Full tests	IS:12124-1987 IS:12203-1987
	grease for automative purpose Fountain pen ink	Full tests	IS:220-1988
	Ferro-Gallo Tannage (0.1 percent iron content)	E. W.L.	JC 200 4002
	Ethyl accetate Trichloro ethylene, technical	Full tests Full tests	IS:229-1993 IS:245-1988
	Boric acid for cosmetic industry	Full tests	IS:263-1990
	Laundry soaps Rectified spirit Oil of eucalyptus globules	Full tests Full tests Full tests	IS:285-1992 IS:323-1959 IS:328-1992
	Pentachloro phenol	Full tests	IS:716-1987
	Acetic anhydride Laundry soap powders/Flakes	Full tests Full tests	IS:1235-1988 IS:2887-1983
CHEMICAL	Perfumery materials resinoid benzene	Full tests	IS:3349-1989
GENERAL	Sodium hypochlorite solution	Full tests	IS:11673/92
	Fluorspar Pottassium	Full tests Full tests	IS:2411/63 IS:333/80

NAME OF THE LABORATORY	PRODUCT/MATERIA OF TEST	AL	TEST/C ALIF FACILITIES	BRATION AVAILABLE	REMA	RKS
	permanganate Cement (Chemical analysis)		Full tests		IS:269 455/8 1498/ 8112/ 12269	19 '91 '89,
		8042/	′89,6452/		89,690 8041/	
	Cement Concrete/Mortar, Designation		ent, sand and cement and	~ ~		ASTM
	Plaster	appro	oved		C85-6	6(Re-
	Coarse and find aggregrate test/stone for concrete	Delet	erious mater nic impurities		1973) IS:383	/1970
	Chemical resistant Motor	Sulph	ur		IS:4456 67, 483 68	(P-2)/ 32(P-3)/
	Loose Mineral wool and Glass Wool	Sulph	ur		IS:3144	./92
	Integrated cemen chloride and water proofing		IS:2645/75 ate	Wa	ter	soluble
	compound Water soluble Inorganic wood preservatives		per-Chrome ic acid	Arsenic	IS:401/	82
	Building lime Stone aggregates			•	IS:712/8 IS:2386 VII)/63	
	Asbestos cement	•	ance to acid	<i>J</i> ,	IS:459/6	52

sheet/Building
pipes
Ceramic unglazed -do- IS:4457/67
vitreous acid
resistant
Salt glazed stone -do- IS:651/80
wares pipe & fittings
Chemically Resistance to acid & alkali IS:3006/65
resistant salt
glazed stone ware

NAME OF THE	PRODUCT/MATERIAL	TEST/C ALIBRATION	REMARKS
LABORATORY	OF TEST	FACILITIES AVAILABLE	

pipe and fittings Acid resistance bricks	Resistance to acid	IS:4860/68
Coarse and fine aggregates/sand/stone aggregates Fire bricks Sodium chloride (common salt)	Soundness test (with sodium sulphate & magnesium sulphate) Full chemical requirements -do-	IS:383/70 2386/2(P- V)/63 IS:6/83 IS:253/70, 7972/67, 4408/67
Aluminium Ammonium Sulphate (Ammonium Alum)	Full chemical requirements	IS:259/69
Aluminium Power (for explosives)	Full chemical requirements	IS:438/72
Aluminium Sulphate (non ferric alum)	Full chemical requirements	IS;260/69
Alumino ferrie (Ferric Alum)	Full chemical requirements	IS:299/89
Ammonia Liquor Ammonium Chloride	Full chemical requirements Full chemical requirements	IS:799/78 IS:1113/65
Ammonium Nitrate	Full chemical requirements	IS:4668/67

Activated Alumina	Full chemical requirements	IS:9700/91
Barium Chloride Blanco	Full chemical requirements Full chemical requirements	IS:5288/69 IS:5468/69
Bleaching Powder	Full chemical requirements	IS:1065/89
Boiler water treatment	Full chemical requirements	IS:79232/82
compound Copper Sulphate	Full chemical requirements	IS:261/82
Copper Nitrate	Full chemical requirements	IS:10895/84
Calcium Carbonate	Full chemical requirements	IS:917/76 918/68
Calcium Chloride Caustic Soda	Full chemical requirements Full chemical requirements	IS:1314/84 IS:252/91,
(Sodium Hydroxide	•	376/86
Synthetic Ext IS:6071/86	ractable iron, manganese,	

NAME OF THE LABORATORY	PRODUCT/MATERIAL OF TEST	TEST/C ALIBRATION FACILITIES AVAILABLE	REMARKS
	separators for chloride		
	lead acid batteries Hydrochloric	Full tests	IS:265/93
	Ferrous Sulphate	Full tests	IS:262/67
	Lead Oxide	Full tests	IS:12292/88
	Magnesium Chloride	Full tests	IS:254/62
	Magnesium Sulphate	Full tests	IS:2730/77
	Manganese Dioxide	Full tests	IS:5713/70
	Nickel Salt for Electro Plasting	Full tests	IS:1809/80
	Phosphorous red	Full tests	IS:2012/61
	Potassium Bichromate	Full tests	IS:250/64
	Potassium Cyanide	Full tests	IS:6358/71
	Potassium metabisulphite	Full tests	IS:500/63
	Silver Nitrate (Photographic	Full tests	IS:2318/74

grade Silver Nitrate	Full tests	IS:2214//62
(Pure & AR	Tun tosts	10.221 177 02
Grade)		
Soda Lime	Full tests	IS:5321/69
Sodium	Full tests	IS:4200/67
Aluminate		
Sodium	Full tests	IS:2124/62,
Bichromate		249/79
Sodium	Full tests	IS:296/74
Carbonate		
Sodium	Full tests	IS:1919/61
Hydrosulphite		
Sodium Sulphate	Full tests	IS:255/82
(Anhydrous)		
Sodium Sulphide	Full tests	IS:297/70
Trisodium	Full tests	IS:537/92
Phosphate		
Glassy Sodium	Full tests	IS:574/89
Metaphosphate		
Sodium Tri	Full tests	IS:6100/84
Polyphosphate		

NAME OF THE	DD ODLIGEA (A TEDIA)	TECTION AT IND A TION	DEMARKO
NAME OF THE	PRODUCT/MATERIAL	TEST/C ALIBRATION	REMARKS
LABORATORY	OF TEST	FACILITIES AVAILABLE	
	Strontium Nitrate	Full tests	IS:5671/84
	Tin Salt for	Full tests	IS:3026/68
	Electro Plating		
	Zinc Chloride	Full tests	IS:701/66
	Zinc Oxide for	Full tests	IS:2850/77
	cosmetic industry		
	Zinc oxide for	Full tests	IS:1880/67
	Electro Plating		
	Zinc Oxide for	Full tests	IS:3399/65
	Rubber Industry		
	Fly Ash	Full tests	IS:3812/81
	Sulphuric Acid	Full tests	IS:266/93
	Nitric Acid	Full tests	IS:264/68
	Disinfectant	Full tests	IS:1061/97
	Fluids		
	Deodourising	Full tests	IS:10758/83
	cum-Disinfectant		

Fluids		
Ammonium	Full tests	IS:1114/64
Chloride		
Ammonium	Full tests	IS:4830/68
Phosphate		
Sulphate		
Ammonium	Full tests	IS:5407/69
Phosphate		
Sulphate Granular		
Ammonium	Full tests	Fertilizer
Phosphate.		control Act
Sulphate, Nitrate		1985
Ammonium	Full tests	IS:826/80
Sulphate		
Ammonium	Full tests	IS:256/62
Sulphate Nitrate		
Bone Meal (Raw)	Full tests	IS:853/64
Calcium	Full tests	IS:2409/71
Ammonium		
Nitrate		
Complex	Full tests	Fertilizer
Fertilizer (NPK)		Control Act
5.	-	1957
Diammonium	Full tests	IS:6448/71
Phosphate	F 11	10.5.400.770
Fused Calcium	Full tests	IS:5408/69
Magnesium		
Phosphate		

NAME OF THE	PRODUCT/MATERI	AL	TEST/C ALIBRAT		REMARKS
LABORATORY	OF TEST		FACILITIES AVA	ILABLE	
	Nitrophosphate with Potash	Full te	ests	Fertili Cont 1957	izer rol Act-
	Nitrophosphate	Full t∈	ests	IS:71	31/73
	Gypsum for Agriculture use	Full te	ests	IS:60	46/71
	Potassium Chloride (Murate of Potash)	Full te	ests	IS:27	79/80
	Rock Phosphate Fertilizer Control	Full te	ests	Fertili Cont	izer trol Act

Order Sulphate of Potash	Full tests	1957 IS:2764/64
Superphosphate Superphosphate (Tripple)	Full tests Full tests	IS:294/79 IS:1013/72
Urea (Tech & Pure)	Full tests	IS:1781/75
Urea Ammonium Phosphate	Full tests	Fertilizer control Act 1957
Zinc Sulphate (Agriculture Grade)	Full tests	IS:8249/76
Industrial Effluent water	Full tests	IS:2490
Carbon Dioxide Compressed Oxygen for Oxygen content only	All tests except oil conten All tests except moisture	t IS:307/83 IS:309/92
Dissolved Acetylene (Industrial use)	Full tests	IS:308/88
Nitrogen Technical	Full tests	IS:1747/72
Medical Oxygen Chlorpyrifos 20% E. C.	Full tests Full tests	IP IS:8944-78
Quinalphos E. C. Dusting powder, Tech.	Full tests	IS:8028/87 2029/76 8072/76
Aluminium Phosphide Tablet	Full tests	IS:6438

NAME OF THE	PRODUCT/MATERIAL	TEST/C ALIBRATION	REMARKS
LABORATORY	OF TEST	FACILITIES AVAILABLE	

Formulation Pesticide - Aluminium Phosphide Tablet Formulation		
BHC Tech &	Full tests	IS:560/80
Refined BHC (HCH)	Full tests	IS:561/78
Dusting Powder BHC (HCH) Emulsifiable	Full tests	IS:632/78
Concentrate BCH (HCH) water Dispersible	Full tests	IS:562/78
Chlordane .	Full tests	IS:2864/64
Dusting Powder Chlordane Emulsifiable	Full tests	IS:2682/66
Concentrate Chlordane, Tech, Copper Oxychloride	Full tests Full tests	IS:2863/64 IS:1506/67
Dusting Powders Copper Oxychloride water dispersible	Full tests	IS:1507/77
Powder Copper Oxychloride, Tech	Full tests	IS:1486/78
Cuprous Oxide,	Full tests	IS:1682/73
Tech, D. D. T. Tech. D. D. T. Dusting Powders	Full tests Full tests	IS:563/73 IS:564/84
DDT Emulsifiable	Full tests	IS:663/64
Concentrate DDT Water dispersible	Full tests	IS:565/75

Powder concentrates Diazinon Emulsifiable

Concentrate

Full tests

IS:2861/80

NAME OF THE LABORATORY	PRODUCT/MATERIA OF TEST	AL	TEST/C ALIBRATI FACILITIES AVAI		REMARKS
LADUKATUKI	OF IEST		TACILITIES AVAI	LADLE	
	Diazinon Water dispersible Powder	Full t∈	ests	IS:286	52/64
	Diazinon, Tech	Full te	ests	IS:183	33/80
	Dichloroves Emulsifiable concentrate	Full t∈	ests	IS:52	77/78
	Simazine, Tech	Full te	ests	IS:14 ²	15/94
	Dichlorovos,	Full te	ests	IS:492	29/68
	Tech				
	Phosphamidon water soluble concentrate/ Dem	Full t∈	ests	IS:617	77/81
	cron (W. S. C.				
	Quinalphos Dusting powder	Full te	ests	IS:802	29/76
	Quinalphos, Tech.	Full te	ests	IS:644	14/79
	Sulphur Dusting Powder	Full te	ests	IS:338	33/82
	Sulphur Powder wettabke	Full te	ests	IS:390	05/66
	Thirteen Emulsifiable	Full te	ests	IS:390	04/66

concentrate		
Thiometon	Full tests	IS:4783/68
concentrate		
Thiram Seed	Full tests	IS:4320/67
Dressing		
Formulation		
Thiram water	Full tests	IS:4451/67
dispersible		
Powder		
Thiram, Tech	Full tests	IS:4320/67
Toxaphene, Tech	Full tests	IS:4451/67
Dicofol	Full tests	IS:5279/69
Emulsifiable		
concentrate		
Dicofol Tech	Full tests	IS:5278/69
Dieldrin Tech.	Full tests	IS:1052/62
Dimethoate	Full tests	IS:3903/75
Emulsifiable		
concentrate		
Dimethoate,	Full tests	IS:3902/75
Tech		10 10 11 5
E. D. C. T. Tech	Full tests	IS:634/65

NAME OF THE	PRODUCT/MATERI.	AL TEST/C AL	IBRATION	REMARKS
LABORATORY	OF TEST	FACILITIE	S AVAILABLE	
	Endosulfan Dusting powder	Full tests	IS:432	22/67
	Endosulfan Emulsifiable	Full tests	IS:432	23/80
	concentrate Endosulfan Water dispersible powder	Full tests	IS:432	24/67
	Endosulfan, Tech	Full tests	IS:434	14/78
	24-D, Ethyl Ester Emulsifiable concentrates			243/82
	Carbofuram granules,	Full tests	IS:936	0/80
	encapusulated Ethyl Parathion, Tech.	Full tests	IS:212	28/73

Ethylene Dibromide	Full tests	IS:1311/66
Fenitrothion	Full tests	IS:5281/79
Emulsifiable		
concentrate	E 11.	10 5000 // 0
Fenitrothion, Tech.	Full tests	IS:5280/69
Formothion	Full tests	IS:8026/76
Emulsifiable		13.0020/70
concentrate		
Formothion,	Full tests	IS:8024/76
Tech.	-	10 (100 /70
Heptachlor	Full tests	IS:6429/72
Dusting Powder Heptachlor	Full tests	IS:6439/78
Emulsifiable	Tull (CStS	13.0437770
concentrate		
Heptachlor, Tech	Full tests	IS:6432/72
Malathion	Full tests	IS:2568/73
Dusting Powder	Full tooto	IC.2E/7//2
Malathion Emulsifiable	Full tests	IS:2567/63
concentrate		
Malathion water	Full tests	IS:2569/63
dispersible		
powder		
Malathion Tech,	Full tests	IS:1832/61
Methyl Parathion,	Full tests	IS:2570/63

NAME OF THE	PRODUCT/MATERIA	A L	TEST/C ALIBRATION	1	REMARKS
LABORATORY	OF TEST		FACILITIES AVAILA	BLE	
	Tech	_			
		Full te	ests	IS:849	96/77
	Phorate Tech	Full te	ests	IS:797	76/76
	Phorate Granules	Full te	ests	IS:935	59/80
	Encapsulated				
	Mancozeb, Tech	Full te	ests	IS:870	07/78
	Mancozeb, Water dispersible	Full te	ests	IS:870	08/78
	powder concentrates				

Zinc phosphide, Tech	Full tests	IS:1251/73
Ziram water dispersible powder	Full tests	IS:3901/75
Ziram, Tech water for concrete mixture	Full tests Full tests	IS:3900/75 IS:456/78
Water for industrial purpose	Full tests	IS:3550/65
Water for land Boilers	Full tests	IS:1680/82
Water for Locomotive Boilers	Full tests	IS:2859/77
Water for Marine Boilers	Full tests	IS:1813/61
Water for Paper & Pulp Industry	Full tests	IS:2724/64
Water for Rayon Industry	Full tests	IS:2725/64
Water for storage Batteries	Full tests	IS:1069/64
Water for Swimming Pools	Full tests	IS:3328/65
Water for Tanning Industry	Full tests	IS:4221/67
Water for Textile industry	All tests except Bacteriological test	IS:201/64
Water, Distilled quality	Full tests	IS:1070/77
Drinking water	Full tests S All test except radioactive residue, Pesticides residue, PCB and some micro orga	1

NAME OF THE	PRODUCT/MATERIAL	TEST/C ALIBRATION	REMARKS
LABORATORY	OF TEST	FACILITIES AVAILABLE	

Drinking water Bacteriological efficasy test purifying equipment (UV and and Non-UV

	system) UPVC Casing pipe (Effect on water test)	All tests	IS:12818/92 (cl. No. 9.7) and 4958/88
CHEMICAL PAINT	Dry pigments for paints Zinc Oxide Carbon black Iron Oxide Lead and Scarlet chrome Zinc Chrome Brunswick Green Ultramarine blue Prussion blue Red Lead Titanium Dioxide Organic pigments Oil paste for paints, white Liquid drier for paints Putty for use on wooden frames	All tests	IS:35/1976 IS:40/1971 IS:44/1991 IS:50/1980 IS:51/1979 IS:53/1988 IS:55/1970 IS:56/1993 IS:57/1989 IS:411/1991 IS:3574/1966 IS:96/1985 IS:385/1979 IS:419/1967
	Distemper Dry colour Oil emulsion Paint remover: Anticorrosive paint for ship's bottoms & Hulls Antifoaling paint for ship's bottoms & Hulls Ready mixed brusing red lead paint Priming, Ready	All tests	IS:427/1965 IS:428/1969 IS:430/1972 IS:1404/1989 IS:1419/1989 IS:102/1962

NAME OF LABORATORY	PRODUCT/MATERIAL OF TEST	TEST/CALIBRATION FACILITIES AVAILABLE	REMARKS
mixed paint,			
brushing			
Zinc chrome	All tests	IS:104/1979	
Plaster	All tests	IS :109/1968	
Red Oxide zinc	All tests	IS:2074/1992	
chrome		& 2075/1979	
Wood primer,	All tests	IS: 3536/1966	
pink			
Thinner,general	All tests	IS:	
purposes for		14314/1995	
synthetic paint &			
R/M paint Grey	All tests	IS :110/1983	
filler for enamels			
for use over prime		IC .117/10/ /	
R/M paint,	All tests	IS :117/1964	
brushing, finishing,exterior,s	omi		
gloss for general	CIIII		
purpose to IS			
colours			
R/M paint,	All tests	IS:123/1962,	
brushing,		124(I)/1976,	
finishing,semi		124(II)/1976,	
gloss for general		124(III)/1979	
purpose to			
various IS colour			
R/M paint,	All tests	IS :35/1976	
brushing,			
finishing,			
exterior,			
semi gloss for gen	leral		
purpose, white	All tests	IS :128/1962	
R/M paint, brushing,	All (C)()	13 . 120/ 1702	
finishing,			
exterior,semi			
gloss for general			
purpose, black			
R/M brushing,m	All tests	IS:137/1965	
J .			

matt or eggshell flat,finishing, interior paint too

NAME OF LABORATORY	PRODUCT/MATERIAL OF TEST	TEST/CALIBRATION FACILITIES AVAILABLE	REMARKS
IS colour R/M paint, exterior,petrol resisting,air	All tests	IS :140/1980	
drying R/M paint, exterior,petrol resisting,stoving	All tests	IS :142/1980	
Acid resisting paint, brushing bituminous black, lead free acid, alkali &	All tests	IS :159/1981	
Heat resisting Water & chlorine R/M paint, brushing,fire resisting silicate type	All tests All tests All tests	IS :158/1981 IS : 9862/1981 re IS :162/1950	sisting
R/M paint, dipping,fire resisting	All tests	IS :163/1978	
R/M paint for road marking	All tests	IS :164/1981	
R/M paint, air drying for genera purpose tinted to various colours Aluminium paint	All tests	IS :168/1993	
For general purpose in dual container	All tests	IS :2339/1963	
Aluminium paint heat resistant	All tests	IS : 13183/1991	

Cement paint
Cement paint
Physico- All tests
chemical test
18 months All tests
outdoor exposure
test
plastic emulsion

paint

IS:5410/1992

NAME OF	PRODUCT/MATERIAL	TEST/CALIBRATION	REMARKS
LABORATORY	OF TEST	FACILITIES	
		AVAILABLE	
For interior use	All tests	IS:	
		5411(I)1974	
For exterior use	All tests	IS:	
		5411(II)/1972	
Kniffing stopper	All tests	IS:5083/1981	
Stoving enamel,	All tests	IS:150/1950	
brushing			
Stoving enamel,	All tests	IS:151/1985	
spraying	All	10, 400 /4070	
Gold size varnish	All tests	IS :198/1978	
Enamel interior	Allitanta	10 100/1000	
Undercoating,	All tests	IS :133/1993	
finishing	All tooto	IS :347/1975	
Varnishing shellac Varnish,interior	: All tests All tests	IS :347/1975 IS :337/1975	
finishing	All (62)	13.337/1973	
French polish	All tests	IS:348/1968	
Insulating varnish	All tests	IS:	
3 3 3		10026/1983	
Synthetic varnish,	All tests	IS:524/1983	
exterior,			
finishing,air			
drying			
Varnish, exterior	All tests	IS:525/1968	
finishing			
Black Japan	All tests	IS:341/1973	
Synthetic exterior	All tests	IS:2932/1993	
enamel finishing/			
undercoating			

physico-chemical

test

Outdoor exposure

test

Enamel exterior All tests IS:2933/1975

finishing/under

coating

Physico-chemical

test

Outdoor exposure

test

Enamel synthetic All tests IS:8662/1993

exterior finishing & undercoating

for railway coaches

NAME OF	PRODUCT/MATERIAL	TEST/CALIBRATION	REMARKS
LABORATORY	OF TEST	FACILITIES	
		AVAILABLE	

Epoxy based zinc All tests IS:

phosphate primer 13238/1991

(two pack)

Epoxy All tests IS:

basedsurfacer 13239/1991

(two pack)

Epoxy enamel All tests IS:

two component, 14209/1994

glossy,

Bituminous All tests Indian railway

emulsion specification p-30/1996

Polyurethene All tests iS:

Primer zinc 13759/1993

phosphate

Polyurethene base All tests IS:

surfacer, 13799/1993

Polyurethene full All tests IS:

gloss enamel 13213/1991 Coal tar tape, All tests AW WA-C-

primer & enamel 203-1991

Thermoplastic All tests IS:

road marking 3262(I)/1989

material

High-Build All tests R.D.S.O.,

Epoxy paint Specn. No.

M & C/PCN/

101/2000

Coach cleaning composition

All tests R.D.S.O.,

Specn. No. M & C/PCN/

101/2001

Fibres & Fabrics Identification of fibre by

microscope & chemical Immaturity count by microscope & chemical

Moisture content

Composition of fisbre (by

chemical)

Loss on ignition Ash content Weight in gm./ sq.metre Dye fastness to light By Fadeometer-

100 hrs. More than 100 hrs.

NAME OF	PRODUCT/MATERIAL	TEST/CALIBRATION	REMARKS
LABORATORY	OF TEST	FACILITIES	
		AVAILABLE	

Natural light (Sun).

Dye fastness to washing and

chemical Scouring loss

PH of aqueous extract

Alkali solubility Sweating test

Copper/Managanese/Zinc Water soluble impurities

Wt. Of coating Chloride/sulphate Grease or oil content

Wool or other fibre content

(quantitative) Colour fastness toRubbing (Dry) ,Rubbing (Wet),Rubbing(Wet)

perspiration

Ink and erasing test of

tracking cloth

Rubbing/Perspiration, Water/Grease/Petrol/Dil.

Acid/Dil.Alkali

Fibres & Fabrics Glass content of glass fabric

Alkali content in glass fabric Free acidity or alkalinity Weight of basic material of

treated material

Identification of nature of

dye

Resistance to fumigants

Resistance to xylol PH of water extract

Paper & stationary materials

Bleeding and blooming

Ash content

Water soluble matter

Copper/iron
Copper number

Acidity of water extract Reducing matter content Resistance to oil or grease

Oil absorption test

NAME OF	PRODUCT/MATERIAL	TEST/CALIBRATION	REMARKS
LABORATORY	OF TEST	FACILITIES	
		AVAILABLE	

Water absorption test
Water resistance property
Bitumen content
Softening point of bitumen
Sulphate/ chloride
Paraffin wax content
Grease retention test
Optical property:

Opacity, Gloss, Reflectance,

Brightness, Whiteness

Adhesive, Glue, Viscosity Shellac etc.

Refreactive index

Nature of addhesive IS:848

(Identification)
Jelly strength
Moisture content

Resin IS:355
Estergum IS:358
Gum Dammer IS:357
Shellac IS:16

Essential requirements only, Optional requirements only

Bleached lac IS:17 Essential requirements only, Optional requirements only

Sealing wax IS:868
Animal glue IS:852
Gum powder/Office paste IS:2257
Gum, Office paste IS:2257

Brushes and Brush Materials

By water immersion, by

benzene/alcohol immersion, by microscope examination, consolidation by all the above

methods

Vacuum brake fittings, etc.

Weight

Moisture content

Weight of basic material

Vulcanised fibre Resistance to marking

& synthetic resin

bonded material Alcoholic liquid, with hot

and phenolic water

NAME OF LABORATORY	PRODUCT/MATERIAL OF TEST	TEST/CALIBRATION FACILITIES	REMARKS
		AVAILABLE	

sheet

Rubber, Ebonite Density/Sp. Gravity & Plastics

water absorption by weight, by volume

oil absorption Acetone extract

Alcoholic potash extract

Ash (Filler content)

Copper/Manganese/Lead

Optical tests:

Opacity, Reflectance, Carbon black content in

rubber

Identification of ploymer Complete analysis of vulcanized compound Total polymer (rubber)

content

Rubber hydrocarbon content

by weight/by volume

Free sulphur in water extract Carbon black content in

polythylene Colour fastness :

To rubbing (crock meter),

Day light,

Fadeometer: 100 hours more

than 100 hours.

Miscellaneous Fugitive ink test for cheque

Sensitisation test of cheque

paper

Iron exchange resin (Anion

& Cation):

Total exchange capacity, Bulk density, Sieve analysis, Moisture, Operation capacity

(per each level)

Synthetic adhesive IS:4835 Dextrine adhesive IS:6367 Flax, cotton or other woolen Jacketed hoses Weight / Length ratio Copper/Zinc/Chromium

NAME OF LABORATORY	PRODUCT/MATERIAL OF TEST	TEST/CALIBRATION FACILITIES	REMARKS
		AVAILABLE	
	Chloride/Sulphate Moisture content Ash content Fats & Oils content Water soluble matter Soluble/insoluble ash Oil/Creosote content Glucose content Epsom Salt content Nitrogen and Hide sub Water absorption		
Cement	Acid value Combined oil content Setting time, Fineness k specific surface sound by Le Chatelier, Sound by Autoclave, Compre strength, Drying shrinka Specific gravity, Resista	ness 1489/8112/12 Iness 269/8042/269 essive 09/8041/403 age,	11
Acid resistance mortar	to sulphate expansion Working time, Setting to Tensile strength, Flexura strength, Compressive strength, Bond Strength Absorption & apparent porosity, Chemical resistance, Resistance thermal shock, Moistur	ime, IS:4456/ al 4832 (Pt. 1,2,3) n, t to e	
Building lime	absorption, Tendency of aggregate settle. Fineness, Residue on slaking, setting time, compressive strength, Transverse	of IS:712	

Strength, workability, volume		
yield, soundness, popping &		

pitting

Pozzolanic Fineness, Lime reactivity, IS:3812/ material Compressive, strength, 1727

Drying shrinkage, Soundness

by Autoclave

Burn Clay Fineness, Limereactivity, IS:1344

Pozzolana compressive strength, Drying

shrinkage

Water proofing Setting time, Compressive IS:26245

NAME OF	PRODUCT/MATERIAL	TEST/CALIBRATION	REMARKS
LABORATORY	OF TEST	FACILITIES	
		AVAILABLE	
			_
compound	strength, Permeability		

Magnesium oxy- Setting time, compressive IS:658 chloride flooring strength, flexural strength, 10132 compound linear change, resistance to

chemicals

Lime pozzolana Free moisture & loss on IS:4098

iginition, fineness, setting time, compressive strength

Thermal Covering capacity, volume IS:5724

insulating cement change, compressive

strength

dry adhesion to steel, linear

shrinkage

Soil/Bentonite Liquid limit, plastic limit, IS:2720/291

shrinkage limit, triaxial 1 (Pt.1 Sec. 2)

shear, moisture content, /1888

specific gravity, particle size,

direct shear density

direct shear, density, unconfined compression, consolidation CBR (Lab & field), Proctor compaction bulk density, swelling index, sand content, bearing capacity (Plate load)

Brick Compressive strength IS:1077/

transverse strength, water 1220/

absorption, Efflorescence, 2222/2691/

	dimension, visual examination, warpage, resistance to abrasion	5779/4860
Timber	Moisture content, Specific	
	gravity, static bending, imp	
	bending, compressive strei	ngth,
	tensile strength, shear stren	igth,
	indentation haedness, nail	&
	screw holding power, Izod	impact
	strength, species of timber	
Flush door	Construction, dimension,	IS:2202/
	moisture content, end	2191/4020
	immersion, knife test, glue	
	adhesion test, varying &	
	differential humidity,	
	slamming, impact	

NAME OF	PRODUCT/MATERIAL	TEST/CALIBRATION	REMARKS
LABORATORY	OF TEST	FACILITIES	
		AVAILABLE	
	-		l
	indentation, shock resi	stance,	
	edge loading, diagon		
	loading, flexure, local		
	planeness, screw holdir	na	
	power	5	
Panelled	Dimension, construction	n, IS: 1003(I&	
door/window	moisture content, slam		
shutter	impact indentation, sh	,	
	resistance, edge loadi		
	resistance to buckling,		
	resistance to misuse,		
	behaviour under humidity		
	variation		
Particle board	Density, dimension, mo	oisture IS :3087/	
(Medium	content, water absorp		
density/High	modulus of rupture, tensile		
density/	strength, flame retardent,		
Insulation)	cyclic test, accelerate		
in local cattorn)	resistance	a water	
Veneered	Dimension & density,	IS:3097/	
particle/	moisture content, water		
Laminated	resistance, swelling,	5. 12,20	
Lammatoa	1033(4)100, 300011119,		

particle board	Modulus of rupture, adhesion of plies, deflection under sustained loading, resistance to steam, resistance to crack,		
	resistance to stain	,	
Block board	Dimension, dimensional	IS:1659	
	change due to humidity,		
	resistance to water, adhesion		
	of piles, mycological, centi	ral	
	loading plate test, flexural,		
	deflection under sustained		
	loading		
Plyboard	Dimension, construction,	IS:303/10/	
	density, moisture content,		
	resistance to dry heat, fire		
	resistance, glue shear	5539	
	strength, adhesion of plies,		
	water resistance,		
	mycological, tensile streng	th,	
	compression strength, stati	С	
	bending, long time loading	9	
	test, impact resistance test	1	
	Central loading plate test	ı	

NAME OF	DD ODLIGE/MATERIAL	TECT/CALIDDATION	DELCADIC
NAME OF	PRODUCT/MATERIAL	TEST/CALIBRATION	REMARKS
LABORATORY	OF TEST	FACILITIES	
		AVAILABLE	
	Nail/screw holding po	wer,	
	Moudulus of elasticity		
Asbetos	Dimension, visual	I.S:2096/2098	
sheet/Boards	examination, density,		
	transverse strength, wa	ıter	
	absorption,impermea	blity,	
	frost cracking	•	
Asbestos cement	Dimension, visual	I.S :459	
corrugated sheet	examination,load bea	nring	
· ·	capacity, water absorp	otion,	
	impermeability, frost		
	cracking		
Fire Extinguisher	Construction, expansion	n I.S :933/934/	
O	space, internal hydrau	lic 935/940/	
	pressure, ultimate burst		
		9	

	pressure, discharge time, te against rusting, leakage te for cartridge, discharge duration, intermittent operation	
Concrete	Crushing strength, slump test, split tensile, transverse, compacting factor, mix design, bond strength	
Hollow block	Dimension, visual examination, compressive strength, drying shrinkage, moisture movement, wate absorption, moisture conte	
Autoclaved reinforced cellular concrete slab Rock	Dimension, density, drying shrinkage, moisture contercompressive strength, deflection & ultimate load Modulus of elasticity, durability test, porosity, water absorption, resistant to wear, weathering test, Moh's hardness, compressive strength, flexural strength, split tensil	I.S:6072 ht, d I.S:9221/ 1126/1122 ce 1123/1124 1125/1706
Road aggregate	strength Grading, specific gravity, bulk density, water absorption, moisture conte flakiness index, elongation	I.S :383/ 2386/6241 ent,

NAME OF	PRODUCT/MATERIAL	TEST/CALIBRATION	REMARKS
LABORATORY	OF TEST	FACILITIES	
		AVAILABLE	
Concrete admixture	index,aggregate crust value,aggregate impa value,aggregate abra value, alkali - aggrega reactivity,stripping tes Water content, setting compressive strength, flexural strength,length	act asion ate t g time, I.S :9103	

change,bleeding

Tiles Dimension, visual I.S: m1238/

examination, flatness, 777/1130 perpendicularity, 8967/

straightness, water 896282222/ absorption, transverse 1464/1478/ strength,resistance to wear, 654/2690/ crushing strength,crazing, 3367/3622/ impact strength,breaking 4457/13753/ load, permeability, warpage, 13755/13756

thermal shock, resistance to

frost

Pipe & Pipe Dimension, visual I.S: 458/2

fittings examination, straigthness, 651/7284/

hydrostatic test, three edge 1592/1625/ bearing, water absorption, 1626/4350/ bursting strength, crushing 6908/7319/ strength, transverse crushing, 9327

longitudinal bending

Refractory Cold crushing strength, I.S:6/7/8

dimension, density, modulus

of rupture, porosity

Mineral wool Dimension, apparent density I.S:3677/8103

under specified load, shot content, moisture content, moisture absorption,

settlement under vibration

Sanitary Construction, freedom from I.S:774/2556/

appliance self siphonage, reduced 7231

water level, discharge capacity, discharge rate, endurance test, dimension, distortion resistance, dead load test, front thrust test,

impact test

Glass Dimension, visual I.S:2553 (I&

s(Toughened & examination warpage, II)

NAME OF LABORATORY	PRODUCT/MATERIAL OF TEST	TEST/CALIBRATION REMARKS FACILITIES AVAILABLE	
	Laminated) adhesion	fragmentation, shock test, boil test, fracture &	
	adricsion	test, impact resistance,	
	penetration resistance Glass (Plain) Dimension, visual I :2835		
		examination, distribution of allowable defects	
	Wired & figured :9162/	Dimension, visual I.S	
	glass C881,	examination, flame ASTM	
	Bitumen & :1834/	proofness 882,883 Extensibility, Hardness I.S	
	bitumenous	number, Marshall test 5317/1195	
ELECTRICAL	produc Miniature Air-	ASTM D 1559	
	Williature Ali-	High voltage test, Over I.S :8828	
	Break Circuit	current device calibration	
	Breakers for voltage not	test, temperature rise test, time/current characteristics	
	exceeding 1000	test, shock test	
	volts Three Phase	Measurement of stator I.S:125	
	Induction Motors upto 5 H.P.	resistance of the motor, Insulation resistance test, No load test, locked rotor test, load test at full load,	
	reduced	temperature rise test,	
		running in both direction, momentary overload in torque test, starting torque test	
	Enclosures	High voltage test, Protection I.S:9174	

contact	of	personnel	against
contact	with live or moving parts inside the enclosure and protection of equipment against ingress of solid foreign bodies, Protection of equipment against ingress		
of			_
	liqui	d	
Single phase :996	Insul	lation Resistar	nce test,I.S
small A.C. and	No l	oad test, lock	ed rotor
Universal electric	test,	full load test,	
motors		mentary overlo ing torque tes	
Temperature rise test,			

NAME OF	PRODUCT/MATERIAL	TEST/CALIBRATION	REMARKS
LABORATORY	OF TEST	FACILITIES	
		AVAILABLE	
	Moisture proofness tes		
	leakage current test, l	•	
	voltage test, Cold resi	stance	
	of windings		
Enclosures of	Protection against the	0	
rotating electrical	, ,		
machinery	protection against ing		
	water/moisture, No loa		
	running test, high volta test	age	
Self contained	Insulation resistance to	act IS ·1175	
drinking water	high voltage test, coo		
coolers	capacity rating test,	mig	
0001013	maximum operating		
	condition test, storage	ż	
	capacity of tank		
Switch for	Protection against ele	ctric IS:3854	
domestic and	shock, insulation resista		
similar purpose	and electric strength,		
	resistance to humidity	ı	
	temperature rise, mak	ing &	

breaking capacity, mechanical strength, resistance to heat, creepage

distance and clearance, water

absorption

Plugs and sockets C (Three pin two Pr

Plugs and sockets Checking of dimension, IS:1293

(Three pin two Protection against electric pole and earthing) shock, construction Cl. 12 & 13, Interchangibility,

resistance to ageing and moisture, insulation resistance and electric strength, effectiveness of contact, temperature rise,

breaking capacity,

withdrawal pull, mechanical strength, resistance to heat, screws and connection, water

absorption.

Starters for

Dimensional checking, IS:2215

Fluorescent lamps insulation resistance under

humidity condition, high voltage test, torsion test,

NAME OF	PRODUCT/MATERIAL	TEST/CALIBRATION	REMARKS
LABORATORY	OF TEST	FACILITIES	
		AVAILABLE	

mechanical strength,

resistance to heat, quality of

marking, starting test,

endurance test, deactivated

lamp test

Carriers and bases Visual examination, test for IS:2086

in rewirable type dimensions, test for

electric fuses for mechanical endurance, test voltages upto for mechanical strength, test for withdrawal force, test for temperature rise, insulation

temperature rise, insulation resistance test, high voltage test, test for water absorption

(non-ceramic) test for

ceramic material, ignition

test

Composition Verification of temp. rise IS:10027

units of air-break limits, verification of switches and re-wireable type verification of mechanical fuses for voltages endurance, starting, air not exceeding 650 delivery, temperature rise, volts.

resistance, electrical input,

fan speed, moisture

proofness test (for regulator

only), A.C. leakage.

Railway Carriage Air delivery, temp. rise, high IS:6680

Fan voltage, insulation

resistance, starting, electrical input, fan speed, leakage test,

Pedestal Fan Air delivery, temp.rise, high IS:1169

voltage, insulation resistance, starting, fan speed, electrical input, moisture proofness

(for regulator only),

mechanical endurance (for regulator only), A.C.leakage

Air Circulator Air delivery, temp.rise, high IS:2997

type electric fan voltage, insulation resistance, starting, fan speed, electrical input, moisture proofness

test

Ballast for tubular Moisture resistance and IS:1534

fluorescent lamp insulation (including inter-

NAME OF LABORATORY	PRODUCT/MATERIAL OF TEST	TEST/CALIBR FACILITIES AVAILABLE	ATION	REMARKS
	turn insulation), test for limitations of Ballast her Test of performance. Power and current our pre-heating condition voltage across starter terminal, open circuit at lamp termination, to ballast looses	eating, tput, s, voltage		
A.C. Watthour Meters	Insulation resistance, r with no load starting, starting, limits of errors interpretation of test re test of meter constant loss, heating, dielectric strength, effect of influ- quantities, effect of sh circuit, effect of self-he range of adjustment, independence of adju- sustained accuracy ter running at low load, repeatability of error	esults, , power c uence ort eating, ustment,	IS :1301	0-90
AC Electricity meters-Var-Hour meters	Insulation resistance, Dielectric strength, rur with no load, starting, of errors, interpretation test results, test of met constant, power loss, I effect of influence qu short circuit test, influe self-heating, range of adjustment, independ adjustment	limits n of er neating alities, nce of		
AC Static Watthour Meters	Protection against Penetration of dust ar water, power consum short time over curren influence of self-heatin influence of heating, A Voltage test, insulation	ption, ts, ng, AC		

test for accuracy requirements, test of starting conditions, test of meter constant, Test of no-load

NAME OF LABORATORY	PRODUCT/MATERIAL OF TEST	TEST/CALIBRATION FACILITIES AVAILABLE	REMARKS
Current Transformers	condition, test of influe quantities, interpretati test results, repeatabili error test Limits of current error a phase displacement verification of termina markings and polarity, voltage power freque on primary windings, h	on of ty and IS:2705 high cy test nigh ncy test	
Alternating current precision k Wh meters	on secondary winding temperature rise test Limits of error, effect o influence quantities, n registration with currer alone, non-registration voltage alone, percer error limit at unbalance loading	f IS:11420 on- nt n with ntage	
Maximum Demand Indicators	Insulation resistance, starting, limits of errors, Power loss, temperatu dielectric strength, mechanical burden, disconnecting elementiming motor operating	re rise, nt and	
Electric ceiling type fan and regulators	voltage limits. Air delivery, temperatu (resistance method), le current, high voltage, insulation resistance, starting, fan speed an	eakage	

earthing connections, protection against electric shock (for regulators), moisture resistance (for regulators only) mechanical strength (for regulators only), suspension system, creepage distances and clearances, mechanical endurance (for

regulators only)

GLS Lamp resistance,

Tubular

Torsion test, insulation IS:118

NAME OF	PRODUCT/MATERIAL	TEST/CALIBRATION	REMARKS	
LABORATORY	OF TEST	FACILITIES		
		AVAILABLE		
Luminous flux (Lumen) measurements-				
	Measurements of Electrical power (Watt), Life			
performance test.				

IS:2418

Fluorescent lamps resistance test, burning test,
Starting characteristic test,
measurement of luminous

measurement of luminous flux (1m), measurement of electric power (Watt), colour characteristics. If a

characteristics, life performance test

GLS lamps Calibration test (Lumen and IS:418-1978

Torsion test, insulation

watts)

Tubular Calibration test (Lumen, IS:2418

fluorescent lamps watts and colour co-

ordinates)

Lead Acid storage Physical examination, IS:7372

batteries for Dimensions, air pressure, capacity, vibration, high rate

(upto capacitry of discharge at normal 200 AH) temperature, high rate discharge at low temp., retention of charge,

resistance to over charge,

life, storage

Lead-acid storage Test for capacity, vibration IS: 1145

batteries for test, high rate discharge (for motor cycle (upto batteries for dyno-starting capacity of 14 only), retension of charge, resistance to overcharge, life,

storage

Stationery cells Test for capacity and test for IS:1651

and batteries voltage during discharge, (with tubular ampere hour and watt-hour positive efficiency tests, test for loss of capacity on storage,

capacity of 500 endurance test

AH)

Stationery cells Test for capacity and test for IS:1652

and batteries, voltage during discharge, lead-acid type ampere hour and watt-hour with plant efficiency, test for-retention positive plates of charge, endurance test

NAME OF	PRODUCT/MATERIAL	TEST/CALIBRATION	REMARKS
LABORATORY	OF TEST	FACILITIES	
		AVAILABLE	

(upto a capacity

of 500 AH)

Synthetic Electrical resistance (DC IS:6071 separators for method), test for mechanical lead-acid batteriesstrength, test for wattability

of separator, chlorine content, iron content,

manganese content, volume

porosity

Rubber and Hydraulic thrust endurance IS:1146

Plastics test, high voltage test, plastic containers for yield test, izod impact test,

lead-acid storage acid resistance test

batteries

Enamelled round Diameter, electrical IS:4800

winding wires resistance, elongation, (Part-III, IV, V to

springiness, mandrel winding XIV)

test, stretching test, jerk test,

peel test,heat shock test,cut through test, break down voltage test,continuity of covering, solvent test,cure test,

Unarmoured PVC insulated cables with copper or aluminium conductors and flexible cords with copper conductors for voltage upto and including 1100 volts

Overall dimensions. IS:10810 thickness of insulation, (Part-1,2,5, thickness of sheath, 6,7,10,11, conductor resistance, 12,14,15,23, insulation resistance, high 43,45) IS:694/1990, voltage test (water immersion test), annealing 8130/84, test (copper), tensile test for 5831/84, aluminium, wrapping test for 1554(l) aluminium, tensile strength and elongation at break for PVC insulation and sheath, loss of mass for PVC insulation and sheath, ageing in air oven for PVC insulation and sheath. shrinkage test for PVC insulation and sheath, heat shock test for PVC insulation and sheath, hot deformation test for PVC insulation &

sheath.

NAME OF	PRODUCT/MATERIAL	TEST/CALIBRATION	REMARKS
LABORATORY	OF TEST	FACILITIES	
		AVAILABLE	
Armoured and	Thickness of insulation	, IS :10810 (Pt-	
unarmoured	thickness of sheath,	1,2,3,5,6,	
single/twin/three	conductor resistance,	7,10,11,12,	
and multicore	annealing test (solid c	opper), 14,15,37,	
PVC insultated	insulation resistance to	est, 38,39,40,41,	
and sheathed	high voltage test (wat	er 43,45,88)	
cables for	immersion test), high	IS:3975/79	
working voltage	voltage test at room	IS:1554(I)/88,	
upto and	temperature, tensile te	est (for 5831/84	
including 1100	aluminium, wrapping		
volts	aluminium, tensile stre		

Armoured and unarmoured single/twin/three and multicoire crosslinked polyethylene (XLPE) insulated and PVC sheathed cables for working voltage upto and

including 1100

volts

and elongation at break armour, torsion test for armour wire, Annealing test (copper),

IS:10810 (Ptconductor resistance, 1,2,3,5,6, thickness of insulation 7,11,12,14, thickness of sheath. 15,30,33,37, insulation resistance test 38,39,40,41, (volume resistivity), high 43,45,88) voltage test at room IS:8130/84 temperature, tensile test for IS:7098(I), aluminium, wrapping test for IS: 3975/79 aluminium, torsion test for IS: 5831/84 armour wire, tensile strength and elongation at break for armour, winding test for armour strip, uniformity of

zinc coating on armour, mass of zinc coating on armour, tensile strength and elongation at break for XLPE and PVC compound, shrinkage test for XLPE & PVC compound, shrinkage test for XLPE & PVC compound, hot set test for XLPE insulation, water absorption test for XLPE insulation, hot deformation test for PVC sheath, heat

shock test for PVC sheath,

Insulated winding Annealing test (Copper), IS:10810 (Ptwires for conductor resistance, 1,5,6,7,11,

thermal stability test.

NAME OF LABORATORY	PRODUCT/MATERIAL OF TEST	TEST/CALIBRATION FACILITIES AVAILABLE	REMARKS
submersible motors	thickness of insulation, insulation resistance, holtage test (water immersion test) tensile strength and elongating PVC insulation, Thermageing in air oven for insulation, Heat shock for PVC insulation, hot test for PVC insulation, shrinkage test for PVC insulation water absorption test	nigh 30,33,43,45) IS:8783,5831 on for all PVC test set	
Single/twin/three four and five core elastomeric insulated and sheathed cables for fixed wiring flexible cables and flexible cords for working voltages upto and including 1100 volts	PVC insulation Annealing test (copper conductor resistance overall diameter, thick insulation, thickness of sheath, insulation resist high voltage test (wat immersion test), tensile for aluminium, wrappi for aluminium, tensile strength and elongation break for elastomeric insulation and sheath, in air oven for elastomeric insulation and sheath, ageing in air bomb for elastomeric insulation sheath, ageing in oxygobomb for elastomeric insulation sheath, oil resistance to elastomeric insulation sheath, tear resistance for elastomeric sheath persulphate test for tire	er), IS:10810 (Pt- test, 1,2,3,4,5, kness of 7,11,17,30, 31,45,88) tance, IS:8130/84 er IS:9968, e test6380, ng test 5831/84 on at ageing peric r and gen for and e test for and e test	

copper

Single core Annealing test, conductor IS:10810 (Ptelastomeric resistance test, thickness of 1,5,6,7,11, insulated flexible covering, high voltage test 30,31,45,56,)

REMARKS

cables for (water immersion test), IS:8130/84

NAME OF LABORATORY	PRODUCT/MATERIAL OF TEST	TEST/CALIBRATION FACILITIES AVAILABLE
welding purpose	tensile strength and elongation at break for elastomeric insulation sheath, ageing in air to for elastomeric insulation and sheath, oil resistant for elastomeric insulation sheath and sheath, hot set the elastomeric insulation sheath	and oven for and comb ion nce test ion st for
Elastomeric insulated flexible cable for Miner's cap lamps	Annealing test, conductes stance test, overall diameter, thickness of insulation, thickness of sheath, voltage test persulphate test for tire copper, tensile strenggelongation at break for elastomeric insulation sheath, ageing in air collection elastomeric insulation sheath, ageing in air for elastomeric insulation and sheath, ageing in oxygen bomb for elastomeric insulation, oil resistance for elastomeric insulation.	1,6,7,11,16, 31,45,56) IS:8130/84 6380/84, ned 2593/84 th and or and oven for and oomb ion tomeric e test
Elastomeric insulated flexible trailing cables	and sheath. Annealing test, conduresistance test, thickness of	ess of 1,4,5,6,7,

use in coalmines

sheath, insulation resistance 31,37,38,39, test, voltage test, persulphate 40,41,43,45, test for tinned copper, tensile 56) strength and tensile stress IS:8130/84 and elongation at break for 691 elastomeric insulation and 6380/84, sheath, ageing in air oven for 3975/79 elastomeric insulation and sheath, ageing in air bomb for elastomeric insulation and sheath, ageing in oxygen bomb for elastomeric

NAME OF	PRODUCT/MATERIAL	TEST/CALIBRATION	REMARKS
LABORATORY	OF TEST	FACILITIES	
		AVAILABLE	

insulation, oil resistance test for elastomeric insulation and sheath, hot set test for elastomeric insulation and sheath, tear resistance test for elastomeric sheath, tensile strength and elongation at break for armour, torsion test for armour wire, winding test for armour strip, uniformity of zinc coating on armour, mass of zinc coating on armour

Three four and five core pliable armour flexible cables with elastomeric insulation and sheath for use in quarries and metalliferrous mines for working voltage upto and including 1100

Annealing test, conductor IS: 10810 (Ptresistance test, thickness of 1.5.6.7.11. insulation, thickness of 16,17,30,31, sheath, insulation resistance 43,56) test, voltage test, persulphate IS:8130/84 test for tinned copper, tensile 1026 strength and tensile stress 6380/84, and elongation at break for elastomeric insulation and sheath, ageing in air oven for elastomeric insulation and sheath, ageing in air bomb for elastomeric insulation

volts and sheath, ageing in oxygen bomb for elastomeric insulation, oil resistance test for elastomeric insulation and sheath, hot set test for elastomeric insulation and sheath, tear resistance test for elastomeric sheath, **PVC** insulatedd Annealing test, conductor IS:10810 (Ptand sheathed resistance test, thickness 1,5,6,7,10, insulation, thickness of plain annealed 11,12,14,15, copper conductor, sheath, insulation resistance 16,43,45) shot firing cables. test, voltage test, tensile IS:8130/84 strength and elongation at 5950/84 break for PVC insulation and 5831/84 sheath, Ageing in air oven for PVC insulation and sheath, loss of mass for PVC insulation and sheath, Hot

NAME OF	PRODUCT/MATERIAL	TEST/CALIBRATION
LABORATORY	OF TEST	FACILITIES
		AVAILABLE
Cross linked polyethylene insulated PVC sheathed cable	deformation for PVC insulation and sheath, shock test for insulation sheath, shock test for insulation sheath, shrinkage test PVC insulation and she Resistance test, tests for armour wires/strips, test, elongation test, test, winding test, test zinc coating, tests for thickness of insulation sheath, physical tests insulation, tensile stren and elongation at breadeing in air oven, ho test, shrinkage test, was absorption (Gravimetr physical tests for outer sheath, tensile strength	n and for eath or IS:7098, nsile IS:8130 orsion 3975,5831, for 10810, and for gth eak, t set ater ic),

REMARKS

elongation at break, ageing in air oven, shrinkage test, hot deformation, loss of mass in air oven, heat shock, thermal stability, dielectric power factor as a function of voltage, insulation resistance test, high voltage test, flammability test Persulphate test, conductor Flex. Trailing IS:1026, res. Test. Tests for thickness cables 10810, of insulation and sheath, 6380/84, physical tests for insulation 3975/79, and sheath, tensile strength, tensile stress and elongation at break, ageing in air oven, ageing in air bomb, ageing in oxygen bomb, oil res. Test, tear res. Test, hot set test, ozone resis. Test, tests for armour wires, tensile test, elongation test, torsion test, resistance of armour, insulation resistance test, high voltage test,

NAME OF LABORATORY	PRODUCT/MATERIAL OF TEST	TEST/CALIBRATION FACILITIES AVAILABLE
Paper insulated lead sheathed cable	flammability test Resistance test, tests for thickness of insulation, for thickness of lead a alloy/sheath, breaking strength and elongation for insulation, test for thickness of steel tape diameter of round steel or dimensions of steel test for thickness and physical properties of extruded bedding and	tests 10810,8130, and lead con test cor el wire strips,

REMARKS

serving, dielectric power factor/ voltage test for19/33 KV cables only, voltage test

Elastometer Conductor resistance test, IS:9968, insulated cables. tests for armour wires/strips. 8130

tests for armour wires/strips, 8130,3975,tensile test, elongation test, 6380,10810,

torsion test, winding test, tests for thickness of insulation and sheath, physical tests for insulation,

tensile strength and

elongation at break, ageing in air bomb, ageing in air oven, physical tests for

sheath, insulation resistance test, dielectric power factor as function of voltage, high

voltage test,

PVC insulated Conductor resistance test, IS:1554,

(Heavy duty) tests for armour wires/strips, 8130,10810, electric cables tensile test, elongation test, 39715

torsion test, winding test, tests for thickness of insulation and sheath, insulation resistance test, dielectric power factor as function of voltage, high voltage test, flammability

test

Procelain Visual examination, IS:731

insulators for over verification of dimensions, load power lines visible discharge test, wet

NAME OF	PRODUCT/MATERIAL	TEST/CALIBRATION	REMARKS
LABORATORY	OF TEST	FACILITIES	
		AVAILABLE	

with a nominal power frequency voltage voltage greater withstand test, temperature than 1000 volts cycle test, mechanical failing load test, puncture test, porosity test, galvanising test Visual examination, Porcelain post IS:2554, insulators for verification of dimensions, visible discharge test, dry systems with nominal voltage power frequency voltage greater than 1000 withstand test, wet power volts frequency voltage withstand test, temperature cycle test, mechanical strength test, puncture test, porosity test, galvanising test, Verification of dimensions IS:283 Procelain. insulators for temperature cycle test, mechanical failing load test, telegraph and telephone lines porosity test, visual examination, insulation resistance Procelain Visual examination. IS:1445. insulators for verification of dimensions, overhead power dry power freq. Voltage lines with a withstand test, temperature nominal voltage cycle test, mechanical failing load test, puncture test, upto and including 1000 porosity test, volts. Procelain Guy Visual examination, IS:5300 insulators verification of dimensions, dry power freq. Voltage withstand test, temperature cycle test, wet power frequency voltage withstand test, mechanical failing load test, porosity test, Tensile strength and IS:5424 Rubber mats for electrical elongation at normal conditions, compression set purposes

at normal temperature, tensile strength after ageing in air oven, electrical (proof test) of rubber mat, breakdown test of rubber

NAME OF LABORATORY	PRODUCT/MATERIAL OF TEST	TEST/CALIBRATION FACILITIES AVAILABLE	REMARKS
Paper covered aluminium conductors	mat, water absorption ambient temp.by weig Tensile strength and elongation at normal condition, tensile stren after ageing in air ove value, conductivity of aqueous extract, oil	ght, IS:6162 Igth In, pH	
Paper covered copper conductors	absorption, electric str (D.P.C. conductors) Tensile strength and elongation at normal condition, burst streng value, conductivity of aqueous extract, oil absorption, electric str	IS :7405 th,pH	
Procelain bushings for A.C. voltages upto and including 1000 volts.	D.P.C.conductors) Visual examinations, verification of dimensi dry power freq. Voltag withstand test, temper cycle test, wet power frequency voltage wit	ge ature	
High voltage fuses Alternating current switches for voltages above 1000 volts.	test, Dry power freq. Voltage withstand test, wet power freq. Voltage withstand temperature rise test. Dry power freq. Voltage withstand test (upto 33 for A.B.Switch, dry power freq. Voltage withstand (above 33 KV) for A.B.	ver d test, ge IS :9920 3 KV) ver	

Switch, wet power frequency voltage withstand test (upto 33 KV), wet power frequency voltage withstand test (above 33 KV), Multi volt drop test, temperature rise test (A.B. Switch), temperature rise test (above 400 amps.), mechanical endurance test (below 33 KV), mechanical endurance test (above 33 KV), mechanical endurance test (above 33 KV)

NAME OF	PRODUCT/MATERIAL	TEST/CALIBRATION	REMARKS
LABORATORY	OF TEST	FACILITIES	
		AVAILABLE	

KV)

A.C. Dry power frequency voltage IS:9921

Disconnectors withstand test (upto 33 KV) (isolators) and for isolator, Dry power earth switches for frequency voltage withstand

voltage above test (upto 33 KV) for 1000 volts isolators, wet power

frequency voltage withstand test (upto 33 K V), wet power frequency voltage withstand test (above 33 KV), test for thickness, width, breaking strength and elongation of tapes, electric strength (proof test) of H.T. insulating tape,

Conductive and Electrical properties of BS:2050

antistatic products antistatic flooring material

made from flexible polymeric materials

Varnished cotton Electrical strength (proof IS:3352

cloth and tape for test) for empire cloth and electrical purpose tape, extensibility at normal

condition, tensile and

elongation for each direction

	(normal condition), todi
	strength (across), tear
	strength (along), acidity (as
	acetic acid)
Voltage	Verification of terminal and IS:3156(I-
transformers	polarity, dry power VI)
	frequency withstand test for
	primary windings, dry power
	frequency withstand test for
	secondary windings
	determination of errors
	(ration and phase angle),
	temperature rise test IS :1146

(normal condition), tear

Battery containers High voltage test.

ACSR Resistance test IS:2121

Conductors

Water from Conductivity test IS:1069

different sources

H.T. Insulating Electric strength test IS :7755

NAME OF	PRODUCT/MATERIAL	TEST/CALIBRATION	REMARKS
LABORATORY	OF TEST	FACILITIES	
		AVAILABLE	

cotton tapes

Bitumen based Electric strength IS:7084

filling compound

Industrial Electrical strength in oil, IS:2036

laminates insulation resistance test

Insulating Electric strength, volume IS:2036,3396

materials e.g. resistivity, surface resistivity

Bakelyte Hylam,

wood etc.

Rubber gloves for Electrical properties IS:4770

electrical

purposes

Mild steel, bars, Tensile test IS:

plates, sheets, strips, high tensile wires, tor steels, screw coupling, tubes, fastners, cast irons, various ferrous and nonferrous materials

-do- Bend test -do- Hardness test :

Vickers, Brinell, Rockwell

Hydrostatic pressure test

screw Coupling Product Impact test (special)

& (Destructive)

Hard drown steel Reverse bend test

wire

Screw coupling Destructive tensile test

Metallic wires Wrapping Test Mild steel Rounds Shear Test Steel wire, copper Torsion test

and copper alloy

wire

Cast iron (C.I.) Transverse test Bitumen Drum Capacity test

Insulator clamp Slip strength of bolted type

fittings tension clamp.
Barbed wire Dimensions, Tensile

Cylinder, tubes, valves, pressure

cooker etc.

Hooks, sprinks, Proof load test

threaded steel fastners, chain

NAME OF	PRODUCT/MATERIAL	TEST/CALIBRATION	REMARKS
LABORATORY	OF TEST	FACILITIES	
		AVAILABLE	

Pulley block

Tubes Flattening test Steel sheet, strip Cupping test

Test sieveDimensions

Steel FilesDimensions, hardness

Tor steelMass/Meter

Sluice valve, Soil Weight test

pipe

Hack saw blades Hardness cutting, pitch

determination

Galvanized stip Winding test

NON-
DESTRUCTIVE
TESTING

Springs Welds, castings, and rolled materials for ferrous and nor ferrous on semi finished as well as finished components	Deflection to Radiograph forgings, ext 4853-82	y testing	2595 ation- 998 - 85; 747-	82-83, -78 &
Welds castings, :4225-79,		ASME (1986 SecV Ultrasonic t		IS
forgings, extruded and rolled materials for ferrous and nor ferrous on semifinished as well as finished components	٦-	4260-86 6394-86 7666-88 8791-78 11626-8 ASME (* Sec.V	o, 3, 3 & 86	
Welds, castings IS:3703-80; forgings, for ferromagnetic materials on se as well as finished		5334-81 6752-91 7743-75 ASME (*Sec.V	.; & 5	testing

NAME OF	PRODUCT/MATERIAL	TEST/CALIBRATION	REMARKS
LABORATORY	OF TEST	FACILITIES	
		AVAILABLE	

components Forged, cast, Liquid penetrant testing IS:3651-81. welded ASME (1986) components in Sec.V semi as well as finished stage Steel/cast iron/ Metallography examination IS:4163-82, wrought steel/ tool 4748-88, steel / bearing 6396-83, steel/ aluminium 6416-88 & its alloys/ 7754-75, electroplated 10131-83, coatings/ ferrous 11371-85, 12037-87, & non-ferrous 13691-93, castings, weldings, forgings & other 12211-87, metal products. 4075-85, 1868-68, 5523-83, 3203-82, 1771-86, 1067-81, 1068-93, 1337-93, 12393-88, 1572-86, 9530-80, 11857-86, 1501-87, 1598-7722 1757-88, 1865-91, 2107-77, 2108-77, 2640-77, 2749-74 814-91 Welding As Per

Electrodes relevant IS & AWS

Failure investigation on ferrous and non-ferrous components

NAME OF	PRODUCT/MATERIAL	TEST/CALIBRATION	REMARKS
LABORATORY	OF TEST	FACILITIES	
		AVAILABLE	

Certification of As per IBR

welders

RUBBER, PLASTICS & TEXTILES Rubber, conveyor All tests except abrasion loss IS:1891(I)

beltings test

V-belts(endless) IS:2494 (I)-

1994

Power All tests Dynamite fatigue

IS:6583-

Transmission test 1989

Belts

Rubber Hose for

IS:447-1988

welding

Electrically All tests except resistance to

IS:10733-

Bonded Road & vacuum & bending

under 1983

Rail Tanker Hose proof pressure

of Rubber

Rubber air hose IS :446-1987 Fire fighting IS :636-1988

Hose

Water suction & All tests except resistance to

IS:1549-1983

discharge hose of vacuum test

rubber (Heavy

duty)

Rubber mats for IS:5424-1969

electrical

purposes
Latex foam

All tests except flexing test

IS:1741-1960 rubber products

Rubber Hot IS :1867-Water Bottles 1975

Sheet rubber IS:638-1979

jointing & rubber insertion jointing

Rubber sealing IS:5382-1985

rings

Hospital IS:4135-1974

sheetings

PVC Conveyor All tests except fire IS

:3181-1992

Beltings resistance test

PVC/Rubber All tests IS:12200-87

Waterstops

PVC Flooring All tests except resistance to

IS:3462-1986

Steels various substances
HDPE Bags All tests IS :11652-92
Decorative All tests. IS :2046-1969

NAME OF	PRODUCT/MATERIAL	TEST/CALIBRATION	REMARKS
LABORATORY	OF TEST	FACILITIES	
		AVAILABLE	

Laminates

Phenolic All tests. IS:2036-1974

Laminated Sheets

Unplasticised All tests except long term IS:4985-2000

PVC Pipes Hydrostatic test.

Polyethylene All tests. IS:6312-1994

Containers

Flexible Non All tests IS:6946-1973

Metallic Conduits

for electrical

installation

Unplasticised All tests IS:12818-92

PVC Screen & Casing Pipes

Low Density All tests IS:2508-1984

Polyethylene Films		
High Density Polyethylene Films	All tests	IS :7328-1992
Bitumen Felts Glass Fibre based Bitumen Felts	All tests All tests	IS :1322-1993 IS :7193-1994
Glass fibre based bitumen felts		IS :7193-1994
Expansion Jointer (Bitumen Impregnated Fibre)		IS: 1838(I)1992
Sisal Ropes		IS :1321(I) 1992
Coir ropes Polypropylene ropes	Upto 24 mm diameter	IS :1410-1983 IS :5175-1992
Fibre core for steel wire ropes		IS :1804-1996
Compressed Asbestos fibre jointing		IS :2712-1998
Gland Packings Linoleum SHEET Angola Cloth Handloom Wool blankets		IS :4687-1995 IS :653-1992 IS :8331-1993 IS :892-1980
Manila ropes		IS:1084-1994

NAME OF	PRODUCT/MATERIAL	TEST/CALIBRATION	REMARKS
LABORATORY	OF TEST	FACILITIES	
		AVAILABLE	
vinyl coated		IS:1259-1984	
fabrics			
Tarpauline		IS:2089-1977	
Bed sheet		IS :175-1989	
Cape waterproof		IS :2422-1985	
Cotton duck		IS:1422-1983	
Textile vests		IS:4964-1991	
cotton		10 44040	
Polyester blend		IS :11248-	
suitings		1995	
Polyester blend		IS :11815-	
shirting for uniforms		1996	
		IC .E004 1002	
Carpets Azure laid papers		IS :5884-1993 IS :1848-1991	
Cream Wove		IS :1848-1991	
papers		13.1040-1771	
Printing coloured		IS :1848-1991	
papers		13.1040 1771	
Bond papers		IS :1848-1991	
Map Litho papers	All tests except gloss a		
map zimo paporo	wax picks		
Printing white	rran prone	IS:1848-1991	
Type writing		IS :1848-1991	
papers			
Krafts papers		IS:1397-1990	
paper, computer		IS:12766-	
		1997.	