

TARIFF RATES FOR CHEMICAL TESTING AT MANTRA,SURAT FROM 01.01.2017

Sr.No.	Nature of Test
(CDY)	DYESTUFF :
CDY 01	Identification of Dyestuff from : (a) Powder (b) Fabric
CDY 02	Moisture Content
CDY 03	Ash Content
CDY 04	Solubility (Water soluble dye)
CDY 05	Dyeing Trial of :
CDY (a)	Single shade
CDY (b)	Consecutive shade
CDY 06	Printing trial of :
CDY (a)	Single shade
CDY (b)	Consecutive shade
CDY 07	Strength of Dye on :
CDY (a)	UV Spectrophotometer against std.,
CCM	COMPUTER COLOUR MATCHING
CCM (A)	Evaluation parameters of single sample
1	Reflectance
2	K/S.
3	Tristimulus values
4	L*a*b* Co-ordinates
5	Whiteness (CIE, or Ganz, etc.)
6	Yellowness (ASTM D1925, ASTM E313.)
7	Recipe formulation + one recipe correction
	For any one of the above parameters per one sample:
	For every additional parameter / sample
CCM (B)	Evaluation parameters of sample pairs
1	Colour difference between standard and one sample.
	For additional samples against same standards
	Additional parameter (such as dye strength)
2	Strength comparison
3	Metamerism
4	Shade sorting
(c)	Measurement of calibration series.....per sample
CDY 08	Fastness Property of Dyestuff or dyed fabric to:
CDY 08 (a)	Washing fastness(ISO 1 to 5 any one) Single fibre adjacent fabric
	Washing fastness(ISO 1 to 5 any one) Multi fibre adjacent fabric
CDY 08 (b)	Rubbing or crocking fastness(Wet & Dry)
CDY 08 (c)	Sublimation fastness
CDY 08 (d)	Perspiration (Acidic & Alkaline) single fibre adjacent fabric
	Perspiration (Acidic & Alkaline) multi fibre adjacent fabric
CDY 08 (e)	Chlorine fastness
CDY 08 (f)	Light or weather fastness (Xenotest – Atlas 300)
	Minimum 10 samplesper sample(xx not possible)
	Less than 10 samples.....per sample(xx not possible)
CDY 09	Migration property of dyestuff
CDY 10	Dispersion property of dyestuff
CDY 11	Leveling property of dyestuff
CDY 12	Salt Content
CDY 13	Pad-dry discharge printing
CDY 14	Whether the fabric is dyed or printed or dyed & printed

(CGT)	GUAR GUM, TKP (TAMARIND KERNEL POWDER)
*CGT 01	Moisture Content
*CGT 02	Ash Content
*CGT 03	Insoluble Matters
CGT 04	Viscosity in :
CGT 04 (a)	Seconds : Redwood viscosity of 1.0 % solution at 50° C. Sec.
CGT 04 (b)	Centipoise : Brookfield Viscometer (CPS)
*CGT 05	pH Value of 1% solution
*CGT 06	Salt Content
*CGT 07	Tack Index
CGT 08	Free Alkali
CGT 09	Oil Content in Gum
(CTS)	THICKNER, SODIUM ALGINATE :
*CTS 01	Purity
*CTS 02	Moisture Content
*CTS 03	Ash Content
CTS 04	Viscosity in :
CTS (a)	Seconds : Redwood Viscosity (Sec)
*CTS (b)	Centipoise : Brookfield Viscometer (CPS)
(CGU)	GLUE :
CGU 01 (a)	Viscosity in seconds (Redwood viscometer)
CGU 01 (b)	Viscosity in CPS. (Brookfield viscometer)
CGU 02	Ash Content
(CTD)	DEXTRINE : (STARCH) :
*CTD 01	Moisture Content
*CTD 02	Ash Content
*CTD 03	Acidity
*CTD 04	Water Insoluble matter/ Water soluble matter
*CTD 05	Purity
(COA)	ANTISTATIC OIL/ SPINDLE OIL :
*COA 01	Appearance
*COA 02	Moisture Content (By Karl Fischer method)
*COA 03	Specific Gravity / Density
*COA 04	pH of 5% solution
*COA 05	Pour Point
*COA 06	Acid Value
*COA 07	Emulsion stability of 10% aqueous solution for 24 hrs.
COA 08(a)	Viscosity in seconds at specific temp. (Redwood viscometer)
COA 08(b)	Viscosity in CPS at specific temp.(Brookfield viscometer)
*COA 09	Flash Point (C.O.C.)
*COA 10	Iodine Value
(CFT)	THERMIC FLUID OIL /HY-THERM OIL
CFT 01	Appearance
*CFT 02	Moisture Content (Karl Fischer method)
*CFT 03	Specific gravity / density
*CFT 04	Flash Point (C.O.C.)
*CFT 05	Fire Point (C.O.C.)
*CFT 06(a)	Viscosity in seconds at specific temp. (Redwood viscometer)
*CFT 06(b)	Viscosity in CPS at specific temp. (Brookfield viscometer)
*CFT 07	Neutralization Value / Acidity
*CFT 08	Pour Point
*CFT 09	Carbon Residue
*CFT 10	Ash Content
*CFT 11	Kinematic viscosity at 40° C or 100° C (C.S.T.)
*CFT 12	Insoluble matters / sediment
*CFT 13	Viscosity Index
*CFT 14	Sulphated Ash Content
*CFT 15	Copper strip corrosion – at 50° C
*CFT 16	Copper strip corrosion – at 100° C

DIE	DIESEL :
DIE 01	Flash Point
DIE 02	Specific Gravity
DIE 03	Pour Point
DIE 04	Carbon Residue
DIE 05	Kinematic viscosity at 40° C (C.S.T.)
DIE 06	Acidity
DIE 07	Moisture Content (By Karl Fischer method)
DIE 08	Sulphur Content
(CFC)	COAL : (T / S)
*CFC 01	Moisture Content
*CFC 02	Ash Content
*CFC 03	Volatile matters
CFC 04	Fixed Carbon (By differences)
*CFC 05	Fixed Carbon (only testing)
*CFC 06	Sulphur Content
*CFC 07	Gross Calorific Value
(CPW)	WATER : (T / S)
CPW 01	Appearance/ Colour
*CPW 02	pH Value
*CPW 03	Total Solids
*CPW 04	Suspended matter
*CPW 05	Total Dissolved solid
*CPW 06	Total Alkalinity
*CPW 07	Alkalinity to Phenolphthalein
*CPW 08	Total Hardness
*CPW 09	Permanent Hardness or temporary hardness
*CPW 10	Sulphates
*CPW 11	Chlorides
*CPW 12	Phosphates
*CPW 13	Silica
*CPW 14	Iron
*CPW 15	Calcium

Sr.No.	Nature of Test
*CPW 16	Magnesium
*CPW 17	Free Chlorine
*CPW 18	Dissolved Oxygen
*CPW 19	Conductivity
*CPW 20	Turbidity
*CPW 21	Temp.
(CEW)	EFFLUENT WATER : (T / S)
*CEW 01	Colour
*CEW 02	pH Value
*CEW 03	Total solids
*CEW 04	Suspended matter
*CEW 05	Total dissolved solid
*CEW 06	Chemical Oxygen Demand (C.O.D.)
*CEW 07	Biochemical Oxygen Demand (B.O.D.)
*CEW 08	Phenolic Compound
*CEW 09	Oil & Grease
*CEW 10	Temp.
*CEW 11	Ammonical Nitrogen
*CEW 12	Sulphides
CEW 13	Hexavalent Chromium
CEW 14	Total Chromium
CEW 15	Iron
CEW 16	Phosphates
CEW 17	Silica
CEW 18	Dissolved Oxygen
*CEW 19	Chlorides
CEW 20	Sodium by flame photometer
CEW 21	Colour measurements by tintometer
*CEW 22	Sulphates
CEW 23	Sodium absorption ratio(SAR)
CEW 24	% Sodium
CEW 25	Manganese
CEW 26	Cyanide
CEW 27	Nitrate
CEW 28	Flouride
(CAS)	SEQUESTERING AGENT (Metaclaw, NTA & EDTA)
CAS 01	Physical form
CAS 02	Colour
CAS 03	Active as EDTA
CAS 04	pH of 1% Solution

CAS 05	Chelation Value
(CCA)	ACIDS : PURITY
CCA 01	Hydrochloric Acid
CCA 02	Sulphuric Acid (Oleum)
CCA 03	Nitric Acid
CCA 04	Formic Acid
CCA 05	Acetic Acid
CCA 06	Oxalic Acid
CCA 07	Tartaric Acid
CCA 08	Citric Acid
CCA 09	PHOSPHORIC ACID:
CCA 09(a)	P ₂ O ₅ Content
CCA 09(b)	Sulphate Content
CCA 09(c)	Purity
CCA 10	Phenol (Carbolic Acid)
CCA 11	Chromic Acid (Colourimetric)
(CCB)	BASES / ALKALIS :

CCB 01	Sodium Hydroxide (or Caustic Lye)
CCB 01(a)	Purity
CCB 01(b)	TW
CCB 02	Potassium Hydroxide
CCB 03	Sodium Carbonate (Soda Ash)
CCB 04	Potassium Carbonate
CCB 05	Ammonia Liquor
CCB 06	Ammonium Carbonate
CCB 07	Lime (Calcium Hydroxide/Calcium Oxide)
CCB 08	Borax (Sodium borate, sodium tetraborate)
CCB 09	Calcium Carbonate
CCB 10	Sodium Silicate :
CCB 10(a)	Total Alkali (Na ₂ O)
CCB 10(b)	Silica
CCB 10(c)	TW
CCB 11	Sodium Phosphate :
CCB 11(a)	Purity
CCB 11(b)	P ₂ O ₅
(CCO)	OXIDISING AGENT : PURITY
CCO 01	Bleaching powder or chlorine tablet(calcium hydrochlorite/available chlorine/purity)
CCO 02	Sodium hypochlorite: Available chlorine/purity
CCO 03	Hydrogen peroxide: Purity/Volumes
CCO 04	Sodium chlorite
CCO 05	Sodium perborate
CCO 06	Sodium chlorate
CCO 07	Resist salt(Sod.salt of meta nitrobenzene sulphonic acid)
CCO 08	Potassium permanganate (% Purity)
CCO 09	Potassium/Ammonium dichromate
(CCR)	REDUCING AGENT : PURITY
CCR 01	Sodium bisulphate
CCR 02	Sodium Hydrosulphite (Hydro)
CCR 03	Stannous Chloride :
CCR 03(a)	Purity
CCR 03(b)	Total Tin
CCR 03(c)	Free Acid
CCR 04	Decroline/ Safoline (Zinc sulphonylate formaldehyde)
CCR 05	Rongolite/ formosule G (Sod. Sulphonylate formaldehyde)
CCR 06	Sodium sulphite
CCR 07	Thiourea Dioxide
(CPM)	MISCELLANEOUS PROCESSING/ TESTS :
CPM 01	Degumming trial silk
CPM 02	Scouring of fabric / carbonizing trial
CPM 03	Bleaching trial
CPM 04	Whitening trial
CPM 05	Colour stripping & redyeing
CPM 06	Colour matching of dyestuff on fabric per single shade
CPM 07	Heat setting trial (effect of temperature)
CPM 08	% Size content on fabric
CPM 09	Application of finishing agent on fabric
CPM 10	Dyeing trial of grey fabric (15cm x 15 cm)
CPM 11	Dyeing trial of grey fabric (1 mtr to 3 mtrs)
CPM 12	Printing trial on grey fabric
CPM 13	% Oil content in yarn
CPM 14	% Spin finish in yarn
(CCS)	SALT / SOLVENT
CCS 01	Ammonium sulphate
CCS 02	Aluminium Sulphate/Alumina content (Al ₂ O ₃)
CCS 03	Ammonium chloride
CCS 04	DIAMMONIUM PHOSPHATE :

CCS 04(a)	P ₂ O ₅
CCS 04(b)	Purity
CCS 05	SODIUM CHLORIDE (COMMON SALT) :
CCS 05(a)	Purity
CCS 05(b)	Solubility
CCS 06	Sodium Sulphate (Glauber salt) : Purity
CCS 07	Sodium Acetate:
CCS 07(a)	pH of 1% Solution
CCS 07(b)	Purity
CCS 08	Ammonium Citrate : Purity
CCS 09	Ammonium Tartrate : Purity
CCS 10	Sod. Hexameta Phosphate :
CCS 10(a)	P ₂ O ₅
CCS 10(b)	Purity
CCS 11	Whitening Agent :
CCS 11(a)	Whitening trial
CCS 11(b)	Whiteness Assessment on C.C.M.
CCS 11(c)	Strength by spectrophotometric method
CCS 11(d)	Strength by volumetric method (for Leucophor PC / Ranipal WHN)
CCS 12	Titanium dioxide purity
CCS 13	TiO ₂ content in Khadi or chips or yarn
CCS 14	Zinc Oxide : Purity
CCS 14	Glycerine :
*CCS 14(a)	Purity
*CCS 14(b)	Boiling Point
*CCS 14(c)	Specific Gravity
*CCS 14(d)	Refractive Index
CCS 15	Diethylene Glycol :
*CCS 15(a)	Boiling Point
*CCS 15(b)	Specific Gravity
*CCS 15(c)	Viscosity (in second) (Redwood viscometer)
*CCS 15(d)	Water Content (By Karl Fischer Method)
*CCS 15(e)	Refractive Index
CCS 16	Monoethylene Glycol :
*CCS 16(a)	Boiling Point
*CCS 16(b)	Specific Gravity
*CCS 16(c)	Viscosity (in second) (Redwood viscometer)
*CCS 16(d)	Water Content (By Karl Fischer method)
*CCS 16(e)	Refractive Index
CCS 17	Polyethylene Glycol :
*CCS 17(a)	Boiling Point
*CCS 17(b)	Specific Gravity
*CCS 17(c)	Viscosity (in second) (Redwood viscometer)
*CCS 17(d)	Water Content (By Karl Fischer method)
*CCS 17(e)	Refractive Index
CCS 18	Acetone :
*CCS 18(a)	Boiling Point
*CCS 18(b)	Purity
*CCS 18(c)	Specific Gravity
CCS 19	Ethyl Acetate :
*CCS 19(a)	Boiling Point
*CCS 19(b)	Purity
*CCS 19(c)	Specific Gravity
CCS 20	Formaldehyde : Purity
CCS 21	Sodium Nitrite : Purity
CCS 22	Urea : Purity
CCS 23	Glucose : Purity
CCS 24	Turkey Red Oil (T.R.O.)

*CCS 24(a)	pH of 1% Solution
*CCS 24(b)	Loss in Wt. at 100° C
*CCS 24(c)	Total Fatty Matter
*CCS 24(d)	Total Alkali
*CCS 24(e)	Miscibility with water
*CCS 24(f)	Total Ash
CCS 25	Acid Slurry : Purity
CCS 26	Cellosolve (Ethylene Glycol Mono Ethylether) :
CCS 26(a)	Boiling Point
CCS 26(b)	Specific Gravity
CCS 27	H.D.P.E.
CCS 27(a)	Identification
CCS 27(b)	Density
CCS 28	Naphthol : Purity
CCS 29	Intermediate of Dyestuff :
CCS 29(a)	Nitrite Value
CCS 29(b)	Coupling Value
CCS 30	Thinner :
CCS 30(a)	Specific Gravity
CCS 30(b)	Fractional Distillation
CCS 31	Pine Oil:
CCS 31(a)	Specific Gravity
CCS 31(b)	Boiling Point
CCS 32	Levomide NW :
CCS 32(a)	Reserving property
CCS 32(b)	Solid Content
CCS 32(c)	Ionic Nature
CCS 33	Non-Ionic Detergent :
CCS 33(a)	Cloud Point
CCS 33(b)	Ionic Nature
CCS 33(c)	Detergency
CCS 33(d)	Hydroxyl Value
CCS 33(e)	Loss in Wt. at Specified temperature and time
CCS 34	Trichloro Ethylene:
CCS 34(a)	Boiling Point
CCS 34(b)	Specific Gravity
CCS 35	Stain Remover :
CCS 35(a)	Solid Content
CCS 35(b)	Stain removing trial
CCS 35(c)	Organic solvent content
CCS 36	Polyvinyl Alcohol (P.V.A.) :
*CCS 36(a)	Purity
*CCS 36(b)	Identification
*CCS 36(c)	Viscosity (CPS) (Brookfield viscometer)
*CCS 36(d)	Volatile matter at 105° C
*CCS 36(e)	Ash Content
*CCS 36(f)	Degree Hydrolysis

CCF 07	NKS/NNK/MHN : Solid Content
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CCS 37	Glyoxol (% Purity)
CCS 38	Magnesium sulphate (% Purity)
CCS 39	Magnesium (% Purity)
CCS 40	Ferric Alum (% Purity)
CCS 41	Sodium Metabi-sulphite (% Purity)
CCS 42	Toluene :
CCS 42(a)	Specific Gravity
CCS 42(b)	Boiling Point
CCS 43	Vam :
CCS 43(a)	Specific Gravity
CCS 43(b)	Boiling Point
CCS 43(c)	% Purity
CCS 44	EL 40 :
CCS 44(a)	Solid Content
CCS 44(b)	Cloud Point
CCS 45	Benzene
CCS 45(a)	Specific Gravity
CCS 45(b)	Boiling Point
CCS 46	Berol 9.5 :
CCS 46(a)	Cloud Point
CCS 46(b)	Non Volatile Compound at 105° C
CCS 47	Potassium Dichromate
CCS 48	Ferrous sulphate
CCS 49	Calcium sulphate
(CCF)	FINISHING AUXILIARIES :
CCF 01	Polysol :
CCF 01(a)	Solid Content
CCF 01(b)	Active Content
CCF 02	UF Resin :
CCF 02(a)	Solid Content
CCF 02(b)	Free Formaldehyde
CCF 02(c)	Total Formaldehyde
CCF 03	Melamine Formaldehyde :
CCF 03(a)	Solid Content
CCF 03(b)	Free Formaldehyde
CCF 03(c)	Total Formaldehyde
CCF 04	DMDHEU or KVS :
CCF 04(a)	Solid Content
CCF 04(b)	Free Formaldehyde
CCF 04(c)	Total Formaldehyde
CCF 05	PE Emulsion (Polyethylene Emulsion) :
CCF 05(a)	Active Content
CCF 05(b)	Solid Content
CCF 06	Silicone Emulsion :
CCF 06(a)	Oily Residue
CCF 06(b)	Silica Content

CCF 08	Polycol (PVA Sol.) : Solid Content
CCF 09	Softener (CMK,MHC,NCRS,EMSP) :
CCF 09(a)	Ionic Nature
CCF 09(b)	pH of 1% Solution
CCF 09(c)	Total Solids
CCF 10	FN (Amino Silicon) :
CCF 10(a)	Oily Residue
CCF 10(b)	Silica Content
CCF 11	Binder/Fixer CCL/ Antifoaming Agent :Solid content
CCF 12	Holtex PGM (Blanket Adhesive) : Solid Content
CCF 13	Stains on Fabric
CCF 13(a)	Identification
CCF 13(b)	Removal
CCF 14	Leveling Agent : (NH, PA-66, DFT) :
CCF 14(a)	Loss in wt. at 100°C
CCF 14(b)	pH Value
CCF 14(c)	Ionic Nature
CCF 14(d)	Leveling Property
CCF 14(e)	Migration Property
CJT	JARI TESTING :
CJT 01	Silver Content in Jari
CJT 02	Gold Content in Jari
CJT 03	Copper Content
CJT 04	Analysis of Jari fabric for jari content (Jari Border)
POY	POLYMER TESTING :
POY 01	Melting Point by DSC
POY 02	Glass transition temp.
POY 03	TGA
POY 04	Melt Flow Index
POY 05	Carboxyl or Amine end group by titration
POY 06	Intrinsic viscosity (I.V.)/ Relative viscosity
POY 07	Density by gradient column technique
POY 08	PPM-5 (Sonic Modulus Measurements)
POY 09	Birefringence Measurements
POY 10	Crystallinity by DSC
POY 11	FTIR
(CGT)	GENERAL TESTS :
CGT 01	Boiling Point
CGT 02	Free Acidity
CGT 03	Saturation Value
CGT 04	Refractive Index
CGT 05	Acid Value
CGT 06	Saponification Value
CGT 07	Iodine Value
CGT 08	Ionic Nature
CGT 09	Free Fatty Acid
CGT 10	Fatty Matter
CGT 11	Sp. Gravity
CGT 12	Density
CGT 13	Pour Point
CGT 14	Flash Point
CGT 15	pH Value of 1% Soln.
CGT 16	Fire Point
CGT 17	Identification of unknown chemical
CGT 18	I.R. Spectra
CGT 19	Melting Point (Oven method)
CGT 20	Ash Content
CGT 21	Moisture Content
CGT 22	Viscosity (In seconds) (Redwood viscometer)

CGT 23	Viscosity (In CPS) (Brookfield viscometer)
CGT 24	Solid Content
CGT 25	Viscosity Index
CGT 26	Redox Potential
CGT 27	Sodium Penta chloro phenate
CGT 28	Azole Content in water
CGT 29	Foamability test or thickener
CGT 30	% Active Bromine
CGT 31	% Quarterly Salt
CGT 32	Surfactant
CGT 33	Magnesium Oxide
CGT 34	Zinc Chloride
CGT 35	TBC/ SRB (Total Bacteria Count)
CGT 36	Cast Iron Powder
CGT 37	High pressure liquid chromatography (HPLC)
CGT 38	Water vapour permeability
CGT 39	Scrubbing fastness
CGT 40	Flammability test (at 45 angle) (Incline FR)
CGT 41	Hygroscopicity
CGT 42	Freezing point
CGT 43	Drape coefficient
CGT 44	Defoaming time
CGT 45	Calcium fluoride
CGT 46	Chromium oxide
CGT 47	Water absorption percentage
CGT 48	Water penetration
14CPW1	Ferric oxide(FeO)content from"ORE" sample
14CPW2	Ferrous oxide(Fe2O3)content from"ORE"sample
12CCS	Purity of Titanium Dioxide
CGT004	Insoluble matter in Benzen
CGT003	Insoluble matter in Hexane
CCS20	Finishing Trial
CGT24	Sulfamic Acid
CGT 25A	Moisture content (By Karl fischer method)
CGT 10	Mesh/Particle size of gum/chemical powder
CGT 50	Particle density of water insoluble powder
CDR	Purity of Gypsum
CPM 01	% Coating
CGT 52	Chips -Whether it is Nylon 6 or 66
CGT 57b	C.T.C- Boiling point
CGT 60	Polymer - solid content
CGT 61	Removal of coating from sample
PFI 05	Moisture regain or content(%)
PFI 06	Identification of(single component) fibre
PFI 08	Total finish on fiber
PYN 07	%Oil content in yarn
PYN 08	% Spin finish in yarn
PYN 11	% Moisture content (Oven method)
PYN 13	Identification of yarn (Single component)
PYN 14	% of loss of boiling water or scouring loss
PYN 39	% Blend composition with identification (two components)
PYN 17	% Blend composition without identification (two components)
PFB 07	Identification of warp or weft yarn(single component)

CEW 20	Odour parameter in water
CDY 16	Accelerated washing fastness
PYN 29	Yarn Appearance by Titanium Dioxide
CCS04	Resistance to Alkali and acid on fabric
QUV QUVa QUVb	QUV Accelerated weathering testing (1) condensation method (2) spray method
POY12 POY12a POY12b	Crystallinity and melting point of polymer chips (1) Crystallinity (2) Crystallinity & melting point
CCS	Barium activity number
CDY17	Colour fastness to Dry cleaning of fabric/yarn
7PYN3	Yarn is staple or filament
TT-25	Flex test for coated fabric
9NPFb4	Identi.of Cationic dye dyeable poly. Warp & Weft (Single Comp.,)plus stripping & redyeing of woven fabric.

9NPFb3 Identi. of yarn(single comp.,)plus stripping & redying of knitted fab.

30PFb3 Calculation of weight of fabric warp & weft of 100meters fabric if
Data is not given by the party.

04PFb Turns per unit length of single staple fibre spun yarn removed from
Fabric warp & weft.

PYN27 Average yarn number

1PYN04 Breaking Load of yarn with(%CV)

PFb900 Seam properties