

Procurement Projections for next 05 years

Name of the Organisation : **Numaligarh Refinery Limited**

Website Link: http://www.nrl.co.in/UPLOAD/LeftMenuFile/NRL_Procurement_Plan_5_Years.pdf

Ministry / Department: **Ministry of Petroleum and Natural Gas**

Department: Instrumentation Maintenance												
Sr. No.	Name of machinery/ component	Unit of Measurement	Number of the Machinery/ components likely to be procured in next 5 years					Estimated value of these procurements in next 5 years (INR Cr.)				
			2026-27	2027-28	2028-29	2029-30	2030-31	2026-27	2027-28	2028-29	2029-30	2030-31
1	Field Instruments & Sensor Spares	NOS	80	30	40	60	120	3.50	2.50	2.80	3.50	5.00
2	Instrument control and shutdown valve spares	NOS	450	0	30	150	350	5.50	0.00	0.50	2.50	6.00
3	Process & Environment Analyzer Spares	NOS	80	80	80	80	80	1.50	1.55	1.60	1.65	1.70
4	Captive Power plants GTG, STG Spares	NOS	50	50	50	50	50	2.50	2.52	2.54	2.56	2.58
5	Gas detection System Spares	NOS	30	35	35	35	35	0.32	0.38	0.40	0.42	0.44
6	Fire Alarm , RIM Seal system Spares	NOS	20	35	35	35	35	0.25	0.50	0.52	0.54	0.56
7	TFMS System spares and accessories	NOS	0	0	6	6	6	0.00	0.00	0.62	0.64	0.66
8	LPG Bottling Plant Spares	NOS	50	50	50	50	50	0.25	0.28	0.30	0.32	0.34
9	Laboratory Equipments Spares	NOS	55	55	55	55	55	1.00	1.05	1.10	1.15	1.20
10	Instumentation Consumables	NOS	50	50	50	50	50	0.20	0.22	0.24	0.26	0.28

11	Procurement of Ultrasonic Meters, Spares and accessories	SET	4	1	1	1	2	3.50	0.50	0.55	0.57	1.30
12	Procurement of Spare CCTV along with accessories	SET	30	30	30	30	30	0.50	0.52	0.54	0.56	0.58
13	Terminal Automation System LRC application and accessories	LOT	1	0	0	0	0	1.20	0.00	0.00	0.00	0.00
14	Front End Upgradation of Control System applications and related software	LOT	3	0	0	1	1	2.50	0.00	0.00	1.50	3.00
15	Refinery Control System upgradation	LOT	1	0	0	0	2	3.50	0.00	0.00	0.00	7.50
16	Test and Measuring Instruments, Tools etc.	SET	20	5	5	5	20	1.20	0.5	0.52	0.52	2.5
17	Procurement of PD meter, DCV/SDV Assembly for LPG loading Bays	SET	5	0	0	0	0	1.20	0.00	0.00	0.00	0.00
18	Replacement of Obsolete BCU, PD meter, DCV/SDV etc of Rail Loading Gantry	SET	76	0	0	0	0	3.50	0.00	0.00	0.00	0.00
19	CCTV based Perimeter Intrusion Detection System	SET	250	0	0	0	0	4.50	0.00	0.00	0.00	0.00
20	Instrumentation Cables(Signal, Control, Fire Alarm, PA system, and OFC cables)	METER	15000	0	0	20000	0	0.60	0.00	0.00	0.80	0.00

Department: Electrical Maintenance

Sr. No.	Name of the Machinery/ Component	Name of the Machinery/ components likely to be procured in next 5 years					Estimated value of these procurements in next 5 years (INR Cr.)				
		2026-27	2027-28	2028-29	2029-30	2030-31	2026-27	2027-28	2028-29	2029-30	2030-31
1	Eathing system for Hydrocarbon storage tank for safety	Retractable type bypass conductor			Retractable type bypass conductor	Retractable type bypass conductor	0.00	0.00	0.00	2.00	2.00
2	Plant Illumination: High Mast	LED High mast luminairs	LED High mast luminairs	LED High mast luminairs	LED High mast luminairs	LED High mast luminairs	1.00	1.00	2.00	1.00	1.00
3	Lightning protection system for Refinery asset	Lightning materials (AL. Conductors, Eathing system, SPD etc)	Lightning materials (AL. Conductors, Eathing system, SPD etc)		Lightning materials (AL. Conductors, Eathing system, SPD etc)	Lightning materials (AL. Conductors, Eathing system, SPD etc)	0.25	0.25	0.00	0.50	0.25
4	Electric Motors	LT(415V) & HT(6.6KV) motor	Spares LT spares (415V) & HT(6.6KV) motor	LT(415V) & HT(6.6KV) motor	Spares LT spares (415V) & HT(6.6KV) motor	Spares LT spares (415V) & HT(6.6KV) motor	0.50	1.00	1.00	0.50	0.50
5	Electrical cables	Power cable (11KV, 6.6KV & 415V)		Power cable (11KV, 6.6KV & 415V)		Power cable (11KV, 6.6KV & 415V)	2.00	0.00	4.00	0.00	4.00
6	Electrical lighting materials	LED bulb, LED Tube, fittings, HPMV, SVMV, FLP light & fittings, Fans, etc	LED bulb, LED Tube, fittings, HPMV, SVMV, FLP light & fittings, Fans, etc	LED bulb, LED Tube, fittings, HPMV, SVMV, FLP light & fittings, Fans, etc	LED bulb, LED Tube, fittings, HPMV, SVMV, FLP light & fittings, Fans, etc	LED bulb, LED Tube, fittings, HPMV, SVMV, FLP light & fittings, Fans, etc	2.00	2.00	1.00	1.00	1.00

7	Power transformer	Spares of Power transformer	Spares of Power transformer	Spares of Power transformer			0.50	0.25	0.25	0.00	0.00
8	Battery Charger	Charger unit assembly	Charger unit assembly				1.00	0.50	0.00	0.00	0.00
9	Battery (Lead-Acid/ Ni-Cd)	Lead Acid/ Ni-Cd battery for UPS & Dc system	Lead Acid/ Ni-Cd battery for UPS & Dc system				1.00	0.50	0.00	0.00	0.00
10	500KVA DG set	500KVA DG spares	500KVA DG spares	500KVA DG spares			0.50	0.25	0.25	0.00	0.00
11	Split Type Air conditioners	1.5T Slip AC	1.5T Slip AC	1.5T Slip AC	1.5T Slip AC	1.5T Slip AC	1.00	0.50	0.25	0.25	0.25
12	Electric Heat Tracing materials	EHT cables, Panels, Control & power cables & other accessories	EHT cables, Panels, Control & power cables & other accessories	EHT cables, Panels, Control & power cables & other accessories	EHT cables, Panels, Control & power cables & other accessories	EHT cables, Panels, Control & power cables & other accessories	2.00	1.00	0.50	0.50	0.50
13	Central Air-conditioning system	HVAC packages included (Compressor, Chiller, pump, AHU etc)	HVAC packages included (Compressor, Chiller, pump, AHU etc)	HVAC packages included (Compressor, Chiller, pump, AHU etc)	HVAC packages included (Compressor, Chiller, pump, AHU etc)	HVAC packages included (Compressor, Chiller, pump, AHU etc)	1.00	0.50	0.25	0.25	0.25
14	Industrial Air-Conditioner	Industrial Air-conditioner package Unit (3TR/5TR or More)	Industrial Air-conditioner package Unit (3TR/5TR or More)	Industrial Air-conditioner package Unit (3TR/5TR or More)	Industrial Air-conditioner package Unit (3TR/5TR or More)	Industrial Air-conditioner package Unit (3TR/5TR or More)	0.50	0.25	0.25	0.25	0.25

15	Electrical Miscellaneous items	Electrical Breaker assembly, CT, PT, Capacitor bank, Insulation mat, Lugs, MCB, Meters, Electrical Contractor, Indication lamp, switches etc)	Electrical Breaker assembly, CT, PT, Capacitor bank, Insulation mat, Lugs, MCB, Meters, Electrical Contractor, Indication lamp, switches etc)	Electrical Breaker assembly, CT, PT, Capacitor bank, Insulation mat, Lugs, MCB, Meters, Electrical Contractor, Indication lamp, switches etc)	Electrical Breaker assembly, CT, PT, Capacitor bank, Insulation mat, Lugs, MCB, Meters, Electrical Contractor, Indication lamp, switches etc)	1.00	1.00	1.00	1.00	1.00
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Department: Mechanical Maintenance					
Category	Estimated value of these procurements in next 5 years (INR Cr.)				
	2026-27	2027-28	2028-29	2029-30	2030-31
Compressor spares	6.85	7.15	5.15	11.45	10.30
GTG spares	0.60	11.00	4.00	32.35	0.90
Pipe spares	5.25	1.00	1.50	2.60	7.85
Mech Seal spares	3.10	4.20	4.45	3.75	4.65
Consumables	3.10	1.05	4.25	6.10	4.65
Exchanger spares	4.35	0.20	0.05	5.25	6.50
Pump spares	3.30	1.75	2.75	5.05	4.95

Air Fin Cooler & spares	1.00	-	-	19.85	1.50
Column spares	0.85	-	0.10	16.05	1.25
H2U Reformer spares	0.65	-	-	16.90	0.95
Valve spares	2.20	0.65	0.60	4.05	3.30
Utility area spares (DM, N2P, Cooling Tower, RWTP)	-	6.00	2.00	0.90	-
Structural steel	1.45	0.30	0.40	3.45	2.15
Filter spares	0.05	0.10	0.20	6.40	0.05
Furnace spares	1.35	-	-	0.10	2.05
STG spares	2.75	1.00	4.00	-	4.10
Flanges	0.80	0.10	0.10	0.95	1.20
Safety valve spares	0.30	0.55	0.70	1.25	0.50
LPG BP spares	0.35	0.35	1.10	0.80	0.55
Fasteners	0.20	2.60	-	0.20	0.30
Boiler spares	0.30	-	0.85	1.40	0.50
Pipe fittings	0.60	0.40	0.15	0.05	0.90
Wax Packaging line spares	0.25	0.10	0.20	1.85	0.35
Steam Turbine spares	0.35	-	1.50	-	0.55
Bearing spares	0.40	0.60	0.25	0.50	0.55
Crane spares	0.30	0.35	0.45	0.80	0.45
Gasket	0.35	0.30	0.40	0.45	0.50

Rotary drum filter spares	0.30	-	-	1.20	0.45
Gear box spares	0.35	0.10	0.85	-	0.55
Coupling spares	0.10	0.45	1.10	0.35	0.15
Centrifuge spares	0.20	-	0.45	1.00	0.25
ETP spares	0.15	0.40	1.20	-	0.20
Vessel and spares	0.20	0.05	0.10	1.05	0.35
Marketing terminal loading arm spares	0.20	-	0.65	0.50	0.30
SRB spares	-	-	0.10	1.85	-
Hose spares	0.35	-	-	-	0.55
Tank spares	-	0.10	0.60	0.75	-
Coke calcination unit spares	0.05	0.35	0.35	0.30	0.10
Fan spares	-	-	-	1.20	-
Tools & tackles	0.10	0.15	0.25	0.35	0.20
Condition monitoring spares	0.10	0.40	0.05	0.05	0.15
Reactor spares	0.05	0.05	0.10	0.40	0.10
Diesel engine spares	-	-	-	0.75	-
Steam trap and CRS spares	0.05	0.25	-	0.20	0.10
Fire protection system spares	-	0.50	-	0.05	0.05
Coke cutting system spares	-	-	0.15	0.40	-
Workshop machine spares	0.05	-	0.15	0.05	0.10

MOSRU spares	0.05	-	0.15	-	0.05
Belt spares	-	-	0.15	-	0.05
Burner spares	0.05	-	-	-	0.10
Pulley spares	-	-	0.05	0.15	-
Rupture disc spares	-	0.05	0.05	0.05	0.05
Material handling equipment spares	0.05	-	-	0.05	0.05
PNG Network spares	0.05	-	-	-	0.05
Oil mist spares	-	-	0.05	-	-
LVDH Spares	-	-	0.05	-	-

Department: Technical Service

Sl No	Description	Broad Specifications Parameters	Qty	Accounting Units	Estimated Value of Procurement INR (Lakhs)	Procurement plan
1	Procurement of HCU catalyst	1 st and 2 nd stage Hydrotreating & Hydrocracking catalyst of HCU to be replaced as per catalyst cycle length of 3 years	320	M3	11113	For RTA'27
2	Procurement of NHTU Reactor catalyst	Naphtha Hydro Treating Catalyst. Total Sulphur & Nitrogen < 0.5 ppmw at the outlet	7445	Kg	131	For RTA'27

3	Procurement of ISOM reactor catalyst	Isomerisation Catalyst. To achieve minimum Isomerase RON 82.	6270	Kg	1679	For RTA'27
4	Procurement of Sulphur Guard Absorbent for NHTU and CRU unit	Sulphur absorber. Total Sulphur < 0.5 ppmw at the outlet of the Sulphur Guard Absorber.	5.14	m3	108	2026
5	Procurement of Chloride Guard Absorbent for ISOM unit	Chloride Guard Absorbent. HCl concentration <0.1 ppmw at the outlet of Chloride Guard Absorber.	3400	Kg	13	For RTA'27
6	Procurement of Chloride Guard Absorbent for CRU unit	Chloride Guard Absorbent. Chloride content of hydrocarbon gas at the outlet of Chloride Guard Absorber < 0.5 ppmv	2560	Kg	14	For RTA'27
7	Procurement of Hydrogen & Naphtha Feed Dryer Absorbent for ISOM unit	Moisture adsorbent for maintaining moisture Content at outlet of Naphtha Feed Dryers & Hydrogen Dryers < 1.0 ppm mole.	2520	Kg	19	For RTA'27
8	Procurement of Benzene Hydrogenation reactor catalyst	Benzene Saturation catalyst for maintaining Benzene at Reactor outlet 0.1 Vol %(Max)	840	Kg	190	For RTA'27
9	Procurement of pilot burner scanner for all the Furnace in the Refinery	Pilot Burner Scanner. New requirement based on the OISD-STD-111 standard, which mandates that all pilot burners must have scanners with interlocks	186	Pcs	500	For RTA'27

10	Procurement of upgraded Gas Burners for CDU and VDU Furnace	Fuel Gas Burners. Upgradation of Burners in CDU VDU to cater new FG specification	28	Nos	228	For RTA'27
11	Desalter Revamp in CDU VDU	Desalter system with retrofitting of the existing desalter & a new desalter to meet the following at Desalter O/L 1. Salt: < 0.5 PTB, 2. BS&W: 0.2 Vol % (Max), and 3. Oil in Brine: < 150 ppmv			4074	For RTA'27
12	Tubular Reformer Catalyst	Reforming catalyst 20x8mm	8	m3	530	For RTA'27
13	HTER catalyst	Reforming catalyst 16x8mm	2	m3	150	For RTA'27
14	ZnO absorber	sulphur guard catalyst	8.4	m3	50	For RTA'27
15	MT shift catalyst	Shift reactor catalyst	14	m3	575	For RTA'27
16	Choride Guard of HDS	Chloride guard catalyst	0.8	m3	20	For RTA'27
17	Clause Catalyst	Al ₂ O ₃ -based catalysts support higher sulfur recovery efficiency of 96% in Sulfur Recovery Units (SRUs) .	6	Ton	14	2028
18	TGTU Catalyst	Co–Mo (cobalt–molybdenum) based hydrogenation catalysts help Tail Gas Treating Units (TGTUs) achieve 99.5% or higher sulfur recovery efficiency.	8.2	m3	50	2028

PROCUREMENT PROJECTIONS FOR NEXT FIVE YEARS (DEPT: OPERATION)

FY-26-27

Sl No	Description of Item	Broad Specification parameter	Qty	Accounting units	Estimated value of procurement INR (Lakhs)
1	Lube oil for Refrigeration Compressor	CP-100	4200	L	70.56
2	Lube oil for Refrigeration Compressor	CP-32	1260	L	20.76
3	MIBK as Solvent	MIBK	462	MT	465.32
4	PROPANE for Refrigeration Compressor	PROPANE	20	MT	16.26
5	Ethylene Glycol	MEG	3200	KG	2.53
6	Lube oil for Refrigeration Compressor	SOLEST-170	420	liter	8.43
7	Cartons for Wax packing	Cartons	1600000	NOS	719.04
8	Strapping Rolls	Strapping rolls	2400	NOS	31.33
9	Carton Sealer	Adhesive Tapes	2400	NOS	9.43
10	Stretch Film Wrapper	Stretch film	360	NOS	7.78
11	Freon for Refrigeration	Freon 134a	3250	KG	25.91
12	Demulsifier for CDU	Demulsifier	8019	KG	15.24
13	Neutralizing Amine	Neutralizing Amine	14566	KG	26.22
14	Corrosion Inhibitor for CDU	Corrosion Inhibitor	4264	KG	6.40
15	Dimethyldisulfide (DMDS)	Catalyst Sulfiding agent	85	MT	204.70
16	LUBRICITY IMPROVER	to meet BS- VI HSD specification of lubricity	240000	KG	300.00
17	CETANE IMPROVER	to meet BS- VI HSD specification of Cetane no	1440000	KG	2033.00
18	Orange Dye	Liquid Orange Dye for dosing in finished BS-VI Motor Spirit	12000	KG	27.36
19	Multi Functional Additive (MFA)	BS VI Motor Spirit additive	60000	KG	186.30
20	Pour Point Depressant(PPD)	BS-VI HSD pour point improver.	6000	KG	15.39
21	Slop Oil Demulsifier	Slop Oil Demulsifier is dosed in Slop Oil to facilitate separation of solid content and water from the slop oil.	2700	KG	11.86
22	Antistatic	For dosing in BS-VI HSD to increase the conductivity	1000	KG	38.18
23	Hydrogen Peroxide (H2O2)	Conc.: 50% W/W, Appearance: Clear, colorless liquid, Physical State: Liquid, Color: Colorless, Odor: Odorless Odor threshold: Not applicable, pH <= 3.0, Melting point/freezing point: -52 °C, Boiling Point/Range: 114 °C, Flash point: Not flammable, Evaporation Rate: > 1 (n-butyl acetate=1), Flammability (solid, gas): Not flammable Flammability Limit in Air: Not applicable, Vapor pressure: 18 mm Hg @ 30 °C, Density: 1.2-1.45 @ 20 °C, Specific gravity: 1.2, Water solubility: Completely soluble, Partition coefficient: log Kow = -1.5 @ 20 °C, Autoignition temperature: Not combustible, Decomposition temperature: 100 °C (adiabatic), Viscosity, kinematic: 1.17 cP @ 20 °C	240	MT	104.77
24	De-oiling Polyelectrolyte (DOPE)	Physical Form: Liquid form, Solubility: Fully soluble in water, Base: Cationic, pH: 2-3, Specific gravity: 0.95 – 1.20 Viscosity: 140 – 240 CP, JAR TEST ANALYSIS TO DETERMINE O&G REMOVAL EFFICIENCY	20	MT	8.50
25	De-watering Polyelectrolyte (Bio)	Physical state: Liquid, Solubility: Soluble in Water, Specific gravity =0.95-1.20, Density (gm/cc):1.01, Effective pH range:4-9	7.5	MT	3.00
26	De-watering Polyelectrolyte (Chem)	pH :<2, Physical state: Liquid, Solubility: Soluble in Water Specific Gravity: 0.99-1.05	7.5	MT	3.00
27	Ferric Alum	Min 16% Al2O3 concentration, Conforming to IS: 299-1989	260	MT	42.70
28	MDEA	Methyldiethanolamine (MDEA) for the Amine Treating Unit of SRB shall be a clear liquid with minimum 99.8% MDEA content and maximum 0.2% water content, having an ammoniacal odour, specific gravity of 1.03–1.09 at 25 °C, boiling point of 245–250 °C, melting point of at least –21 °C, flash point not less than 135 °C, pH of approximately 11.5 in full strength, and be completely soluble in water at 20 °C.	28000	KG	54.26
29	Activated Carbon	The activated carbon used in the amine filtration unit shall be coconut shell–based and capable of removing coloring materials from 25–45% strength MDEA, including dissolved iron, grease, hydrocarbons, and other contaminants, with a particle size of 4/12 BSS, bulk density of 0.59 g/cc, moisture content of 3%, ash content of 3.2%, iodine adsorption value of 830 mg/g, surface area of 720 m ² /g, and hardness of 90.	3000	KG	3.04

30	Catdegas	CATDEGAS (Liquid Sulphur Degassing Chemical) – Proprietary EIL licensor product for liquid sulphur pit degassing system; reduces dissolved H ₂ S in liquid sulphur from 300–500 ppm to <10 ppm. Must meet: Colourless to pale yellow liquid, mild aromatic odour, specific gravity ~1.092, viscosity ~0.52 cSt at 30°C, boiling point ~234°C, melting point ~-14°C, vapour density ~4.3 (air=1), hygroscopic, and 100% water soluble.	200	KG	21.22
31	Ceramic Balls	1/2" Ceramic Balls (Catalyst Support Balls)	1.5	M3	1.57
32	C2Cl4	Purity =99.9 wt% min, Viscosity @ 40 Deg C =153, Viscosity index=196, Specific gravity =0.995 No added stabiliser, Oxygen and nitrogen Compound <15 wt ppm., Specific gravity=1.628	24	MT	106.00
33	Corrosion inhibitor for MSP	Must form a stable protective film on carbon steel. Temperature resistance upto 140 dec C. It must be compatible to H ₂ S, NH ₃ , Chloride environment. Dual phase protection.	4	MT	1.72
34	Refrigeration compressor lube oil	Viscosity@40°C cST = 153, Viscosity Index=196, Specific gravity =0.995	2288	L	46.94
35	Antioxidant	BHT/2,6 DBPC	800	KG	3.28
36	Hydrochloric Acid (HCL)	Min 30% concentration, conforming to IS 265: 2021	1824.41	MT	112.87
37	Caustic Lye, (NaOH)	100% concentration, conforming to IS 252: 2013 (Amendment 2018) Grade-1.	727.132	MT	461.79
38	Sulphuric Acid (H2SO4)	98% Conc. conforming to IS-266.	43.494	MT	5.90
39	Poly Aluminium Chloride (PAC)	Conforming to IS 15573:2005	490	MT	106.72
40	Boiler Chemicals (Kg)	Polyamine based chemicals	5334	KG	8.22
41	Cyclo-hexyl-Amine	99% Amine Content	10	MT	35.10
42	Hydrated lime	Conforming to IS:1540-2	71.102	MT	10.35
43	Common Salt (NaCl)	NaCl content 98%,	49.707	MT	4.15
44	CT-Chemicals	Cooling water treatment Chemical	1	LS	63.55
45	DM Resin Cation Resin	Strong Acid Cation Resin (for SAC)	9621	L	14.72
46	DM Resin Anion Resin	Strong Bse Anion Resin (for SBA and MB)	10470	L	30.70
47	Liquid Nitrogen	Liquid Nitrogen purity 99.95%	550	KL	98.40
FY-27-28					
SI No	Description of Item	Broad Specification parameter	Qty	Accounting units	Estimated value of procurement INR (Lakhs)
1	Lube oil for Refrigeration Compressor	SOLEST-170	2100	L	44.91
2	Cartons for Wax packing	Cartons	1600000	NOS	766.08
3	Strapping Rolls	Strapping rolls	2400	NOS	33.38
4	Carton Sealer	Adhesive Tapes	2400	NOS	10.05
5	Stretch Film Wrapper	Stretch film	360	NOS	8.29
6	Freon for Refrigeration	Freon 134a	16250	KG	138.01
7	Duraclear DS-4609-7F	Synthetic lube oil	2288	L	81.70
8	Antifoam Chemical for DCU	Antifoam Chemical for DCU	1800	KG	6.50
9	Corrosion Inhibitor for DCU	Corrosion Inhibitor for DCU	2700	KG	6.50
10	APS	Ammonium Polysulphide solution to use as corrosion inhibitor in Hydrocracker	16000	KG	30.34
11	LUBRICITY IMPROVER	to meet BS- VI HSD specification of lubricity	240000	KG	321.00
12	CETANE IMPROVER	to meet BS- VI HSD specification of Cetane no	1440000	KG	2175.31
13	Orange Dye	Liquid Orange Dye for dosing in finished BS-VI Motor Spirit	12000	KG	29.28
14	Multi Functional Additive (MFA)	BS VI Motor Spirit additive	60000	KG	199.34
15	Pour Point Depressant(PPD)	BS-VI HSD pour point improver.	6000	KG	16.47
16	Slop Oil Demulsifier	Slop Oil Demulsifier is dosed in Slop Oil to facilitate separation of solid content and water from the slop oil.	2700	KG	12.69
17	Antistatic	For dosing in BS-VI HSD to increase the conductivity	1000	KG	40.85
18	Hydrogen Peroxide (H2O2)	Conc.: 50% W/W, Appearance: Clear, colorless liquid, Physical State: Liquid, Color: Colorless, Odor: Odorless Odor threshold: Not applicable, pH <= 3.0, Melting point/freezing point: -52 °C, Boiling Point/Range: 114 °C, Flash point: Not flammable, Evaporation Rate: > 1 (n-butyl acetate=1), Flammability (solid, gas): Not flammable Flammability Limit in Air: Not applicable, Vapor pressure: 18 mm Hg @ 30 °C, Density: 1.2-1.45 @ 20 °C, Specific gravity: 1.2, Water solubility: Completely soluble, Partition coefficient: log Kow = -1.5 @ 20 °C, Autoignition temperature: Not combustible, Decomposition temperature: 100 °C (adiabatic), Viscosity, kinematic: 1.17 cP @ 20 °C	240	MT	112.10

19	De-oiling Polyelectrolyte (DOPE)	Physical Form: Liquid form, Solubility: Fully soluble in water, Base: Cationic, pH: 2-3, Specific gravity: 0.95 – 1.20 Viscosity: 140 – 240 CP, JAR TEST ANALYSIS TO DETERMINE O&G REMOVAL EFFICIENCY	20	MT	9.10
20	De-watering Polyelectrolyte (Bio)	Physical state: Liquid, Solubility: Soluble in Water, Specific gravity =0.95-1.20, Density (gm/cc):1.01, Effective pH range:4-9	7.5	MT	3.21
21	De-watering Polyelectrolyte (Chem)	pH :<2, Physical state: Liquid, Solubility: Soluble in Water Specific Gravity: 0.99-1.05	7.5	MT	3.21
22	Ferric Alum	Min 16% Al2O3 concentration, Conforming to IS: 299-1989	245	MT	43.10
23	MDEA	Methyldiethanolamine (MDEA) for the Amine Treating Unit of SRB shall be a clear liquid with minimum 99.8% MDEA content and maximum 0.2% water content, having an ammoniacal odour, specific gravity of 1.03–1.09 at 25 °C, boiling point of 245–250 °C, melting point of at least –21 °C, flash point not less than 135 °C, pH of approximately 11.5 in full strength, and be completely soluble in water at 20 °C.	28000	KG	57.60
24	Corrosion Inhibitor	The corrosion inhibitor shall be an oil-soluble filming amine type with a specific gravity of 0.90–0.96 at 15.6 °C, a flash point above 50 °C, and be completely water-soluble; the maximum dosing rate shall not exceed 0.120 kg/hr, iron pickup in the overhead accumulator of the amine regeneration unit shall be maintained below 0.3 ppm, the pH of the overhead reflux water shall be within 8.5–9.0, and the inhibitor shall be compatible with MDEA without causing its degradation.	2200	KG	5.11
25	Antifoam	The antifoaming agent shall be a silicone-free organic liquid with a specific gravity of 0.97–1.10 at 15.6°C and kinematic viscosity ≤250 cSt at 40°C, capable of reducing foam height to less than 1 mm within 10 seconds during SRU testing for both lean and rich amine, and must be fully compatible with MDEA without causing its degradation.	800	KG	2.36
26	C2Cl4	Purity =99.9 wt% min, Viscosity @ 40 Deg C =153, Viscosity index=196, Specific gravity =0.995 No added stabiliser, Oxygen and nitrogen Compound <15 wt ppm., Specific gravity=1.628	24	MT	113.42
27	Corrosion inhibitor for MSP	Must form a stable protective film on carbon steel. Temperature resistance upto 140 dec C. It must be compatible to H2s, NH3, Chloride environment. Dual phase protection.	4	MT	1.84
28	Refrigeration compressor lube oil	Viscosity@40°C cST = 153, Viscosity Index=196, Specific gravity =0.995	2288	L	50.23
29	Dimethyldisulfide (DMDS)	Catalyst Sulfiding agent	24	MT	80.31
30	Antioxidant	BHT/2,6 DBPC	5000	KG	22.56
31	Hydrochloric Acid (HCL)	Min 30% concentration, conforming to IS 265: 2021	1672.376	MT	103.47
32	Caustic Lye, (NaOH)	100% concentration, conforming to IS 252: 2013 (Amendment 2018) Grade-1.	666.5377	MT	423.31
33	Sulphuric Acid (H2SO4)	98% Conc. conforming to IS-266.	39.8695	MT	5.41
34	Poly Aluminium Chloride (PAC)	Conforming to IS 15573:2005	450	MT	98.01
35	Boiler Chemicals (Kg)	Polyamine based chemicals	4890	KG	7.53
36	Cyclo-hexyl-Amine	99% Amine Content	9.166667	MT	32.18
37	Hydrated lime	Conforming to IS:1540-2	65	MT	9.46
38	Common Salt (Nacl)	NaCl content 98%,	49.707	MT	4.15
39	CT-Chemicals	Cooling water treatment Chemical	1	LS	63.55
40	DM Resin Cation Resin	Strong Acid Cation Resin (for SAC)	9621	L	14.72
41	DM Resin Anion Resin	Strong Bse Anion Resin (for SBA and MB)	10470	L	30.70
42	Liquid Nitrogen	Liquid Nitrogen purity 99.95%	150	KL	26.84

FY-28-29

Sl No	Description of Item	Broad Specification parameter	Qty	Accounting units	Estimated value of procurement INR (Lakhs)
1	Lube oil for Refrigeration Compressor	CP-100	3150	L	59.84
2	Lube oil for Refrigeration Compressor	CP-32	1260	L	23.48
3	MIBK as Solvent	MIBK	468	MT	533.04
4	PROPANE for Refrigeration Compressor	PROPANE	15	MT	13.79
5	Ethylene Glycol	MEG	600	KG	0.54
6	Lube oil for Refrigeration Compressor	SOLEST-170	420	L	9.53
7	Cartons for Wax packing	Cartons	1600000	NOS	813.12
8	Strapping Rolls	Strapping rolls	2400	NOS	35.43
9	Carton Sealer	Adhesive Tapes	2400	NOS	10.67
10	Stretch Film Wrapper	Stretch film	360	NOS	8.80

11	Freon for Refrigeration	Freon 134a	3250	KG	29.30
12	Demulsifier	Demulsifier	16038	KG	32.61
13	Neutralizing Amine	Neutralizing Amine	29132	KG	56.11
14	Corrosion Inhibitor for CDU	Corrosion Inhibitor	8528	KG	13.69
15	Antistatic	STADIS® 450 for ATF production	720	KG	59.24
16	LUBRICITY IMPROVER	to meet BS- VI HSD specification of lubricity	240000	KG	343.47
17	CETANE IMPROVER	to meet BS- VI HSD specification of Cetane no	1440000	KG	2327.58
18	Orange Dye	Liquid Orange Dye for dosing in finished BS-VI Motor Spirit	12000	KG	31.33
19	Multi Functional Additive (MFA)	BS VI Motor Spirit additive	60000	KG	213.29
20	Pour Point Depressent(PPD)	BS-VI HSD pour point improver.	6000	KG	17.62
21	Slop Oil Demulsifier	Slop Oil Demulsifier is dosed in Slop Oil to facilitate separation of solid content and water from the slop oil.	2700	KG	13.58
22	Antistatic	For dosing in BS-VI HSD to increase the conductivity	1000	KG	43.71
23	Hydrogen Peroxide (H2O2)	Conc.: 50% W/W, Appearance: Clear, colorless liquid, Physical State: Liquid, Color: Colorless, Odor: Odorless Odor threshold: Not applicable, pH <= 3.0, Melting point/freezing point: -52 °C, Boiling Point/Range: 114 °C, Flash point: Not flammable, Evaporation Rate: > 1 (n-butyl acetate=1), Flammability (solid, gas): Not flammable Flammability Limit in Air: Not applicable, Vapor pressure: 18 mm Hg @ 30 °C, Density: 1.2-1.45 @ 20 °C, Specific gravity: 1.2, Water solubility: Completely soluble, Partition coefficient: log Kow = -1.5 @ 20 °C, Autoignition temperature: Not combustible, Decomposition temperature: 100 °C (adiabatic), Viscosity, kinematic: 1.17 cP @ 20 °C	240	MT	119.95
24	De-oiling Polyelectrolyte (DOPE)	Physical Form: Liquid form, Solubility: Fully soluble in water, Base: Cationic, pH: 2-3, Specific gravity: 0.95 – 1.20 Viscosity: 140 – 240 CP, JAR TEST ANALYSIS TO DETERMINE O&G REMOVAL EFFICIENCY	20	MT	9.73
25	De-watering Polyelectrolyte (Bio)	Physical state: Liquid, Solubility: Soluble in Water, Specific gravity =0.95-1.20, Density (gm/cc):1.01, Effective pH range:4-9	7.5	MT	3.43
26	De-watering Polyelectrolyte (Chem)	pH :<2, Physical state: Liquid, Solubility: Soluble in Water Specific Gravity: 0.99-1.05	7.5	MT	3.43
27	Ferric Alum	Min 16% Al2O3 concentration, Conforming to IS: 299-1989	260	MT	48.90
28	MDEA	Methyldiethanolamine (MDEA) for the Amine Treating Unit of SRB shall be a clear liquid with minimum 99.8% MDEA content and maximum 0.2% water content, having an ammoniacal odour, specific gravity of 1.03–1.09 at 25 °C, boiling point of 245–250 °C, melting point of at least –21 °C, flash point not less than 135 °C, pH of approximately 11.5 in full strength, and be completely soluble in water at 20 °C.	28000	KG	60.93
29	Activated Carbon	The activated carbon used in the amine filtration unit shall be coconut shell-based and capable of removing coloring materials from 25–45% strength MDEA, including dissolved iron, grease, hydrocarbons, and other contaminants, with a particle size of 4/12 BSS, bulk density of 0.59 g/cc, moisture content of 3%, ash content of 3.2%, iodine adsorption value of 830 mg/g, surface area of 720 m²/g, and hardness of 90.	3000	KG	3.42
30	Catdegas	CATDEGAS (Liquid Sulphur Degassing Chemical) – Proprietary EIL licensor product for liquid sulphur pit degassing system; reduces dissolved H₂S in liquid sulphur from 300–500 ppm to <10 ppm. Must meet: Colourless to pale yellow liquid, mild aromatic odour, specific gravity ~1.092, viscosity ~0.52 cSt at 30°C, boiling point ~234°C, melting point ~-14°C, vapour density ~4.3 (air=1), hygroscopic, and 100% water soluble.	200	KG	23.21
31	C2Cl4	Purity =99.9 wt% min, Viscosity @ 40 Deg C =153, Viscosity index=196, Specific gravity =0.995 No added stabiliser, Oxygen and nitrogen Compound <15 wt ppm., Specific gravity=1.628	24	MT	121.36
32	Corrosion inhibitor for MSP	Must form a stable protective film on carbon steel. Temperature resistance upto 140 dec C. It must be compatible to H2s, NH3, Chloride environment. Dual phase protection.	4	MT	1.97

33	Refrigeration compressor lube oil	Viscosity@40°C cST = 153, Viscosity Index=196, Specific gravity =0.995	2288	L	53.75
34	Dimethyldisulfide (DMDS)	Catalyst Sulfiding agent	24	MT	88.33
35	Antioxidant	BHT/2,6 DBPC	800	KG	3.97
36	Hydrochloric Acid (HCL)	Min 30% concentration, conforming to IS 265: 2021	1824.41	MT	129.23
37	Caustic Lye, (NaOH)	100% concentration, conforming to IS 252: 2013 (Amendment 2018) Grade-1.	727.132	MT	528.71
38	Sulphuric Acid (H2SO4)	98% Conc. conforming to IS-266.	43.494	MT	6.75
39	Poly Aluminium Chloride (PAC)	Conforming to IS 15573:2005	490	MT	122.19
40	Boiler Chemicals (Kg)	Polyamine based chemicals	5334	KG	9.41
41	Cyclo-hexyl-Amine	99% Amine Content	10	MT	40.19
42	Hydrated lime	Conforming to IS:1540-2	71.102	MT	11.85
43	Common Salt (Nacl)	NaCl content 98%,	49.707	MT	4.75
44	CT-Chemicals	Cooling water treatment Chemical	1	LS	72.76
45	DM Resin Cation Resin	Strong Acid Cation Resin (for SAC)	9621	L	16.85
46	DM Resin Anion Resin	Strong Bse Anion Resin (for SBA and MB)	10470	L	35.14
47	Liquid Nitrogen	Liquid Nitrogen purity 99.95%	150	KL	30.73
FY-29-30					
SI No	Description of Item	Broad Specification parameter	Qty	Accounting units	Estimated value of procurement INR (Lakhs)
1	Lube oil for Refrigeration Compressor	SOLEST-170	420	L	10.09
2	Cartons for Wax packing	Cartons	1600000	NOS	860.16
3	Strapping Rolls	Strapping rolls	2400	NOS	37.48
4	Carton Sealer	Adhesive Tapes	2400	NOS	11.29
5	Stretch Film Wrapper	Stretch film	360	NOS	9.31
6	Freon for Refrigeration	Freon 134a	3250	KG	30.99
7	APS	Ammonium Polysulphide solution to use as corrosion inhibitor in Hydrocracker	16000	KG	34.74
8	LUBRICITY IMPROVER	to meet BS- VI HSD specification of lubricity	240000	KG	367.51
9	CETANE IMPROVER	to meet BS- VI HSD specification of Cetane no	1440000	KG	2490.51
10	Orange Dye	Liquid Orange Dye for dosing in finished BS-VI Motor Spirit	12000	KG	33.52
11	Multi Functional Additive (MFA)	BS VI Motor Spirit additive	60000	KG	228.22
12	Pour Point Depressant(PPD)	BS-VI HSD pour point improver.	6000	KG	18.85
13	Slop Oil Demulsifier	Slop Oil Demulsifier is dosed in Slop Oil to facilitate separation of solid content and water from the slop oil.	2700	KG	14.53
14	Antistatic	For dosing in BS-VI HSD to increase the conductivity	1000	KG	46.77
15	Hydrogen Peroxide (H2O2)	Conc.: 50% W/W, Appearance: Clear, colorless liquid, Physical State: Liquid, Color: Colorless, Odor: Odorless Odor threshold: Not applicable, pH <= 3.0, Melting point/freezing point: -52 °C, Boiling Point/Range: 114 °C, Flash point: Not flammable, Evaporation Rate: > 1 (n-butyl acetate=1), Flammability (solid, gas): Not flammable Flammability Limit in Air: Not applicable, Vapor pressure: 18 mm Hg @ 30 °C, Density: 1.2-1.45 @ 20 °C, Specific gravity: 1.2, Water solubility: Completely soluble, Partition coefficient: log Kow = -1.5 @ 20 °C, Autoignition temperature: Not combustible, Decomposition temperature: 100 °C (adiabatic), Viscosity, kinematic: 1.17 cP @ 20 °C	240	MT	128.34
16	De-oiling Polyelectrolyte (DOPE)	Physical Form: Liquid form, Solubility: Fully soluble in water, Base: Cationic, pH: 2-3, Specific gravity: 0.95 – 1.20 Viscosity: 140 – 240 CP, JAR TEST ANALYSIS TO DETERMINE O&G REMOVAL EFFICIENCY	20	MT	10.41
17	De-watering Polyelectrolyte (Bio)	Physical state: Liquid, Solubility: Soluble in Water, Specific gravity =0.95-1.20, Density (gm/cc):1.01, Effective pH range:4-9	7.5	MT	3.68
18	De-watering Polyelectrolyte (Chem)	pH :<2, Physical state: Liquid, Solubility: Soluble in Water Specific Gravity: 0.99-1.05	7.5	MT	3.68
19	Ferric Alum	Min 16% Al2O3 concentration, Conforming to IS: 299-1989	260	MT	52.36
20	MDEA	Methyldiethanolamine (MDEA) for the Amine Treating Unit of SRB shall be a clear liquid with minimum 99.8% MDEA content and maximum 0.2% water content, having an ammoniacal odour, specific gravity of 1.03–1.09 at 25 °C, boiling point of 245–250 °C, melting point of at least –21 °C, flash point not less than 135 °C, pH of approximately 11.5 in full strength, and be completely soluble in water at 20 °C.	28000	KG	64.26

21	Corrosion Inhibitor	The corrosion inhibitor shall be an oil-soluble filming amine type with a specific gravity of 0.90–0.96 at 15.6 °C, a flash point above 50 °C, and be completely water-soluble; the maximum dosing rate shall not exceed 0.120 kg/hr, iron pickup in the overhead accumulator of the amine regeneration unit shall be maintained below 0.3 ppm, the pH of the overhead reflux water shall be within 8.5–9.0, and the inhibitor shall be compatible with MDEA without causing its degradation.	2200	KG	5.41
22	Antifoam	The antifoaming agent shall be a silicone-free organic liquid with a specific gravity of 0.97–1.10 at 15.6°C and kinematic viscosity ≤250 cSt at 40°C, capable of reducing foam height to less than 1 mm within 10 seconds during SRU testing for both lean and rich amine, and must be fully compatible with MDEA without causing its degradation.	800	KG	2.65
23	Ceramic Balls	1/2" Ceramic Balls (Catalyst Support Balls)	2	M3	2.44
24	C2Cl4	Purity =99.9 wt% min, Viscosity @ 40 Deg C =153, Viscosity index=196, Specific gravity =0.995 No added stabiliser, Oxygen and nitrogen Compound <15 wt ppm., Specific gravity=1.628	24	MT	129.85
25	Corrosion inhibitor for MSP	Must form a stable protective film on carbon steel. Temperature resistance upto 140 dec C. It must be compatible to H2s, NH3, Chloride environment. Dual phase protection.	4	MT	2.11
26	Refrigeration compressor lube oil	Viscosity@40°C cST = 153, Viscosity Index=196, Specific gravity =0.995	2288	L	57.51
27	Dimethylsulphide (DMS)	Catalyst Sulfiding agent	24	MT	97.17
28	Antioxidant	BHT/2,6 DBPC	800	KG	4.37
29	Hydrochloric Acid (HCL)	Min 30% concentration, conforming to IS 265: 2021	1824.41	MT	138.27
30	Caustic Lye, (NaOH)	100% concentration, conforming to IS 252: 2013 (Amendment 2018) Grade-1.	727.132	MT	565.72
31	Sulphuric Acid (H2SO4)	98% Conc. conforming to IS-266.	43.494	MT	7.23
32	Poly Aluminium Chloride (PAC)	Conforming to IS 15573:2005	490	MT	130.74
33	Boiler Chemicals (Kg)	Polyamine based chemicals	5334	KG	10.07
34	Cyclo-hexyl-Amine	99% Amine Content	10	MT	43.00
35	Hydrated lime	Conforming to IS:1540-2	71.102	MT	12.68
36	Common Salt (Nacl)	NaCl content 98%,	49.707	MT	5.08
37	CT-Chemicals	Cooling water treatment Chemical	1	LS	77.85
38	DM Resin Cation Resin	Strong Acid Cation Resin (for SAC)	11000	L	20.62
39	DM Resin Anion Resin	Strong Bse Anion Resin (for SBA and MB)	14000	L	50.28
40	Liquid Nitrogen	Liquid Nitrogen purity 99.95%	550	KL	120.55
FY-30-31					
Sl No	Description of Item	Broad Specification parameter	Qty	Accounting units	Estimated value of procurement INR (Lakhs)
1	Lube oil for Refrigeration Compressor	SOLEST-170	420	L	10.64
2	Cartons for Wax packing	Cartons	1600000	NOS	907.20
3	Strapping Rolls	Strapping rolls	2400	NOS	39.53
4	Carton Sealer	Adhesive Tapes	2400	NOS	11.90
5	Stretch Film Wrapper	Stretch film	360	NOS	9.82
6	Freon for Refrigeration	Freon 134a	3250	KG	32.69
7	Demulsifier for CDU	Demulsifier	16038	KG	39.94
8	Neutralizing Amine	Neutralizing Amine	29132	KG	68.73
9	Corrosion Inhibitor	Corrosion Inhibitor	8528	KG	16.77
10	Duraclear DS-4609-7F	Synthetic lube oil	2288	L	100.08
11	DMS	Dimethyl disulfide used for Catalyst Sulfiding during RTA	60	MT	272.00
12	Antioxidant	Antioxidant for ATF production (2,6 DBPC)	4000	KG	24.38
13	LUBRICITY IMPROVER	to meet BS- VI HSD specification of lubricity	240000	KG	393.24
14	CETANE IMPROVER	to meet BS- VI HSD specification of Cetane no	1440000	KG	2664.85
15	Orange Dye	Liquid Orange Dye for dosing in finished BS-VI Motor Spirit	12000	KG	35.87
16	Multi Functional Additive (MFA)	BS VI Motor Spirit additive	60000	KG	244.20
17	Pour Point Depressent(PPD)	BS-VI HSD pour point improver.	6000	KG	20.17
18	Slop Oil Demulsifier	Slop Oil Demulsifier is dosed in Slop Oil to facilitate separation of solid content and water from the slop oil.	2700	KG	15.55
19	Antistatic	For dosing in BS-VI HSD to increase the conductivity	1000	KG	50.04

20	Hydrogen Peroxide (H2O2)	Conc.: 50% W/W, Appearance: Clear, colorless liquid, Physical State: Liquid, Color: Colorless, Odor: Odorless Odor threshold: Not applicable, pH <= 3.0, Melting point/freezing point: -52 °C, Boiling Point/Range: 114 °C, Flash point: Not flammable, Evaporation Rate: > 1 (n-butyl acetate=1), Flammability (solid, gas): Not flammable Flammability Limit in Air: Not applicable, Vapor pressure: 18 mm Hg @ 30 °C, Density: 1.2-1.45 @ 20 °C, Specific gravity: 1.2, Water solubility: Completely soluble, Partition coefficient: log Kow = -1.5 @ 20 °C, Autoignition temperature: Not combustible, Decomposition temperature: 100 °C (adiabatic), Viscosity, kinematic: 1.17 cP @ 20 °C	240	MT	137.33
21	De-oiling Polyelectrolyte (DOPE)	Physical Form: Liquid form, Solubility: Fully soluble in water, Base: Cationic, pH: 2-3, Specific gravity: 0.95 – 1.20 Viscosity: 140 – 240 CP, JAR TEST ANALYSIS TO DETERMINE O&G REMOVAL EFFICIENCY	20	MT	11.14
22	De-watering Polyelectrolyte (Bio)	Physical state: Liquid, Solubility: Soluble in Water, Specific gravity =0.95-1.20, Density (gm/cc):1.01, Effective pH range:4-9	7.5	MT	3.93
23	De-watering Polyelectrolyte (Chem)	pH :<2, Physical state: Liquid, Solubility: Soluble in Water Specific Gravity: 0.99-1.05	7.5	MT	3.93
24	Ferric Alum	Min 16% Al2O3 concentration, Conforming to IS: 299-1989	260	MT	56.03
25	MDEA	Methyldiethanolamine (MDEA) for the Amine Treating Unit of SRB shall be a clear liquid with minimum 99.8% MDEA content and maximum 0.2% water content, having an ammoniacal odour, specific gravity of 1.03–1.09 at 25 °C, boiling point of 245–250 °C, melting point of at least –21 °C, flash point not less than 135 °C, pH of approximately 11.5 in full strength, and be completely soluble in water at 20 °C.	28000	KG	67.59
26	Activated Carbon	The activated carbon used in the amine filtration unit shall be coconut shell-based and capable of removing coloring materials from 25–45% strength MDEA, including dissolved iron, grease, hydrocarbons, and other contaminants, with a particle size of 4/12 BSS, bulk density of 0.59 g/cc, moisture content of 3%, ash content of 3.2%, iodine adsorption value of 830 mg/g, surface area of 720 m²/g, and hardness of 90.	3000	KG	3.79
27	Catdegas	CATDEGAS (Liquid Sulphur Degassing Chemical) – Proprietary EIL licensor product for liquid sulphur pit degassing system; reduces dissolved H2S in liquid sulphur from 300–500 ppm to <10 ppm. Must meet: Colourless to pale yellow liquid, mild aromatic odour, specific gravity ~1.092, viscosity ~0.52 cSt at 30°C, boiling point ~234°C, melting point ~-14°C, vapour density ~4.3 (air=1), hygroscopic, and 100% water soluble.	200	KG	24.64
28	C2Cl4	Purity =99.9 wt% min, Viscosity @ 40 Deg C =153, Viscosity index=196, Specific gravity =0.995 No added stabiliser, Oxygen and nitrogen Compound <15 wt ppm., Specific gravity=1.628	24	MT	138.94
29	Corrosion inhibitor for MSP	Must form a stable protective film on carbon steel. Temperature resistance upto 140 dec C. It must be compatible to H2s, NH3, Chloride environment. Dual phase protection.	4	MT	2.25
30	Refrigeration compressor Lube oil	Viscosity@40°C cST = 153, Viscosity Index=196, Specific gravity =0.995	2288	L	61.53
31	Dimethyldisulfide (DMDS)	Catalyst Sulfiding agent	24	MT	106.89
32	Antioxidant	BHT/2,6 DBPC	800	KG	4.80
33	Hydrochloric Acid (HCL)	Min 30% concentration, conforming to IS 265: 2021	1824.41	MT	147.95
34	Caustic Lye, (NaOH)	100% concentration, conforming to IS 252: 2013 (Amendment 2018) Grade-1.	727.132	MT	605.32
35	Sulphuric Acid (H2SO4)	98% Conc. conforming to IS-266.	43.494	MT	7.73
36	Poly Aluminium Chloride (PAC)	Conforming to IS 15573:2005	490	MT	139.89
37	Boiler Chemicals (Kg)	Polyamine based chemicals	5334	KG	10.77
38	Cyclo-hexyl-Amine	99% Amine Content	10	MT	46.01
39	Hydrated lime	Conforming to IS:1540-2	71.102	MT	13.56
40	Common Salt (Nacl)	NaCl content 98%,	49.707	MT	5.44
41	CT-Chemicals	Cooling water treatment Chemical	1	LS	83.30
42	DM Resin Cation Resin	Strong Acid Cation Resin (for SAC)	9621	L	19.30

43	DM Resin Anion Resin	Strong Bse Anion Resin (for SBA and MB)	10470	L	40.24
44	Liquid Nitrogen	Liquid Nitrogen purity 99.95%	150	KL	35.18