

**UNIVERSITY OF KERALA
DEPARTMENT OF CHEMISTRY**

03.07.2023

**QUOTATION NOTICE
DC/ST/Che./06/2023-24**

Competitive quotations are invited for the purchase of the following chemicals of desirable make as detailed below. Sealed quotations addressed to The Head, Dept. of Chemistry, University of Kerala, Kariavattom Campus, Thiruvananthapuram 695581 should reach on or before 24/07/2023, 5 P.M. Preferred make for each chemical is included in the table against each chemical. The quoted price should include GST.

Sl No.	Name of the Item (Required Specification and Purity)	Required Quantity	CAS No.	Required Make
1	Hexane (AR grade) (95% purity)	25L	110-54-3	Merck/TCI/Spectrochem
2	DCM (Methylene chloride) (AR grade) (>99.0%)	25L	75-09-2	Merck/TCI/Spectrochem
3	Ethyl acetate (AR grade) (>99.5% purity)	25L	141-78-6	Merck/TCI/Spectrochem
4	Chloroform (HPLC) (99.0 - 99.4%)	1L	67-66-3	Merck/TCI/Spectrochem
5	Toluene (HPLC) (>99.8% purity)	1L	108-88-3	Merck
6	Acetonitrile (For synthesis LR grade) 99.0% purity	2.5L	75-05-8	HPLC/Merck/Spectrochem
7	Methanol (HPLC) >99.7% purity	2.5L	67-56-1	Merck
8	Acetone (Emplura)	25L	67-64-1	Merck/TCI/Spectrochem
9	Toluene (ACS grade for analysis)	2.5L	108-88-3	Merck/TCI/Spectrochem
10	Chloroform	25L	67-66-3	Merck/TCI/Spectrochem

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11	Chloroform (Anhydrous)	2.5L	67-66-3	Merck/TCI/Spectrochem
12	Tetrahydrofuran (Anhydrous dried)	2.5L	109-99-9	Spectrochem
13	THF HPLC (>99.7%)	1L	109-99-9	Merck
14	DCM (Methylene chloride) HPLC (>99.5%)	1L	75-09-2	Merck
15	Cyclohexane HPLC (>99.7%)	1L	110-82-7	Merck/TCI/Spectrochem
16	Dimethyl sulphoxide (DMSO) Anhydrous dried	1L	67-68-5	Merck/TCI/Spectrochem
17	Silica gel 60-120 mesh for Column chromatography	500g	112926-00-8	Spectrochem
18	Silica gel 100-200 mesh for Column Chromatography	500g	112926-00-8	Spectrochem
19	Acetonitrile HPLC (>99.9%)	1L	75-05-8	Merck
20	Ammonia Solution 25% for analysis	1L	1336-21-6	Nice/Merck/TCI/Spectrochem
21	Calcium chloride fused	500g	10043-52-4	Nice/Merck/TCI/Spectrochem
22	Hydrazine monohydrate Puriss for synthesis (99%)	500mL	10217-52-4	Merck/TCI/Spectrochem
23	Potassium hydroxide pellets ACS Reagent (>85%)	500g	1310-58-3	Merck/TCI/Spectrochem
24	Triphenyl amine (98%)	25g	603-34-9	Merck
25	Palladium (II) acetate (>99% purity)	1g	3375-31-3	Thermoscientific/Alfa Aesar/Spectrochem/Sigma/TCI/Merck
26	Sodium-tert-butoxide (>98% purity)	25g	865-48-5	Thermoscientific/Alfa Aesar/Spectrochem/Sigma/TCI/Merck

27	Tri-tert-butylphosphonium tetra fluoroborate (>98% purity)	1g	131274-22-1	TCI/Spectrochem/Thermoscientific/Alfa Aesar/Merck
28	Potassium carbonate (ACS reagent, >99%)	500g	584-08-7	Merck/TCI/Spectrochem/Avra
29	Triethanolamine (AR, >99%)	250mL	102-71-6	SpectrochemMerck/TCI
30	Potassium chloride (ACS reagent, 99%)	500g	7440-09-7	Sigma-Aldrich/TCI/Spectrochem
31	Sodium bicarbonate(ACS reagent, >99.7%)	500g	144-55-8	Merck/TCI
32	Trifluoromethane Sulphonic acid(>98%)	100g	1493-13-6	Spectrochem/Merck/TCI
33	Naphthalene 1,4,5,8 tetracarboxylic acid dianhydride (>97%)	25g	81-30-1	Spectrochem/Merck/TCI/Sigma/Alfa aesar
34	3,4,9,10-Perylenetetracarboxylic dianhydride (>98%)	25g	128-69-8	Spectrochem/Merck/TCI/Sigma/Alfa aesar
35	4-Nitrobenzaldehyde (Puriss for synthesis, 98%)	25g	555-16-8	Spectrochem/Merck/TCI
36	TLC Plate (TLC Silica gel 60 F254 (20*20cm))	1 Packet	105554	Merck
37	Extran MA01 (Alkaline)	5L	107555	Merck
38	4-Cyanobenzaldehyde(Purified for synthesis, >98%)	25g	105-07-7	Spectrochem/Merck/TCI
39	Nitrobenzene (For Synthesis, 99%)	500mL	98-95-3	Spectrochem/Merck/TCI
40	Toluene dry (>=99.5% purity)	500mL	108-88-3	Thermoscientific/Alfa Aesar/Spectrochem/Sigma/TCI/Merck
41	10H-Phenoxazine (98% purity)	1g	135-67-1	Thermoscientific/Alfa Aesar/Spectrochem/Sigma/TCI/Merck

42	9,9-dimethyl-9,10-dihydroacridine (98% purity)	10g	6267-02-3	Thermoscientific/Alfa Aesar/Spectrochem/Sigma/TCI/Merck
43	10H-spiro[acridine-9,9'-fluorene] (98% purity)	100mg	92638-81-8	Thermoscientific/Alfa Aesar/Spectrochem/Sigma/TCI/Merck
44	1,10-phenanthroline-5,6-diamine	250mg	168646-54-6	Thermoscientific/Alfa Aesar/Spectrochem/Sigma/TCI/Merck
45	Phenanthrene-9,10-diamine	250mg	53348-04-2	Thermoscientific/Alfa Aesar/Spectrochem/Sigma/TCI/Merck
46	4,5-Diaminophthalonitrile	1gm	129365-93-1	Thermoscientific/Alfa Aesar/Spectrochem/Sigma/TCI/Merck
47	1, 2-phenylene diamine	25g	95-54-5	Thermoscientific/Alfa Aesar/Spectrochem/Sigma/TCI/Merck
48	1-bromo-4-ethynylbenzene	1g	766-96-1	Thermoscientific/Alfa Aesar/Spectrochem/Sigma/TCI/Merck
49	Cu(OTf) ₂ [copper(II) trifluoromethanesulfonate (99% purity)]	10g	34946-82-2	Thermoscientific/Alfa Aesar/Spectrochem/Sigma/TCI/Merck
50	Ethyl glyoxalate (50% solution in toluene)	100gm	924-44-7	Thermoscientific/Alfa Aesar/Spectrochem/Sigma/TCI/Merck
51	α, α' -Dichloro- <i>p</i> -xylene (98%)	25g	623-25-6	Thermoscientific/Alfa Aesar/Spectrochem/

				Sigma/TCI/Merck
52	1,3,5-Tris(bromomethyl)benzene (97%)	5g	18226-42-1	Thermoscientific/Alfa Aesar/Spectrochem/Sigma/TCI/Merck
53	1,3,5-tribromobenzene (98%)	25g	626-39-1	Sigma-Aldrich/Spectrochem/Merck/TCI
54	Acrylamide (40%)	500g	79-06-1	Thermoscientific/Alfa Aesar/Spectrochem/Sigma Aldrich/TCI
55	Acetone (99.5%)	2.5 Litre	67-64-1	Thermoscientific/Alfa Aesar/Spectrochem/Sigma Aldrich/TCI
56	Curcumin (95%)	5g	458-37-7	Thermoscientific/Alfa Aesar/Spectrochem/Sigma Aldrich/TCI
57	Beta cyclodextrin (99.5%)	5g	7585-39-9	Thermoscientific/Alfa Aesar/Spectrochem/Sigma Aldrich/TCI
58	Ciproflaxin (98%)	5g	33286-22-5	Thermoscientific/Alfa Aesar/Spectrochem/Sigma Aldrich/TCI
59	Cetyl trimethyl ammonium bromide (99%)	10g	57-09-0	Thermoscientific/Alfa Aesar/Spectrochem/Sigma Aldrich/TCI
60	Folic acid (97%)	5g	59-30-3	Thermoscientific/Alfa Aesar/Spectrochem/Sigma Aldrich/TCI
61	Fluorouracil (99%)	5g	51-21-8	Thermoscientific/

				Alfa Aesar/ Spectrochem/ Sigma Aldrich/TCI
62	Glycol chitosan (60%)	100mg	123938-86-3	Thermoscientific/ Alfa Aesar/ Spectrochem/ Sigma Aldrich/TCI
63	Heparin sodium salt (97%)	1g	9041-08-1	Thermoscientific/ Alfa Aesar/ Spectrochem/ Sigma Aldrich/TCI
64	Hexa methylene tetramine (98%)	500g	100-97-0	Thermoscientific/ Alfa Aesar/ Spectrochem/ Sigma Aldrich/TCI
65	Hyaluronic acid sodium salt (95%)	5g	9067-32-7	Thermoscientific/ Alfa Aesar/ Spectrochem/ Sigma Aldrich/TCI
66	Fe[2]sulphate heptahydrate (99%)	500g	7720-78-7	Thermoscientific/ Alfa Aesar/ Spectrochem/ Sigma Aldrich/TCI
67	Fe[3]chloride hexa hydrate (97%)	500ml	10025-77-1	Thermoscientific/ Alfa Aesar/ Spectrochem/ Sigma Aldrich/TCI
68	Pluronic F 127 Bioreagent (50%)	250g	9003-11-6	Thermoscientific/ Alfa Aesar/ Spectrochem/ Sigma Aldrich/TCI
69	Pectin (74%)	15g	9000-69-5	Thermoscientific/ Alfa Aesar/ Spectrochem/ Sigma Aldrich/TCI
70	Rhodamine B STD (97%)	500g	509-34-2	Thermoscientific/ Alfa Aesar/ Spectrochem/ Sigma Aldrich/TCI

71	Polyethylene glycol (50%)	2g	25322-68-3	Thermoscientific/ Alfa Aesar/ Spectrochem/ Sigma Aldrich/TCI
72	Doxorubicin (>95%)	100mg	25316-40-9	Thermoscientific/ Alfa Aesar/ Spectrochem/ Sigma Aldrich/TCI
73	Dimethylformamide (99%)	2.5L	68-12-2	Thermoscientific/ Alfa Aesar/ Spectrochem/ Sigma Aldrich/TCI
74	1-(3 Dimethylaminopropyl)-3-Ethyl Carbodiimide (EDC. HCl) (97%)	5g	25952-53-8	Thermoscientific/ Alfa Aesar/ Spectrochem/ Sigma Aldrich/TCI
75	Lawesson's reagent	25g	19172-47-5	Spectrochem/ Sigma/Merck/TCI/ Empura
76	Dimethyl acetylene carboxylate	25 g	762-42-5	Spectrochem/ Sigma/Merck/TCI/ Empura
77	Oxindole	100g	59-48-3	Spectrochem/ Sigma/Merck/TCI/ Empura
78	Oxalyl chloride	100 mL	79-37-8	Spectrochem/ Sigma/Merck/TCI/ Empura
79	Sodium bicarbonate	500g/1kg	144-55-8	Spectrochem/ Sigma/Merck/TCI/ Empura
80	Molecular sieves 4 A ⁰	500 g	1	Spectrochem/ Sigma/Merck/TCI/ Empura

81	Sodium sulphate	2Kg	6	Spectrochem/ Sigma/Merck/TCI/ Empura
82	Triethyl amine anhydrous (99%)	250 mL	121-44-8	Spectrochem
83	Potassium hydroxide pellets	500G	1310-58-3	Merck
84	1,2,3,4-Tetrahydro-9H- pyrido[3,4-b]indole (98%)	1g	16502-01-5	Sigma/Merk
85	7-Chloroisatin (97%)	1 g	7477-63-6	Sigma/Merk
86	5-Methoxyisatin (97%)	5 g	39755-95-8	Spectrochem
87	5-Chloroisatin (97%)	5 g	17630-76-1	Spectrochem
88	5-Iodoisatin (>98%)	5 g	20780-76-1	Sigma/Merk
89	4-Nitrobenzaldehyde (98%)	100 g	555-16-8	Sigma/Merk
90	Holmium (III) chloride Hexahydrate(99.9% trace metals basis)	25g	14914-84-2	Sigma Aldrich
91	Thulium (III) chloride Hexahydrate (99.9% trace metal basis)	5g	<u>1331-74-4</u>	Sigma Aldrich
92	Erbium (III) chloride Hexahydrate (99.9% trace metal basis)	25g	<u>10025-75-9</u>	Sigma Aldrich
93	Isopropanol(70% in H ₂ O)	2.5 L	67-63-0	Sigma Aldrich
94	Acetone (ACS Reagent >= 99.5%)	2.5 L	<u>179124</u>	Sigma Aldrich
95	Conc. Nitric acid(ACS reagent, 70%)	2.5 L	7697-37-2	Sigma Aldrich

96	Cyclohexane(ACS reagent, ≥99%)	2.5 L	110-82-7	Sigma Aldrich
97	2,8-Diethyl-1,3,5,7- tetramethyl-9- phenylbipyrromethene difluoroborate (BODIPY-520) (99% HPLC)	1 g	189264-25-3	Merck
98	Cy [®] 5 Mono NHS Ester	1 mg	GEPA15101	Sigma-Aldrich
99	Cy [®] 3 NHS Ester	1 PKG	GE25-9004- 72	Merck
100	Erlotinib hydrochloride (≥98% HPLC)	50 mg	SML2156	Merck
101	1,10 phenanthroline (≥99%)	2.5g	131377	Merck
102	7,12- Dimethylbenz[a]anthracene (≥95%)	100 mg	D3254	Merck
103	Anti-CA19-9 antibody (Mouse monoclonal [121SLE] to CA19-9) (>95%)	100 µg	(ab3982)	Abcam
104	N,N-dimethyl-4-nitrosoaniline (RNO, D172405) (97%)	25 g	138-89-6	Merck
105	Imidazole (ReagentPlus [®] , 99%)	5 g	288-32-4	Merck
106	Thiazolyl blue tetrazolium bromide (MTT, 98%),	100 mg	298-93-1	Merck
107	Tetraethyl orthosilicate (TEOS) (≥99.0%)	≥50 mL	78-10-4	Merck
108	Zinc nitrate (99%)	500 g	10196-18-6	Merck
109	Copper nitrate (99-104%)	100 g	10031-43-3	Merck

110	Magnesium oxide (99%)	250 g	1309-48-4	Merck
111	Cerium oxide (99.9%)	100 g	1306-38-3	Merck
112	Urea (99%)	500 g	57-13-6	Merck
113	DAPI dihydrochloride, cell culture tested (98%)	5 mg	28718-90-3	Himedia
114	Fluorescein diacetate	5 g	596-09-8	Sigma
115	Propidium iodide	5 g	25535-16-4	Sigma
116	Nutrient broth M002	500 g	105443	Himedia
117	Ti ₃ AlC ₂	25 g	196506-01-1	Merck
118	Dopamine hydrochloride ≥ 98%	5 g	62-31-7	Himedia
119	Palladium chloride (99%)	1 g	7647-10-1	Sigma
120	Sodium dodecyl sulfate	500 g	151-21-3	Spectrochem/ Sigma/Merck/TCI/ Empura
121	Cerium nitrate hexahydrate (99.9%)	100 g	10294-41-9	Merck
122	Chitosan	50 g	448869	Sigma
123	Sodium nitrite (99%)	500 g	7632-00-0	Nice/ Spectrochem/ Sigma/Merck/TCI/ Empura
124	Sodium molybdate (98%)	100 g	10102-40-6	Nice/ Spectrochem/ Sigma/Merck/TCI/ Empura
125	Thioacetamide	50 g	62-55-5	Nice/ Spectrochem/ Sigma/Merck/TCI/ Empura
126	Manganous sulphate (99%)	500 g	10034-96-5	Spectrum
127	Ortho phosphoric acid (88%)	500 ml	7664-38-2	Emparta
128	Bisphenol A (97%)	25 g	80-05-7	TCI

129	Bisphenol AF (97%)	25 g	1478-61-1	TCI
130	Bisphenol F (97%)	5 g	620-92-8	TCI
131	Bisphenol Z (97%)	25 g	843-55-0	TCI
132	Bisphenol S (97%)	25 g	80-09-1	TCI
133	Ammonium hypo phosphate	500 g	7783-28-0	Nice/ Spectrochem/ Sigma/Merck/TCI/ Empura
134	Europium nitrate	100g	10102-40-6	Sigma
135	Citric acid (99.7%)	500 g	77-92-9	Molychem
136	Titanium isopropoxide (97%)	500 ml	546-68-9	Sigma

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ASSISTANT PROFESSOR AND HEAD
DEPARTMENT OF CHEMISTRY
UNIVERSITY OF KERALA
KARIYATTOM
TRIVANDRUM-682 031

