

[illegible]

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2024 OCT

2024 Nov

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2	
2	
1	2025 Mar

	1	
Initiators	1	2024 Oct
	1	2025 Mar
	1	2025 Mar
	1	2024 Oct
	1	
	1	
Acrylate/acryamide	1	
	1	
	1	2024 Oct
	1	2024 oct
	3	2024 Oct
	2	
	1	
	1	
	2	
	1	
	1	
Solvent	1	
	1	
	1	
	6	
	1	
	1	
	1	
	2	
	1	
	1	
	1	2024 Nov
	1	2024 Nov
	1	2025 Sep
	1	2025 Mar
Fillers and particles	1	2025 Jan
	2	
	1	

1

1

1

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1

Surfactant

1

1

1

1

Wax

1

Liposome

1

1

Name	Vendor
agar	Sigma-Aldrich
Chitosan	Sigma Aldrich
Porcine Gelatin (Type A, powder, gel strength ~300 g Bloom)	Sigma Aldrich
Poly(vinyl alcohol) Mw 89,000-98,000	Sigma Aldrich
Gellan Gum	Sigma Aldrich
Polycaprolactone Diol Mw 530	Sigma Aldrich
Sodium alginate	SIGMA
POLYCAPROLACTONE DIOL, AVERAGE MN CA. 5	Aldrich
1,1' -(Methylenedi-4,1-phenylene)bismaleimide	Sigma Aldrich
Epoxy (Epon 828/826)	Hexion westlake
Pentaerythritol tetrakis(3-mercaptopropionate)	Sigma Aldrich
Dimethyl sulfoxide-d ₆	Sigma Aldrich
1,1,3,3-Tetramethylguanidine	Sigma Aldrich
Sodium tetraphenylborate	Sigma Aldrich
1,6-Hexanediol	Sigma Aldrich
1-Dodecanethiol	Sigma Aldrich
Jeffamine D-230 (Poly(propylene glycol) bis(2-aminopropyl ether))	Sigma Aldrich
Sodium thioglycolate	Sigma Aldrich
L-Cysteine hydrochloride	Sigma Aldrich
N-(3-Dimethylaminopropyl)-N'-ethylcarbodiimide hydrochloride	Sigma Aldrich
N-Hydroxysuccinimide	Sigma Aldrich
Tartrazine	Sigma Aldrich
Rhodamine B	Sigma Aldrich
Rose bengal	Sigma Aldrich
LITHIUM BROMIDE	Sigma Aldrich
LITHIUM CHLORIDE	Sigma Aldrich
Iron(II) sulfate heptahydrate	Sigma Aldrich
2,6-Di-tert-butyl-4-methylphenol	Sigma Aldrich
Zinc acetate	Sigma Aldrich
(2-Ethyl-2-(hydroxymethyl)-1,3-propanediol polymer with (chloromethyl)oxirane)	Sigma Aldrich
L-Ascorbic acid	Sigma Aldrich
L-Ascorbic acid	Fisher Scientific
Citric Acid	Fisher Scientific
Sodium bicarbonate	Sigma Aldrich
Riboflavin	Sigma Aldrich
Sunset Yellow FCF	Sigma Aldrich
Sudan	Sigma Aldrich
1,1,2,2-Tetrachloroethane-d ₂ , for NMR, 99.5+ atom% D	Fisher Scientific
1,2-Dipalmitoyl-sn-glycero-3-phosphocholine	Fisher Scientific
1,2-Dichlorobenzene-d ₄	Sigma Aldrich
Hexamethyldisilane	Sigma Aldrich
N-Isopropylmethacrylamide	Sigma Aldrich
Lauric acid	Sigma Aldrich
EDTA Disodium	Fisher Scientific
alpha-Tocopherol 95%	Thermo Scientific

Trimethylolpropane triacrylate	Sigma Aldrich
Pentaerythritol tetrakis(3-mercaptopropionate)	Sigma Aldrich
Sodium persulfate	Sigma
Methacrylic anhydride	Sigma Aldrich
Sodium chloride	Sigma Aldrich
Lithium bromide	SIGMA ALDRICH
MES solution	Sigma Aldrich
<u>Hydrochloric acid</u>	Sigma Aldrich
Succinic anhydride	SIGMA ALDRICH
Sodium Hydroxide, Pellets	Sigma Aldrich
N,N'-Bis(acryloyl)cystamine	Alfa Aesar
Calcium chloride dihydrate	SIGMA ALDRICH
Trimethylolpropane tris(3-mercaptopropionate)	Sigma Aldrich
N,N,N',N'-Tetraethylethylenediamine	Sigma Aldrich
Acetonitrile	Sigma Aldrich
1,5,7-Triazabicyclo[4.4.0]dec-5-ene	Sigma Aldrich
Poly(ethylene glycol)	Sigma Aldrich
Potassium persulfate	Sigma Aldrich
SILICA, FUMED	Sigma Aldrich
SODIUM BISULFITE	Sigma Aldrich
Bis(2-methacryloyl)oxyethyl disulfide (DSDMA)	Sigma Aldrich
DIMETHYL SULFOXIDE	FISHER SCIENTIFI

Diethyl ether	Sigma Aldrich
Poly(ethylene oxide) Mn=4,000k	Sigma Aldrich
Poly(ethylene oxide) Mn=8,000k	Sigma Aldrich
Poly(ethylene oxide) Mn=2,000k	Sigma Aldrich
Poly(ethylene oxide) Mn=100k	Sigma Aldrich
TRIETHYLAMINE, BIOULTRA, >= 99.5 % GC	Sigma Aldrich
FURFURYLAMINE, 99+%	Sigma Aldrich
Thionyl chloride (SOCl ₂)	Sigma Aldrich
Jeffamine ED-600	Huntsman
Dithiothreitol DTT	AmericanBio
Sodium borohydride	Sigma Aldrich

Pentaerythritol tetrakis(3,5-di-tert-butyl-4-hydroxyhydrocinnamate)	Sigma Aldrich
Ammonium peroxydisulfate	Sigma Aldrich
Ketoglutaric acid	Sigma Aldrich
2-hydroxy-4'-(2-hydroxyethoxy)-2-methylpropiophenone	SIGMA ALDRICH
LAP - Lithium phenyl-2,4,6-trimethylbenzoylphosphinate	SIGMA ALDRICH
2, 2'-Azobis(2-methylpropionitrile)	Sigma Aldrich
2,2'-Azobis[2-methyl-N-(hydroxyethyl)propioamide]	Sigma Aldrich
Phenylbis(2,4,6-trimethylbenzoyl)phosphine oxide (Irgacure® 819)	Sigma Aldrich
4,4'-Azobis(4-cyanovaleric acid)	Sigma Aldrich
Poly(ethylene glycol) diacrylate700	Sigma Aldrich
N-isopropylacrylamide	Sigma-Aldrich
N-Isopropylmethacrylamide	Sigma Aldrich
N,N'-Methylenebis(acrylamide)	Sigma Aldrich
N.N-dimethylacrylamide	Sigma Aldrich
Acrylic acid	Sigma Aldrich
2-Aminoethyl methacrylate hydrochloride, 90%, stabilized	Acros Organics
2-Hydroxy-2-methylpropiophenone 97%	Sigma Aldrich
2-Hydroxyethyl methacrylate	Sigma Aldrich
Furfuryl methacrylate	Sigma Aldrich
2-HYDROXYETHYL ACRYLATE, 96%	Sigma Aldrich
Cyanoacetic acid	Sigma Aldrich
Isobornyl acrylate	Sigma Aldrich
Ethylene glycol phenyl ether acrylate	Sigma Aldrich
3-Furoic acid	
Acetone	Sigma Aldrich
ETHYL ALCOHOL	
Dimethyl sulfoxide (DMSO)	Sigma Aldrich
Dimethyl sulfoxide-d6	Sigma Aldrich
CHLOROFORM-D, 99.8 ATOM % D	Sigma Aldrich
(METHYL SULFOXIDE)-D6, 99.9 ATOM % D	Sigma Aldrich
DEUTERIUM OXIDE, 99.9 ATOM % D	Sigma Aldrich
TOLUENE, HPLC PLUS, FOR HPLC	Sigma Aldrich
Chloroform	Sigma Aldrich
Chloroform	Fisher Scientific
Chloroform	Sigma Aldrich
Methanol	Sigma Aldrich
Isopropanol	Sigma Aldrich
Tetrahydrofuran	Sigma Aldrich
N,N-Dimethylformamide	Sigma Aldrich
Glass fiber	
Silica, fumed (powder, 0.2-0.3 µm avg. part. size)	Sigma Aldrich
Laponite	BYK USA INC
Nano silica	
MultiWalled Carbon Nanotubes 20-30nm	cheaptubes

Carbon nanofibers
Myristyl Myristate

ACS Material
WholesaleSuppliesf

Tergitol solution

Sigma Aldrich

Moo Gloo TI Transglutaminase
Activa RM Transglutaminase

EBECRYL 114 radiation curing resins
EBECRYL 8413 radiation curing resins

allnex
allnex

Span 80 Sorbitan Monool
Lecithin Refined 250 g
Pluronic F-68 Polyol

TCI American
Thermo Scientific
MP Biomedicals

Lauric Acid
Myristyl Myristate

MM
Wholesale supplies

DSPE-PEG 2000
18:0 Lyso (MSPC)
DSPE-PEG-Amine ammonium salt,MW 2,000

MedChem Express
Avanti
BroadPharm

Quantity	CAS no.	cat. no.	Location		Molecule Weight
1	71010-52-1	A1296-500G	500g	flamable cabnet	
				flamable cabnet	
		G1890-500G		flamable cabnet	
		341584-100G	100g	flamable cabnet	
		G1910-250G	250G	flamable cabnet	
		36890-68-3			
		189405-250G			
		71238-250G	250g	flamable cabnet	
		00036890-68-3			
		18405-250G	250g		
		13676-54-5			
		227463-100G			
		EPON™ Resin 828			
		7575-23-7	381462-500ML	500ML	488.66
		2206-27-1	151874-10G-G	10g	84.14
100g 25g	409971000	80-70-6	241768-100ML	100mL	
		143-66-8	T25402-100G	100g	
		629-11-8	H11807-500G	500G	
		112-55-0	471364-100ML	100mL	
		9046-10-0	406651-500ML	500mL	
		367-51-1	T0632-25G		
		52-89-1	30120	10g	
		25952-53-8	03450-5g	5g	
		6066-82-6	130672	25g	
		1934-21-0	T0388-100G		534.36
		81-88-9	R6626	25g	
			330000-1G		
			213225-100G		
		7550-35-8	L7026-100ML		
		7782-63-0	F7002-250G		
100g 25g	AC409971000	128-37-0	B1378-100G		
		557-34-6	383317-25G		
		30499-70-8	430269-250ML		
		50-81-7	A4544-25G		
		240490	FLA61-100	100g	
		A10395-30	AAA1039530		
		144-55-8	S5761-500G		
		83-88-5	R9504-25G		
		2783-94-0	465224-25G		
		842-07-9	103624-25G		
		33685-54-0	AC321310250		
			50-505-663		
		2199-69-1	331511-1G		
		1450-14-2	217069-5G		
		13749-61-6	423548-25G		
		143-07-7	8053331000		
100g 25g	AC428120250				

500g		246808-500G
500ml	7575-23-7	381462-500ML
	00007775-27-1	216232-500G 500 g
		276685-500ML 500mL

7647-01-0	258148-25ML 25 ml
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1310-73-2	567530-250GM
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10035-04-8	C7902-500G 500g
33007-83-9	

127078	
34851-100ML	41.05
345571-5G	139.2
P2139-500G	
216224-500G	
S5505-500G	
243973-500G	
735094-5G	
D1594 4L	

C

	346136-100ML	74.12
	189464-250G	4000k
	372838-250G	8000k
	372803-250G	2000k
	181986-250G	100k
	90335-100ML	
617-89-0	F20009-100G	
9/7/7719	8081540500	118.97

452882-500G 500G

6683-19-8	441783-100G		
7727-54-0	215589-100G	100g	
328-50-7	K1128-100G	100g	
	410896-50G	50G	
		5g bottle	
78-67-1	441090-25G	25g	
162881-26-7	511447-50G	50g	
2638-94-0	11590-100G	100G	
	455008	500mL	
2210-25-5	415324-50G	100G	
	423548-25G	25g	
79-10-7			
454-28-2	411760		
818-61-1	292818-250ML		
372-09-8	C88505-25G		85.06
5888-33-5	392103	100/500ML	
48145-04-6	408336-259ML		
	163392		
	179124-4L		
	459844-4L		
67-68-5	472301-100ML		78.13
	151874-10G-GL		
865-49-6	151823-100G		
2206-27-1	296147-25G		
7789-20-0	151882-100G		
108-88-3	650579-1L		
67-66-3	C2432-1L	1L	
	c607-4	4L	
67-66-3	C2432-500ML	500mL	
67-56-1	179337-1L	1L	
109-99-9	34865-1L	1L	
68-12-2	270547-1L	1L	73.09
112945-52-5	S5505-100G		
	(free samples)		

	308063-67-4	2 oz	
	NP40S-100ML	1003726799	
	50g	1203-50	
		1000-10	0
	1kg		
	1kg		
500g	1338-43-8	S0060500G	
250g	8002-43-5	AA3648630	
100g	11/6/9003	MP92750016	
100g	00000143-07-7	8053330100	
2 oz			
100 mg	644865	HY142979	
200 mg	19420576	855775P-200mg	
1g	474922-26-4	BP-43715	

Estimated Costs	Link
	https://www.sigmaaldrich.com/US/en/product/sigma/a1296
	https://www.sigmaaldrich.com/US/en/product/sigma/g1890
	https://www.sigmaaldrich.com/US/en/product/aldrich/341584
	https://www.sigmaaldrich.com/US/en/search/sodium-alginate?focus=products
	https://www.sigmaaldrich.com/US/en/product/aldrich/227463
	https://www.westlakeepoxy.com/en-US/product/EPON-Resin-828
73.8	
19.15	
78.8	https://www.sigmaaldrich.com/US/en/search/pentaerythritol(3-mercaptopropio
\$258.10	https://www.sigmaaldrich.com/US/en/product/sial/t25402
	https://www.sigmaaldrich.com/US/en/search/tetramethylguanidine?focus=proc
	https://www.sigmaaldrich.com/US/en/search/1-dodecanethiol?focus=products&pag
	https://www.sigmaaldrich.com/US/en/product/aldrich/406651
	https://www.sigmaaldrich.com/US/en/search/dithiothreitol?focus=products&pa
	https://www.sigmaaldrich.com/US/en/search/dithiothreitol?focus=products&pa

<https://www.sigmaaldrich.com/US/en/product/aldrich/276685>

<https://www.sigmaaldrich.com/US/en/search/meoh?focus=products&page=1&>

<https://www.sigmaaldrich.com/US/en/product/sigma/c7902>

<https://www.sigmaaldrich.com/US/en/product/aldrich/127078>

<https://www.sigmaaldrich.com/US/en/product/aldrich/p2139>

62.3

<https://www.sigmaaldrich.com/US/en/product/sigald/346136>

<https://www.sigmaaldrich.com/US/en/product/aldrich/189464>

<https://www.sigmaaldrich.com/US/en/product/aldrich/181986>

<https://www.sigmaaldrich.com/US/en/product/mm/808154>

<https://www.sigmaaldrich.com/US/en/search/ammonium-peroxydisulfate?focus=products&page=1>
<https://www.sigmaaldrich.com/US/en/search/ketoglutaric-acid?focus=products&page=1>

<https://www.sigmaaldrich.com/US/en/search/ammonium-peroxydisulfate?focus=products&page=1>
[https://www.sigmaaldrich.com/US/en/search/2%2C-2'-azobis\(2-methylpropionitrile\)?focus=products&page=1](https://www.sigmaaldrich.com/US/en/search/2%2C-2'-azobis(2-methylpropionitrile)?focus=products&page=1)
<https://www.sigmaaldrich.com/US/en/product/aldrich/511447?srsId=AfmBOoqX-r>
[https://www.sigmaaldrich.com/US/en/search/4%2C4%E2%80%B2-azobis\(4-cyanovanillin\)?focus=products&page=1](https://www.sigmaaldrich.com/US/en/search/4%2C4%E2%80%B2-azobis(4-cyanovanillin)?focus=products&page=1)
<https://www.sigmaaldrich.com/US/en/substance/polyethyleneglycoldiacrylate12345>
<https://www.sigmaaldrich.com/US/en/product/aldrich/415324>
<https://www.sigmaaldrich.com/US/en/search/n-isopropylacrylamide?focus=products&page=1>

70.3

<https://www.sigmaaldrich.com/US/en/product/aldrich/c88505>

46

35.71

30.26

<https://www.sigmaaldrich.com/US/en/product/sigald/c2432>
<https://www.sigmaaldrich.com/US/en/search/hydrochloric-acid?focus=products&page=1>

<https://www.sigmaaldrich.com/US/en/product/sigald/270547>

<https://www.sigmaaldrich.com/US/en/product/sigma/s5505>
<https://www.byk.com/en/products/additive-guide/laponite-rd>

<https://www.cheaptubes.com/product/multi-walled-carbon-nanotubes-20-30nm>

<https://www.acsmaterial.com/carbon-nanofibers.html>

<https://www.sigmaaldrich.com/US/en/product/sigma/np40s?srltid=AfmBOopE>

[nate\)?focus=products&page=1&perpage=30&sort=relevance&term=pentaerythritol%283-mercapt](#)

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[%27-azobis%5B2-methyl-N-%28hydroxy%20ethyl%29propionamide%5D%2C%2C%27-azobis%5B2-meth](#)



[yl-N-%28hydroxy%20ethyl%29propiolamide%5D&focus=products&page=1&perpage=30&sort=relevance&](#)



[term=4%2C4%E2%80%B2-Azobis%284-cyanovaleric%20acid%29&type=product](#)
