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1 2024 OCT
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1 2024 Nov
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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	
	1	2024 Nov
	1	2024 Nov
	1	2025 Sep
	1	2025 Mar
Fillers and particles	1	2025 Jan
	2	

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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-d2, for NMR, 99.5+ atom% D	Fisher Scientific
1,2-Dipalmitoyl-sn-glycero-3-phosphocholine	Fisher Scientific
1,2-Dichlorobenzene-d4	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
FURFURLAMINE, 99+%	Sigma Aldrich
Thionyl chloride (SOCl2)	Sigma Aldrich
Jeffamine ED-600	Huntsman
Dithiothreitol DTT	AmericanBio
Sodium borohydride	Sigma Aldrich

<u>Pentaerythritol tetrakis(3,5-di-tert-butyl-4-hydroxyhydrocinnamate)</u>	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-cyanovaleic 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 hysrochloride, 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
<u>N,N-Dimethylformamide</u>	Sigma Aldrich
Glass fiber	
Silica, fumed (powder, 0.2-0.3 µm avg. part. size)	Sigma Aldrich
Laponite	BYK USA INC
<u>Nano silica</u>	
<u>MultiWalled Carbon Nanotubes 20-30nm</u>	cheaptubes

Carbon nanofibers
Myristyl Myristate

ACS Material
WholesaleSupplies

Tergitol solution Sigma Aldrich

Moo Goo TI Transglutaminase
Activa RM Transglutaminase

EBECRYL 114 radiation curing resins allnex
EBECRYL 8413 radiation curing resins allnex

Span 80 Sorbitan Monool TCI American
Lecithin Refined 250 g Thermo Scientific
Pluronic F-68 Polyol MP Biomedicals

Lauric Acid MM
Myristy Myristate Wholesale supplies

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

Quantity	CAS no.	cat. no.	<i>Location</i>	
			Molecule Weight	
1	71010-52-1	A1296-500G 500g	flamable cabinet	
		G1890-500G	flamable cabinet	
		341584-100G 100g	flamable cabinet	
		G1910-250G 250G	flamable cabinet	
		36890-68-3 189405-250G	flamable cabinet	
		71238-250G 250g	flamable cabinet	
		00036890-68-3 18405-250G 250g		
		13676-54-5 227463-100G		
		EPON™ Resin 828		
		7575-23-7 381462-500ML 500ML	488.66	
100g	2206-27-1	2206-27-1 151874-10G-G 10g	84.14	
		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		
25g	1934-21-0	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		
		128-37-0 B1378-100G		
		557-34-6 383317-25G		
		30499-70-8 430269-250ML		
		50-81-7 A4544-25G		
100g	240490	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		
25g	409971000	13749-61-6 423548-25G		
		143-07-7 8053331000		
100g	428120250	409971000 AC409971000		
		428120250 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

1310-73-2 567530-250GM

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
112945-52-5	S5505-100G	73.09
	(free samples)	

308063-67-4

Plus

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.sigmacatalog.com/US/en/search/sodium-alginate?focus=products&page=1
	https://www.sigmacatalog.com/US/en/product/aldrich/227463
	https://www.westlakeepoxy.com/en-US/product/EPON-Resin-828
73.8	
19.15	
78.8	https://www.sigmacatalog.com/US/en/search/pentaerythritol(3-mercaptopropioate)2-methyl-2-butene-1-yl%20salt?focus=products&page=1
\$258.10	https://www.sigmacatalog.com/US/en/product/sial/t25402
	https://www.sigmacatalog.com/US/en/search/tetramethylguanidine?focus=products&page=1
	https://www.sigmacatalog.com/US/en/search/1-dodecanethiol?focus=products&page=1
	https://www.sigmacatalog.com/US/en/product/aldrich/406651
	https://www.sigmacatalog.com/US/en/search/dithiothreitol?focus=products&page=1
	https://www.sigmacatalog.com/US/en/search/dithiothreitol?focus=products&page=1

<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-methylpropionamide%29?srsltid=AfmBOoqX-ri&focus=products&page=1](https://www.sigmaaldrich.com/US/en/search/2%2C-2'-azobis(2-methylpropionamide%29?srsltid=AfmBOoqX-ri&focus=products&page=1)
<https://www.sigmaaldrich.com/US/en/product/aldrich/511447?srsltid=AfmBOoqX-ri&focus=products&page=1>
[https://www.sigmaaldrich.com/US/en/search/4%2C4%E2%80%B2-azobis\(4-cyanovaleic%29-acrylate?srsltid=AfmBOoqX-ri&focus=products&page=1](https://www.sigmaaldrich.com/US/en/search/4%2C4%E2%80%B2-azobis(4-cyanovaleic%29-acrylate?srsltid=AfmBOoqX-ri&focus=products&page=1)
<https://www.sigmaaldrich.com/US/en/substance/polyethyleneglycoldiacrylate12345?srsltid=AfmBOoqX-ri&focus=products&page=1>
<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?srsltid=AfmBOopC>

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[ducts&page=1&perpage=30&sort=relevance&term=N-isopropylacrylamide&type=product](#)



%27-azobis%5B2-methyl-N-%28hydroxy%20ethyl%29propionamide%5D%2C2%2C2%27-azobis%5B2-meth



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