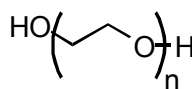
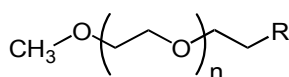


Polypure focuses on providing polyethylene glycol (PEG) and their derivatives of unmatched quality. Polypure products consist of polymers that have been fractionated from polydisperse PEG into single oligomer fractions. Our purity specifications for PEG is >95% for MW up to 1500, and 90% for MW to 3000.



PEG oligomers are processed further into a variety of derivatives. A high purity for intermediates and products is maintained, and our catalogue items usually have an overall purity exceeding 95%. In comparison to PEG products obtained from polydisperse material, the use of our compounds is therefore more consistent.



Methoxy PEGs



PEG amines

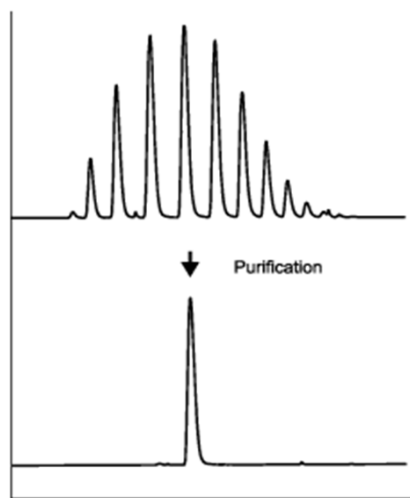
PEG is a versatile polymer that is used for numerous applications. The polymer is non-toxic and biocompatible, and is highly soluble in aqueous and organic solutions. Therefore it can serve as a solubilization agent, as spacer molecule and as protecting agent to avoid degradation. Furthermore, PEG coated surfaces have a minimal propensity to bind proteins and other biomolecules.

Please review our product pages to find compounds that serve your applications or contact us for specific needs.

	Page
<u>PEG</u>	2
Polypure supplies high purity PEG oligomers in a variety of molecular weights.	
<u>mPEG and mPEG derivatives</u>	3
Methoxy-PEG or mPEG is a PEG chain having one functional group blocked with a methyl group.	
<u>PEG amines</u>	4-5
The amino function is a highly appreciated functional group.	
<u>PEG acids and amino acids</u>	6-7
The acid function is introduced as a propionic acid moiety, or as a diglycolic acid amide.	
<u>PEG thiols and disulfides</u>	8-9
The thiol group is a strong nucleophile and is used in conjugation reactions.	
<u>Special PEG Reagents</u>	10
We provide reagents for affinity labeling (Biotins) and for conjugation chemistry (maleimides, thiols).	
<u>How to order</u>	11

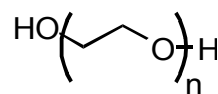
PEG

Polypure supplies high purity PEG oligomers in a variety of molecular weights. The products are obtained from polydisperse polyethylene glycol, which is fractionated into single oligomer quality.



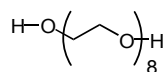
Product specification is set to > 95% oligomer integrity but the actual purity is usually 97-99%.

A selection of oligomers is available from stock.

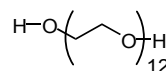


Please inquire for other molecular weights

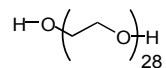
PEG oligomer



Cat #	Product	n	MW	Price in	USD
10110-0895	Octaethylene glycol, (PEG-8) > 95% oligomer purity, delivered as neat oil CAS number 5117-19-1	8	370,4	5g - 25g -	180 655



Cat #	Product	n	MW	Price in	USD
10110-1295	Dodecaethylene glycol, (PEG-12) > 95% oligomer purity, delivered as white solid CAS number 6790-09-6	12	546,7	5g - 25g -	305 1125



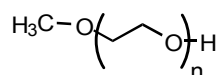
Cat #	Product	n	MW	Price in	USD
10110-2895	PEG-28, (Octacosaeethylene glycol) > 95% oligomer purity, delivered as white powder	28	1251,5	1g - 5g -	140 505

mPEG and mPEG derivatives

Methoxy-PEG or mPEG is a PEG chain having one functional group blocked with a methyl group.

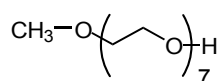
mPEG and mPEG derivatives are therefore useful for modification of compounds where cross-linking should be avoided.

Polypure mPEG is free from the corresponding diol, and the derivatives are purified to the highest level of purity.

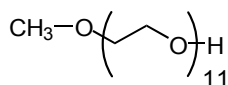


Please inquire for other molecular weights.

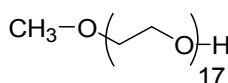
mPEG



Cat #	Product	n	MW	Price in	USD
10111-0795	mPEG7 (Methoxy PEG-7, O-Methyl-heptaethylene glycol, Heptaethylene glycol methyl ether) > 95% oligomer purity, delivered as colourless liquid CAS Number: 4437-01-8	7	340,4	1g - 5g -	145 545



Cat #	Product	n	MW	Price in	USD
10111-1195	mPEG11 (Methoxy PEG-11, O-Methyl-undecaethylene glycol, Undecaethylene glycol methyl ether) > 95% oligomer purity, delivered as colourless liquid CAS Number: 114740-40-8	11	516,6	1g - 5g -	200 755



Cat #	Product	n	MW	Price in	USD
10111-1795	mPEG17 (Methoxy PEG-17, O-Methyl-heptadecaethylene glycol, Heptadecaethylene glycol methyl ether) > 95% oligomer purity, delivered as a white solid	17	780,9	1g - 5g -	225 845

mPEG Derivatives

Cat #	Product	n	MW	Page
11137-1195	mPEG acid	11	588,7	6
11156-0695	mPEG thiol	6	356,5	8
11157-0695	mPEG disulfide	6	710,9	8

PEG amines

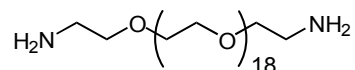
The amino function is a highly appreciated functional group. It is more reactive than the corresponding PEG alcohol, and is used to form amide bonds with carboxylic acids.

It also acts as a nucleophile, and participates in substitution reactions.

We supply mono and bifunctional amines to many needs.

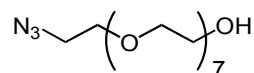
The bis-amines are also provided as mono-protected with either Boc-protection or as the azide precursor.

PEG diamine

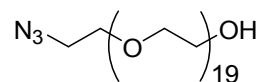


Cat #	Product	n	MW	Price in	USD
12112-1895	PEG Diamine (O,O'-Bis(2-aminoethyl)octadecaethylene glycol) > 95% oligomer purity, delivered as white powder CAS Number: 892154-56-2	18	897,1	1g - 5g -	180 675

Azido-PEG

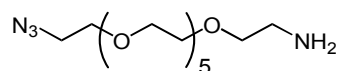


Cat #	Product	n	MW	Price in	USD
10113-0795	Azido-PEG (O-(2-Azidoethyl)-heptaethylene glycol) > 95% oligomer purity, delivered as neat oil	7	395,5	1g - 5g -	205 755

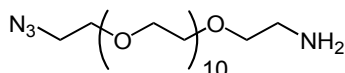


Cat #	Product	n	MW	Price in	USD
10113-1995	Azido-PEG (O-(2-Azidoethyl)-dekaeneaeethylene glycol) > 95% oligomer purity, delivered as a solid	19	924,1	1g - 5g -	270 1015

Azido-PEG amine

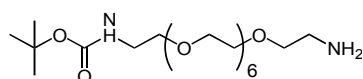


Cat #	Product	n	MW	Price in	USD
12113-0595	Azido-PEG amine (O-(2-Aminoethyl)-O'-(2-azidoethyl)pentaethylene glycol)	5	350,4	1g -	250
	> 95% oligomer purity, delivered as neat oil			5g -	935

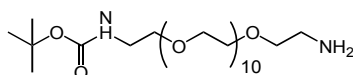


Cat #	Product	n	MW	Price in	USD
12113-1095	Azido-PEG amine (O-(2-Aminoethyl)-O'-(2-azidoethyl)decaethylene glycol)	10	570,7	1g -	295
	> 95% oligomer purity, delivered as neat oil			5g -	1100

Boc-amino PEG amine



Cat #	Product	n	MW	Price in	USD
12114--0695	Boc-amino PEG amine (O-(2-Aminoethyl)-O'-[2-(Boc-amino)ethyl]hexaethylene glycol)	6	468,6	1g -	340
	> 95% oligomer purity, delivered as neat oil			5g -	1270
	CAS 206265-98-7				

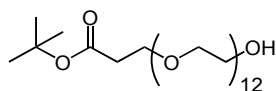


Cat #	Product	n	MW	Price in	USD
12114-1095	Boc-amino PEG amine O-(2-Aminoethyl)-O'-[2-(Boc-amino)ethyl]decaethylene glycol	10	644,8	1g -	340
	> 95% oligomer purity, delivered as neat oil			5g -	1270
	CAS 890091-42-6				

PEG acids and amino acids

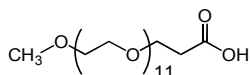
PEG acids are provided as propionic acids or esters. Protected amino acids are also available, either as propionates or as diglycolic acids.

PEG ester



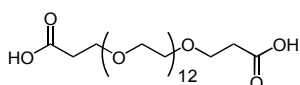
Cat #	Product	n	MW	Price in	USD
10139-1295	PEG tBu-propionate	12	674,8	1g -	270
	O-(2-tert-Butyloxycarbonyl)ethyl)dodecaethylene glycol			5g -	1015
	> 95% oligomer purity, delivered as white powder				

mPEG acid



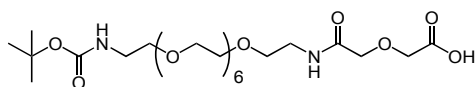
Cat #	Product	n	MW	Price in	USD
11137-1195	mPEG acid	11	588,7	1g -	315
	> 95% oligomer purity, delivered as neat oil				
				5g -	1180

PEG acid

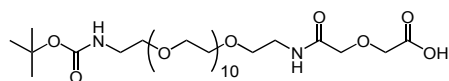


Cat #	Product	n	MW	Price in	USD
37137-1295	PEG diacid	12	690,8	1g -	155
	(O,O'-Bis(2-carboxyethyl)dodecaethylene glycol)			5g -	595
	> 95% oligomer purity, delivered as white powder				
	CAS Number: 892155-64-5				

Boc-amino PEG diglycolic acid

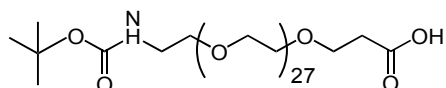


Cat #	Product	n	MW	Price in	USD
14131-0695	Boc-amino PEG acid	6	584,7	1g -	495
	(O-[2-(Boc-amino)-ethyl]-O'-[2-(diglycolyl-amino)ethyl]hexaethylene glycol)			5g -	1855
	> 95% oligomer purity, delivered as neat oil				
	CAS 600141-83-1				



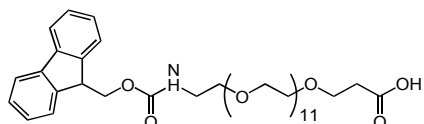
Cat #	Product	n	MW	Price in	USD
14131-1095	Boc-amino PEG acid	10	760,9	1g -	495
	(O-[2-(Boc-amino)-ethyl]-O'-[2-(diglycolyl-amino)ethyl]decaethylene glycol)			5g -	1855
	> 95% oligomer purity, delivered as neat oil				
	CAS 600141-83-1				

Boc-amino PEG propionic acid

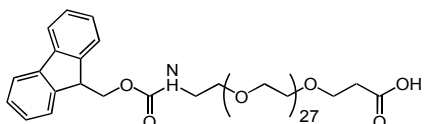


Cat #	Product	n	MW	Price in	USD
14137-2790	Boc-amino PEG propionic acid	27	1422,7	1g -	675
	Boc-NH-(PEG)27-COOH			5g -	2530
	> 90% oligomer purity, delivered as solid				

Fmoc-amino PEG propionic acid

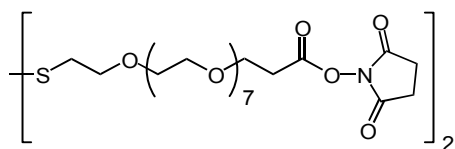


Cat #	Product	n	MW	Price in	USD
15137-1195	Fmoc-amino PEG acid	11	840,0	1g -	630
	(Fmoc-NH-(PEG) ₁₁ -COOH,			5g -	2365
	O-(N-Fmoc-2-aminoethyl)-O'-(2-carboxyethyl)-undecaethyleneglycol)				
	> 95% oligomer purity, delivered as neat oil				



Cat #	Product	n	MW	Price in	USD
15137-2790	Fmoc-amino PEG acid	27	1544,8	1g -	745
	(Fmoc-NH-(PEG)27-COOH)			5g -	2780
	> 90% oligomer purity, delivered as solid				

PEG succinimidylpropionate, disulfide



Cat #	Product	n	MW	Price in	USD
38157-0795	PEG NHS ester disulfide (4,7,10,13,16,19,22,25,32,35,38,41,44,47,50,53-Hexadeca- -28,29-dithiahexapentacontanedioic acid di-N-succinimidyl ester)	7	1109,3	1g -	470
	> 95% oligomer purity, delivered as neat oil NHS group may hydrolyse to acid when contact with moisture CAS Number: 947601-98-1			5g -	1770

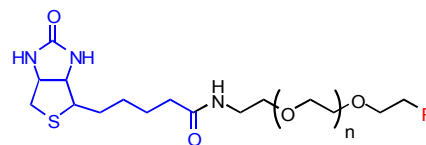
Special reagents

Polypure provides reagents for affinity labeling (Biotins) and for conjugation chemistry (maleimides, thiols).

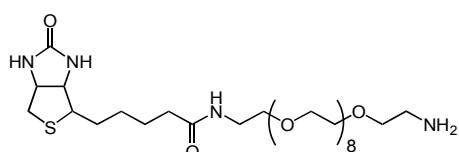
Biotin PEG

The biotin groups serves as an affinity label towards the proteins avidin and streptavidin. PEG attached to the biotin gives an extended spacer arm that permits the biotin to reach into the binding pocket of the protein. The PEG moiety also increases solubility of Biotin-PEG conjugates considerably.

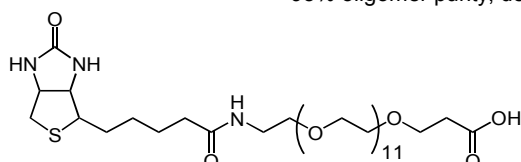
Polypure offers a selection of functionalized biotin-PEG derivatives.



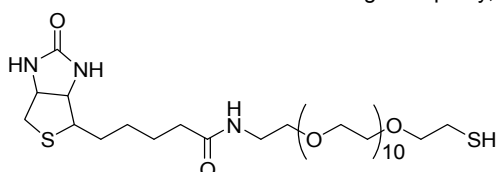
Biotin-PEG



Cat #	Product	n	MW	Price in	USD
12141-0895	Biotin PEG amine	8	682,9	100mg -	315
	>95% oligomer purity, delivered as slightly yellow powder			1g -	1125



Cat #	Product	n	MW	Price in	USD
37141-1195	Biotin PEG acid	11	844,0	100mg -	315
	>95% oligomer purity, delivered as white powder			1g -	1125



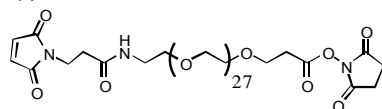
Cat #	Product	n	MW	Price in	USD
41156-1095	Biotin PEG thiol	10	788,0	100mg -	375
	>95% oligomer purity, delivered as white powder			1g -	1350

Maleimide PEG

This heterobifunctional PEG allows crosslinking between compounds carrying amino groups and thiol functions. Our polymer homogeneity ensures a high level of functional intergrity.

The extended PEG spacers length enhances solubilisation of poorly soluble drugs.

Applications: surface modification, PEGylation, crosslinking...



Cat #	Product	n	MW	Price in	USD
21138-2790	Maleimidopropionyl PEG NHS ester	27	1570,8	100mg -	375
	>90% oligomer purity, delivered as white powder			1g -	1350
	NHS group may hydrolyse to acid when contact with moisture				

ORDER

Ordering

Orders and inquiries can be addressed:

By e-mail: order@polypure.no

By fax: +47 22 95 83 28

Please include on your order form:

- catalogue number and quantity requested,
- complete shipping and billing address,
- contact name with phone number and email address.

Product delivery

Products will be received within a week without further order confirmation.

Products are delivered via Federal Express International Priority Shipment.

Please include FedEx account number on your order form or accept 70 USD shipping charge.

The receiver is responsible for all duties and import taxes.

Payment

Invoices can be paid by wire transfer or by check:

Payment terms: 30 days

Bank address: DNB NOR Bank ASA
Stranden 21
NO-0021 Oslo
Norway