

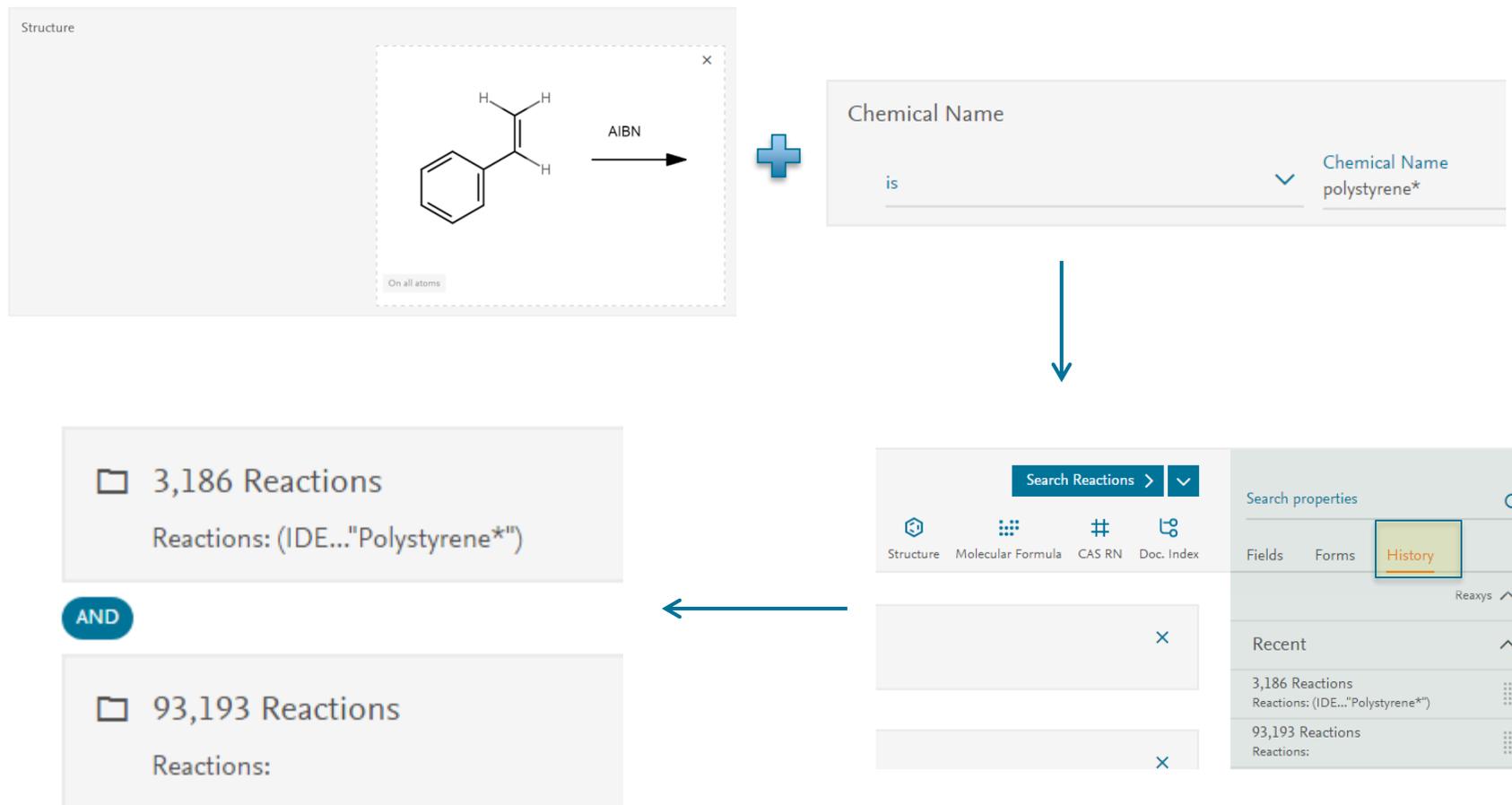
POLYMER SEARCHING



ПРИМЕРЫ ПОИСКА ПОЛИМЕРОВ

1. Синтез полимера из желаемого исходного материала?
2. Есть ли способ классифицировать поиск на основе информации, такой как полимер MW и другим свойствам?
3. Как искать полимеры по синтетическому маршруту? Или мономеры с определенным синтетическим путем (ATRP, RAFT, Свободный радикал, NMP, опосредованный металлом)?
4. Как искать сополимеры? (Например: диблок против случайных против чередующихся против звездных полимеров)
5. Как искать полимеры с конкретными концевыми группами?
6. Как искать полимерные сети? (взаимопроникающие сети)
7. Поиск органических наночастиц?

REAXYS – ПОИСК ПОЛИМЕРОВ ПО МОНОМЕРАМ И ХИМИЧЕСКИМ НАЗВАНИЯМ



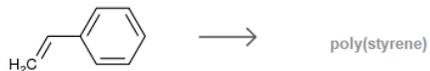
REAXYS – ПОИСК ПОЛИМЕРОВ ПО МОНОМЕРАМ И ХИМИЧЕСКИМ НАЗВАНИЯМ

1,790 Reactions out of 413 Documents containing 2,035 Substances

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1

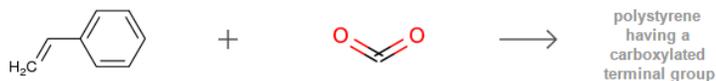


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Yield	Conditions	Reference
100%	With $C_{28}H_{34}N_2O_4P_2S_4$ in xylene at 125°C for 18h; Experimental Procedure	Parker, Dane Kenton - US2006/160774, 2006, A1 Location in patent: Page/Page column 10 Full Text Show details



2



[Find Similar Reactions](#)

REAXYS – ПОИСК ПО ПОЛИМЕРНЫМ СВОЙСТВАМ

По названию и по базовому индексу

Chemical Name

is Chemical Name

OR

 Group

Substance Basic Index

is Substance Basic Index

AND

Chemical Name

is Chemical Name

REAXYS – ПОИСК ПО ПОЛИМЕРНЫМ СВОЙСТВАМ

По названию и по базовому индексу

Poly(maleic anhydride-co-styrene)-block-polystyrene
8898631

Poly(maleic
anhydride-co-
styrene)-block-
polystyrene

[Hit Data - 1](#)

[Identification](#)

[Physical Data - 1](#)

[Preparations - 1 >](#)

[Reactions - 1 >](#)

[Documents - 1 >](#)

^ [Hit Data - 1](#)

^ [Crystal Phase - 1 hits out of 1](#)

Description (Crystal Phase)	Reference
Glass transition temperature	Zhu; Wei; Li; +2 others - Chemical Communications, 2001, # 4, p. 365 - 366 Full Text ↗ Cited 74 times ↗ Show details >

polystyrene, via
living anionic
polymerization,
with sec-butyl ...

polystyrene, via living anionic polymerization, with sec-butyl groups on one end, M_n from 2900 to 25500, M_w/M_n from 1.01 to 1.05, T_g from 65 deg C to 88 deg C; Monomer(s): styrene; sec-BuLi

9253527

[Identification](#)

[Spectra - 1](#)

[Preparations - 1 >](#)

[Reactions - 1 >](#)

[Documents - 1 >](#)

polystyrene, via
living anionic
polymerization,
with sec-butyl ...

polystyrene, via living anionic polymerization, with sec-butyl groups on one end and CH₂CH₂OH groups on another, M_n from 2400 to 24500, M_w/M_n from 1.01 to 1.04, T_g from 72 deg C to 91 deg C; Monomer(s): styrene; sec-BuLi; ethylene oxide

9253528

[Identification](#)

[Spectra - 2](#)

[Preparations - 1 >](#)

[Reactions - 2 >](#)

REAXYS – ПОИСК ПО ТИПУ СПЕЦИФИЧЕСКИХ РЕАКЦИЙ

Reaxys позволяет искать по мономеру и по типу реакции

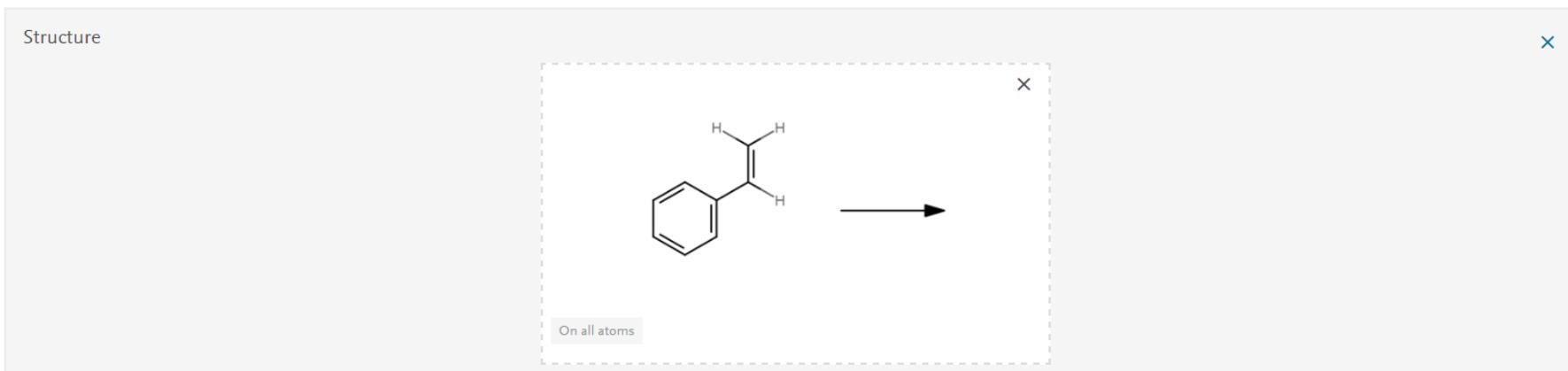
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Quick search Query builder Results Synthesis planner History

Import Save Reset form Delete

Search Reactions > ▾

Structure Molecular Formula CAS RN Doc. Index



AND

Reaction Basic Index

is

Reaction Basic Index
raft

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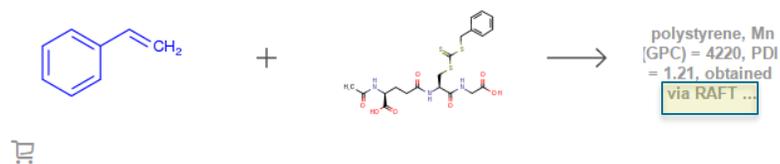
REAXYS – ПОИСК ПО ТИПУ СПЕЦИФИЧЕСКИХ РЕАКЦИЙ

Reaxys позволяет искать по мономеру и по типу реакции



Find Similar Reactions >

Yield	Conditions	Reference
	With 2,2'-azo-bisobutyronitrile Candida antarctica lipase B at 65°C under 207017 Torr for 24h;	Thurecht, Kristofer J.; Gregory, Andrew M.; Villarroya, Silvia; +3 others - Chemical Communications, 2006, # 42, p. 4383 - 4385 Full Text ↗ Cited 52 times ↗ Show details >



polystyrene, $M_n(\text{GPC}) = 4220$, PDI = 1.21, obtained via RAFT polymerization using 2-acetamido-S-(benzylsulfanylthiocarbonyl)glutathione as chain transfer agent; monomer(s); styrene; 2-acetamido-S-(benzylsulfanylthiocarbonyl)glutathione

Yield	Conditions	Reference
	With 2,2'-azo-bisobutyronitrile In 1,4-dioxane at 60°C for 15h;	Zhao, Youliang; Perrier, Sebastien - Chemical Communications, 2007, # 41, p. 4294 - 4296 Full Text ↗ Cited 39 times ↗ Show details >

REAXYS – ПОИСК СОПОЛИМЕРОВ

Используя поле компонентов можно искать сополимеры

Chemical Name

is Chemical Name
polystyrene*

AND

Number of Components

> Number of Components
1

REAXYS – ПОИСК СОПОЛИМЕРОВ

Используя поле компонентов можно искать сополимеры

972 Substances out of 192 Documents containing 995 Reactions

0 selected: [Limit To](#)  [Exclude](#)  [Export](#) 

1
polystyrene-polyisoprene block copolymer, 89.0 wt percent of styrene, Mw = 67.7; monomer(s): styrene; isoprene
9691642
Identification
Physical Data - 4

Finds even if copolymer is not in chemical name

2
polystyrene; 125I-capped diamino poloxamer 407; nanospheres, formulation of
8189244
Bioactivity - 2

3
polystyrene; 125I-capped tetramine poloxamine 908; nanospheres, formulation of
8189245
Bioactivity - 2

REAXYS – ПОИСК СОПОЛИМЕРОВ

Reaxys позволяет выполнять поиск сополимеров и типов

diblock vs random vs alternating vs star polymers

Chemical Name

is Chemical Name polystyrene*

AND

Number of Components

> Number of Components 1

AND

Substance Basic Index

is Substance Basic Index diblock*

REAXYS – ПОИСК СОПОЛИМЕРОВ

Reaxys позволяет выполнять поиск сополимеров и типов

Polystyrene-b-poly (tert-butyl acrylate) diblock copolymer, atom ...	Polystyrene-b-poly(tert-butyl acrylate) diblock copolymer, atom transfer radical polymerization 8828581	Preparations - 1 > Reactions - 2 > Documents - 1 >
Polystyrene-b- polyacrylic acid diblock copolymer	Polystyrene-b-polyacrylic acid diblock copolymer 8828582	Preparations - 1 > Reactions - 1 > Documents - 1 >
polystyrene- deuterated polystyrene diblock ...	polystyrene-deuterated polystyrene diblock copolymer, $N_d = 156$, $N_h = 131$, polydispersity = 1.03; Monomer(s): styrene; deuterated styrene 8972600	Preparations - 1 > Reactions - 1 > Documents - 1 >
polystyrene- polyisoprene diblock copolymer, via ...	polystyrene-polyisoprene diblock copolymer, via anionic copolymerization, $M_w=19800$ for polystyrene blocks, $M_w=6000$ for polyisoprene blocks, $M_w/M_n=1.07$, 26 vol percent of polyisoprene fraction; Monomer(s): isoprene; styrene 9117897	Documents - 1 >

REAXYS – ПОИСК ПОЛИМЕРОВ С ОПРЕДЕЛЕННЫМИ КОНЦЕВЫМИ ГРУППАМИ.

Reaxys позволяет выполнять поиск полимеров с определенными концевыми группами.

Chemical Name

is

Chemical Name
poly*

AND

Substance Basic Index

is

Substance Basic Index
(terminal* NEXT group*) OR (end* NEXT group*)

REAXYS – ПОИСК ПОЛИМЕРОВ С ОПРЕДЕЛЕННЫМИ КОНЦЕВЫМИ ГРУППАМИ.

Polymer; Monomer(s): hexafluoro-1,3-butadiene; Radical derived ...	Polymer; Monomer(s): hexafluoro-1,3-butadiene; Radical derived from 2-(hexafluoropropyl)tetrahydrofuran as terminal group 8391248	Identification Spectra - 2	Preparations - 1 > Reactions - 1 > Documents - 1 >
Polymer; Monomer(s): hexafluoro-1,3-butadiene; Radical derived ...	Polymer; Monomer(s): hexafluoro-1,3-butadiene; Radical derived from acetaldehyde as terminal group 8391249	Identification Spectra - 2	Preparations - 1 > Reactions - 1 > Documents - 1 >
Polymer; Monomer(s): hexafluoro-1,3-butadiene; Radical derived ...	Polymer; Monomer(s): hexafluoro-1,3-butadiene; Radical derived from methanol as terminal group 8391250	Identification Spectra - 2	Preparations - 1 > Reactions - 1 > Documents - 1 >
Poly(3-hexylthiophene) with 2-thienyl end groups; Mw: ...	Poly(3-hexylthiophene) with 2-thienyl end groups; M_w : 25.6 kg mol ⁻¹ ; PD: 1.42 8540676	Identification Spectra - 2	Preparations - 1 > Reactions - 1 > Documents - 1 >

REAXYS – ПОЛИМЕРЫ И СЕТИ

Chemical Name

is



Chemical Name
poly*

AND

Substance Basic Index

is



Substance Basic Index
poly* NEXT network*

REAXYS – ПОЛИМЕРЫ И СЕТИ

poly(ethyl acrylate)-i-poly(ethyl methacrylate), ...	<p>poly(ethyl acrylate)-i-poly(ethyl methacrylate), cross-linked with 10 percent ethylene glycol dimethacrylate, block polymerization, content of poly(ethyl methacrylate) 56 percent, interpenetrating polymer network</p> <p>9990591</p>	<p>Preparations - 1 ></p> <p>Reactions - 1 ></p> <p>Documents - 1 ></p>
polyampholytic polymer network, tetrahydropyranyl fragments ...	<p>polyampholytic polymer network, tetrahydropyranyl fragments hydrolyzed; monomer(s): 2-(dimethylamino)ethyl methacrylate; ethylene glycol dimethacrylate; tetrahydropyranyl methacrylate</p> <p>10058267</p>	<p>Preparations - 3 ></p> <p>Reactions - 3 ></p> <p>Documents - 1 ></p>
polymer network, prepared by cross-linking of PPF chains with PPF-DA, ...	<p>polymer network, prepared by cross-linking of PPF chains with PPF-DA, double bond ratio PPF/PPF-DA = 0.5, double bond conversion: 0.48; acrylate 0.70, fumarate 0.22, total 0.48, total bonds in network 3.60 mmol/g, mol. weight between cross-links $M_c = 457$</p> <p>10151355</p>	<p>Preparations - 1 ></p> <p>Reactions - 2 ></p> <p>Documents - 1 ></p>
polymer network, prepared by cross-linking of PPF chains with PPF-DA, ...	<p>polymer network, prepared by cross-linking of PPF chains with PPF-DA, double bond ratio PPF/PPF-DA = 1, double bond conversion: acrylate 0.74, fumarate 0.24, total 0.47, total bonds in network 3.33 mmol/g, molecular weight between cross-links $M_c = 472$</p> <p>10151357</p>	<p>Preparations - 1 ></p> <p>Reactions - 2 ></p> <p>Documents - 1 ></p>

REAXYS – ПОИСК ПОЛИМЕРОВ ИСПОЛЬЗУЕМЫХ С НАНОЧАСТИЦАМИ

Reaxys позволяет выполнять поиск полимеров, используемых с наночастицами

Chemical Name

is Chemical Name poly*

AND

Group

Document Basic Index

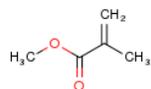
is Document Basic Index nanoparticle*

OR

Substance Basic Index

is Substance Basic Index nanoparticle*

REAXYS – ПОИСК ПОЛИМЕРОВ ИСПОЛЬЗУЕМЫХ С НАНОЧАСТИЦАМИ



methacrylic acid methyl ester

C₅H₈O₂ 100.117 605459 80-62-6

Hit Data - 1

Identification

Physical Data - 535

Spectra - 124

Bioactivity - 374

Other Data - 237

Preparations - 159 >

Reactions - 7,033 >

Documents - 6,150 >



^ Hit Data - 1

^ Use - 1 hits out of 225

Use Pattern

Monomer for hydrophobic polymeric core of adhesin-specific nanoparticles

Reference

CLEMSON UNIVERSITY - WO2005/30126, 2005, A2

Full Text [↗](#) Show details [>](#)

polyvinylpyrrol...

polyvinylpyrrolidone

8188189 9003-39-8

Hit Data - 3

Identification

Physical Data - 64

Spectra - 16

Bioactivity - 102

Other Data - 1,896

Preparations - 4 >

Reactions - 17 >

Documents - 1,831 >

^ Hit Data - 3

^ Use - 3 hits out of 1,896

Use Pattern

Stabilizer of pigment nanoparticles for inks

Reference

Xerox Corporation - US7427323, 2008, B1

Reaxys позволяет искать мономерные компоненты полимеров

Reaxys[®] Quick search Query builder Results Synthesis planner History

Search Substances > 

Import Save Reset form Delete

Structure Molecular Formula CAS RN Doc. Index

Chemical Name 

is  Chemical Name polystyrene* 

AND

Substance Basic Index 

is  Substance Basic Index monomer* NEXT (styrene* NEXT acryl*) 

Reaxys позволяет искать мономерные компоненты полимеров

polystyrene-block-poly(n-butyl acrylate), Mn 34.3 K, Mw/Mn ...	polystyrene-block-poly(n-butyl acrylate), Mn 34.3 K, Mw/Mn 1.11 by GPC; monomer(s): styrene; n-butyl acrylate 10649999	Documents - 1 >
	Identification Physical Data - 2	
polystyrene-block-poly(n-butyl acrylate), Mn 26.8 K, Mw/Mn ...	polystyrene-block-poly(n-butyl acrylate), Mn 26.8 K, Mw/Mn 1.14 by GPC; monomer(s): styrene; n-butyl acrylate 10654073	Preparations - 1 > Reactions - 1 > Documents - 1 >
	Identification Physical Data - 4	
polystyrene carrying copolymer shell of styrene and 2...	polystyrene carrying copolymer shell of styrene and 2-(methyl 2'-chloropropionato)ethyl acrylate, particle size = 669 nm; monomer(s): styrene; 2-(methyl 2'-chloropropionato)ethyl acrylate 10783243	Preparations - 1 > Reactions - 2 > Documents - 1 >
	Physical Data - 6	
polystyrene-co-poly(acrylic acid), Mw = 3830 amu, wpercent of ...	polystyrene-co-poly(acrylic acid), Mw = 3830 amu, wpercent of styrene = 86.7; monomer(s): styrene; acrylic acid 11180813	Preparations - 1 > Reactions - 1 > Documents - 1 >
	Physical Data - 2	

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открытия, которые
определят мир
завтра.

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