

Reaction (Beilstein(2008/02):Reactions:Q01 hit 1, RX.ID [38533](#))

Reaction ID	38533
Reactant BRN	1071202 1-bromo-3-chloro-2-propanol
Product BRN	79785 2-chloromethyloxirane
No. of Reaction Details	2
Find similar reactions	click here

Field Availability List (Beilstein(2008/02):Reactions:Q01 hit 1, RX.ID [38533](#))

Code	Field Name	Occ.
RX	Reaction Details	2

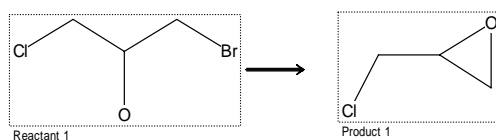
Reaction Details 1 of 2 (Beilstein(2008/02):Reactions:Q01 hit 1, RX.ID [38533](#))

Reaction Classification	Preparation
Reagent	aqueous KOH-solution
Note 1	levorotatory form
Ref. 1	556960;Original Document ; Journal; Abderhalden; Eichwald; CHBEAM; Chemische Berichte; 48; 1915; 1854; ISSN: 0002-7864; CHBEAM; Chemische Berichte; 47; 1914; 1865,2884.

Reaction Details 2 of 2 (Beilstein(2008/02):Reactions:Q01 hit 1, RX.ID [38533](#))

Reaction Classification	Preparation
Product BRN	79785 2-chloromethyloxirane
Yield	58 percent
Reagent	sodium ethylene glycolate
Solvent	ethane-1,2-diol
Time	0.25 h
Temperature	20 C

Ref. 1	5930559;Original Document ; Journal; O'Hagan, David; White, Jeffrey; Jones, David A.; JLCRD4; Journal of Labelled Compounds and Radiopharmaceuticals; English; 34; 9; 1994; 871 - 880; DOI: 10.1002/jlcr.2580340908; ISSN: 0362-4803.
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Reaction (Beilstein(2008/02):Reactions:Q01 hit 2, RX.ID [214080](#))

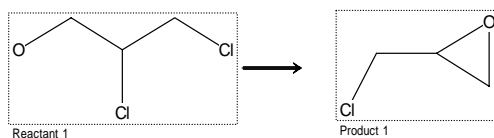
Reaction ID	214080
Reactant BRN	1732060 2,3-dichloropropan-1-ol
Product BRN	79785 2-chloromethyloxirane
No. of Reaction Details	1
Find similar reactions	click here

Field Availability List (Beilstein(2008/02):Reactions:Q01 hit 2, RX.ID [214080](#))

Code	Field Name	Occ.
RX	Reaction Details	1

Reaction Details (Beilstein(2008/02):Reactions:Q01 hit 2, RX.ID [214080](#))

Reaction Classification	Preparation
Reagent	KOH
Ref. 1	556018;Original Document ; Journal; Muender; Tollens; Zeitschrift fuer Chemie; 1871; 252.



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Reaction (Beilstein(2008/02):Reactions:Q01 hit 3, RX.ID [214175](#))

Reaction ID	214175
Reactant BRN	1732063 1,3-dichloro-1,3-dideoxyglycerol
Product BRN	79785 2-chloromethyloxirane
No. of Reaction Details	9
Find similar reactions	click here

Field Availability List (Beilstein(2008/02):Reactions:Q01 hit 3, RX.ID [214175](#))

Code	Field Name	Occ.
RX	Reaction Details	9

Reaction Details 1 of 9 (Beilstein(2008/02):Reactions:Q01 hit 3, RX.ID [214175](#))

Reaction Classification	Preparation
Reagent	calcium hydroxide
Note 1	inactive form
Ref. 1	556953;Original Document ; Patent; Chem. Fabr. Griesheim-Elektron; DE 246242; FTFVA6; Fortschr. Teerfarbenfabr. Verw. Industriezweige; DE; German; 10; 22.
Ref. 2	556954;Original Document ; Patent; Bayer and Co.; DE 239077; FTFVA6; Fortschr. Teerfarbenfabr. Verw. Industriezweige; DE; German; 10; 23.
Ref. 3	556955;Original Document ; Journal; Niviere; COREAF; Comptes Rendus Hebdomadaires des Seances de l'Academie des Sciences; 156; 1913; 1628; ISSN: 0001-4036; BSCFAS; Bulletin de la Societe Chimique de France; <4> 13; 1913; 970.

Reaction Details 2 of 9 (Beilstein(2008/02):Reactions:Q01 hit 3, RX.ID [214175](#))

Reaction Classification	Preparation
Reagent	KOH
Ref. 1	550020;Original Document ; Journal; Reboul; ANCPAC; Annales de Chimie (Cachan, France); <3> 60; 1860; 32; ISSN: 0151-9107; JLACBF; Justus Liebig's Annalen der Chemie; Suppl.1; 1861/1862; 227.
Ref. 2	555938;Original Document ; Journal; Reboul; JLACBF; Justus Liebig's Annalen der Chemie; Suppl.1; 1861/1862; 233; ISSN: 0075-4617.

Reaction Details 3 of 9 (Beilstein(2008/02):Reactions:Q01 hit 3, RX.ID [214175](#))

Reaction Classification	Preparation
Reagent	sodium hydroxide
Ref. 1	555977;Original Document ; Journal; Carius; JLACBF; Justus Liebig's Annalen der Chemie; 134; 1865; 73; ISSN: 0075-4617.

Ref. 2	556019;Original Document ; Journal; Prevost; JPCEAO; Journal fuer Praktische Chemie (Leipzig); <2> 12; 1875; 160; ISSN: 0021-8383.
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Reaction Details 4 of 9 (Beilstein(2008/02):Reactions:Q01 hit 3, RX.ID [214175](#))

Reaction Classification	Preparation
Reagent	calcium hydroxide
	water
Temperature	20 C
Ref. 1	559539;Original Document ; Journal; Braun; ORSYAT; Organic Syntheses; 16; 1936; 31; ISSN: 0078-6209; ORSYAT; Organic Syntheses; Coll. Vol. II; 1943; 257.

Reaction Details 5 of 9 (Beilstein(2008/02):Reactions:Q01 hit 3, RX.ID [214175](#))

Reaction Classification	Preparation
Reagent	NaOH-solution
Temperature	12 - 15 C
Ref. 1	1314728;Original Document ; Journal; Hill; Fischer; JACSAT; Journal of the American Chemical Society; 44; 1922; 2584,2590; ISSN: 0002-7863.

Reaction Details 6 of 9 (Beilstein(2008/02):Reactions:Q01 hit 3, RX.ID [214175](#))

Reaction Classification	Preparation
Reagent	alkaline solution
Note 1	inactive form
Ref. 1	556953;Original Document ; Patent; Chem. Fabr. Griesheim-Elektron; DE 246242; FTFVA6; Fortschr. Teerfarbenfabr. Verw. Industriezweige; DE; German; 10; 22.
Ref. 2	556954;Original Document ; Patent; Bayer and Co.; DE 239077; FTFVA6; Fortschr. Teerfarbenfabr. Verw. Industriezweige; DE; German; 10; 23.
Ref. 3	556955;Original Document ; Journal; Niviere; COREAF; Comptes Rendus Hebdomadaires des Seances de l'Academie des Sciences; 156; 1913; 1628; ISSN: 0001-4036; BSCFAS; Bulletin de la Societe Chimique de France; <4> 13; 1913; 970.

Reaction Details 7 of 9 (Beilstein(2008/02):Reactions:Q01 hit 3, RX.ID [214175](#))

Reaction Classification	Preparation
Reagent	sodium carbonate
Note 1	inactive form
Ref. 1	556953;Original Document ; Patent; Chem. Fabr. Griesheim-Elektron; DE 246242; FTFVA6; Fortschr. Teerfarbenfabr. Verw. Industriezweige; DE; German; 10; 22.
Ref. 2	556954;Original Document ; Patent; Bayer and Co.; DE 239077; FTFVA6; Fortschr. Teerfarbenfabr. Verw. Industriezweige; DE; German; 10; 23.
Ref. 3	556955;Original Document ; Journal; Niviere; COREAF; Comptes Rendus Hebdomadaires des Seances de l'Academie des Sciences; 156; 1913; 1628; ISSN: 0001-4036; BSCFAS; Bulletin de la Societe Chimique de France; <4> 13; 1913; 970.

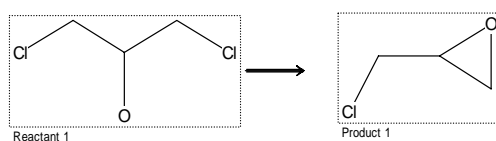
Reaction Details 8 of 9 (Beilstein(2008/02):Reactions:Q01 hit 3, RX.ID [214175](#))

Reaction Classification	Preparation
Product BRN	79785 2-chloromethyloxirane
Yield	98 percent
Reagent	resin IRA-440
Solvent	CH ₂ Cl ₂
Time	24 h
Other Conditions	Ambient temperature
Ref. 1	5657376;Original Document ; Journal; Dargelos, Marianne; Borredon, Marie Elisabeth; Gaset, Antoine; AJCHAS; Australian Journal of Chemistry; English; 45; 8; 1992; 1327 - 1330; ISSN: 0004-9425.

Reaction Details 9 of 9 (Beilstein(2008/02):Reactions:Q01 hit 3, RX.ID [214175](#))

Reaction Classification	Chemical behaviour
Product BRN	79785 2-chloromethyloxirane
Yield	98 percent
Reagent	strong basic ion-exchange resin IRA 440
Solvent	CH ₂ Cl ₂
Time	24 h

Other Conditions	Ambient temperature
	other basic ion-exchange resins; other glycerol dihalohydrins; other solvents and time
Subject Studied	Product distribution
Ref. 1	5657376;Original Document ; Journal; Dargelos, Marianne; Borredon, Marie Elisabeth; Gaset, Antoine; AJCHAS; Australian Journal of Chemistry; English; 45; 8; 1992; 1327 - 1330; ISSN: 0004-9425.



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Reaction (Beilstein(2008/02):Reactions:Q01 hit 6, RX.ID [746530](#))

Reaction ID	746530
Reactant BRN	635685 glycerine
Product BRN	79785 2-chloromethyloxirane
No. of Reaction Details	2
Find similar reactions	click here

Field Availability List (Beilstein(2008/02):Reactions:Q01 hit 6, RX.ID [746530](#))

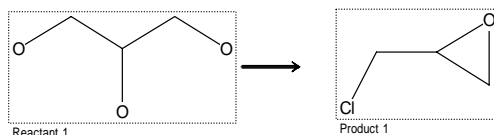
Code	Field Name	Occ.
RX	Reaction Details	2

Reaction Details 1 of 2 (Beilstein(2008/02):Reactions:Q01 hit 6, RX.ID [746530](#))

Reaction Classification	Preparation
Reagent	phosphorus trichloride
Ref. 1	550019;Original Document ; Journal; Berthelot; Luca; ANCPAC; Annales de Chimie (Cachan, France); <3> 48; 1856; 306,311; ISSN: 0151-9107; JLACBF; Justus Liebigs Annalen der Chemie; 101; 1857; 69,71.
Ref. 2	556023;Original Document ; Journal; Berthelot; Luca; JLACBF; Justus Liebigs Annalen der Chemie; 101; 1857; 67; ISSN: 0075-4617.

Reaction Details 2 of 2 (Beilstein(2008/02):Reactions:Q01 hit 6, RX.ID [746530](#))

Reaction Classification	Preparation
Reagent	HCl
Other Conditions	anschl. mit Aetzkali
Ref. 1	556016;Original Document ; Book Review / Secondary Ref.; Fischer,E.; Organic Syntheses, Collective Vol. I <New York 1932> S. 228.
Ref. 2	556017;Original Document ; Book Review / Secondary Ref.; Fischer,E.; Darstellung organischer Praeparate, 10. Aufl. <Braunschweig 1922>, S. 55.



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Reaction (Beilstein(2008/02):Reactions:Q01 hit 7, RX.ID [746863](#))

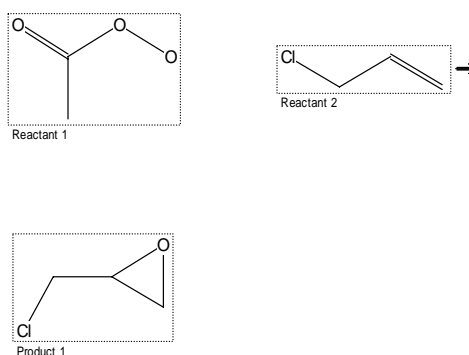
Reaction ID	746863
Reactant BRN	1098464 peroxy acetic acid
	635704 3-Chloroprop-1-en
Product BRN	79785 2-chloromethyloxirane
No. of Reaction Details	1
Find similar reactions	click here

Field Availability List (Beilstein(2008/02):Reactions:Q01 hit 7, RX.ID [746863](#))

Code	Field Name	Occ.
RX	Reaction Details	1

Reaction Details (Beilstein(2008/02):Reactions:Q01 hit 7, RX.ID [746863](#))

Reaction Classification	Preparation
Reagent	catalysts
Ref. 1	564603;Original Document ; Patent; Union Carbide Corp.; GB 784620; 1955.



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Reaction (Beilstein(2008/02):Reactions:Q01 hit 8, RX.ID [747112](#))

Reaction ID	747112
Reactant BRN	635704 3-Chloroprop-1-en
Product BRN	79785 2-chloromethyloxirane
No. of Reaction Details	11
Find similar reactions	click here

Field Availability List (Beilstein(2008/02):Reactions:Q01 hit 8, RX.ID [747112](#))

Code	Field Name	Occ.
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RX	Reaction Details	11
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Reaction Details 1 of 11 (Beilstein(2008/02):Reactions:Q01 hit 8, RX.ID [747112](#))

Reaction Classification	Preparation
Reagent	tungsten (VI)-oxide
	hydrogen peroxide
Ref. 1	607707 ; Original Document ; Patent; Shell Devel.Co.; US 2786854; 1953.

Reaction Details 2 of 11 (Beilstein(2008/02):Reactions:Q01 hit 8, RX.ID [747112](#))

Reaction Classification	Preparation
Product BRN	79785 2-chloromethyloxirane
Yield	80 percent Chromat.
Reagent	Na ₂ WO ₄ *2H ₂ O, 40percent w/v H ₃ PO ₄ , 8percent aq. H ₂ O ₂ , Aliquat
Solvent	benzene
Time	2.5 h
Other Conditions	pH 1.6, 60 deg C bath temp.
Ref. 1	5578973 ; Original Document ; Journal; Venturello, Carlo; Alneri, Enzo; Ricci, Marco; JOCEAH; Journal of Organic Chemistry; English; 48; 21; 1983; 3831 - 3833; DOI: 10.1021/jo00169a052; ISSN: 0022-3263.

Reaction Details 3 of 11 (Beilstein(2008/02):Reactions:Q01 hit 8, RX.ID [747112](#))

Reaction Classification	Preparation
Reagent	28percent aqueous hydrogen peroxide
Catalyst	molybdenum acetylacetonate, (n-Bu ₃ Sn) ₂ O
Solvent	propan-2-ol
Temperature	50 C
Note 1	Yield given
Ref. 1	5670400 ; Original Document ; Journal; Watanabe, Yoshihiro; Inoue, Masamichi; Itai

Yasushi; CPBTAL; Chemical & Pharmaceutical Bulletin; English; 31; 4; 1983; 1119 - 1124; ISSN: 0009-2363.

Reaction Details 4 of 11 (Beilstein(2008/02):Reactions:Q01 hit 8, RX.ID [747112](#))

Reaction Classification	Preparation
Product BRN	79785 2-chloromethyloxirane
Yield	85 percent Chromat.
Reagent	aq. H ₂ O ₂ , methyltrioctylammonium tetrakis(diperoxotungsto)phosphate
Solvent	benzene
Time	2.5 h
Other Conditions	Heating
Ref. 1	5700985 ; Original Document ; Journal; Venturello, Carlo; D'Aloiso, Rino; JOCEAH; Journal of Organic Chemistry; English; 53; 7; 1988; 1553 - 1557; DOI: 10.1021/jo00242a041; ISSN: 0022-3263.

Reaction Details 5 of 11 (Beilstein(2008/02):Reactions:Q01 hit 8, RX.ID [747112](#))

Reaction Classification	Chemical behaviour
Reagent	CH ₃ CO ₃ H
Other Conditions	IP versus log k (rel); var. electrophiles
Ref. 1	5544641 ; Original Document ; Journal; Nelson, Donna J.; Soundararajan, Raman; TELEAY; Tetrahedron Letters; English; 29; 48; 1988; 6207 - 6210; DOI: 10.1016/S0040-4039(00)82306-0; ISSN: 0040-4039.

Reaction Details 6 of 11 (Beilstein(2008/02):Reactions:Q01 hit 8, RX.ID [747112](#))

Reaction Classification	Chemical behaviour
Reagent	ethylbenzene hydroperoxide, layered graphite compound, MoCl ₅
Time	1.8 h
Temperature	90 C

Other Conditions	further catalysts; further hydroperoxides (t-BuOOH)
Subject Studied	Product distribution
Ref. 1	5771901;Original Document ; Journal; Kovtyukhova, N. I.; Belousov, V. M.; Novikov, Yu. N.; Vol'pin, M. E.; BACCAT; Bulletin of the Academy of Sciences of the USSR, Division of Chemical Science (English Translation); English; 32; 8; 1983; 1566 - 1570; DOI: 10.1007/BF00954271; ISSN: 0568-5230; IASKA6; Izvestiya Akademii Nauk SSSR, Seriya Khimicheskaya; Russian; 8; 1983; 1728 - 1732.

Reaction Details 7 of 11 (Beilstein(2008/02):Reactions:Q01 hit 8, RX.ID [747112](#))

Reaction Classification	Chemical behaviour
Product BRN	79785 2-chloromethyloxirane
Yield	84.4 percent Turnov.
Reagent	H ₂ O ₂
Catalyst	titanium silicalite-1
Solvent	methanol
Time	1 h
Temperature	45 C
Other Conditions	var. of catalyst
Subject Studied	Product distribution
Ref. 1	5944130;Original Document ; Journal; Gao, Huanxin; Suo, Jishuan; Li, Shuben; JCCCAT; Journal of the Chemical Society, Chemical Communications; English; 8; 1995; 835 - 836; DOI: 10.1039/c39950000835; ISSN: 0022-4936.

Reaction Details 8 of 11 (Beilstein(2008/02):Reactions:Q01 hit 8, RX.ID [747112](#))

Reaction Classification	Preparation
Reagent	hydroperoxide
Ref. 1	6446192;Original Document ; Journal; Rybina, G. V.; Srednev, S. S.; Bobyleva, L. I.; RJACEO; Russian Journal of Applied Chemistry; English; 76; 5; 2003; 842 - 843; DOI: 10.1023/A:1026054529816; ISSN: 1070-4272; ZPKHAB; Zhurnal Prikladnoi Khimii (Sankt-Peterburg, Russian Federation); Russian; 76; 5; 2003; 870 - 871.

Reaction Details 9 of 11 (Beilstein(2008/02):Reactions:Q01 hit 8, RX.ID [747112](#))

Reaction Classification	Preparation
Product BRN	79785 2-chloromethyloxirane
Yield	35 percent
Reagent	hydrogen peroxide
	phosphoric acid
	sulfuric acid
Catalyst	Aliquat(R) 336
	sodium tungstate dihydrate
Solvent	H ₂ O
	1,2-dichloro-ethane
Time	1 h
Temperature	70 C
pH-Value	1.6
Other Conditions	microwave irradiation
Ref. 1	6526579 ; Original Document ; Journal; Bogdal, D.; Lukasiewicz, M.; Pielichowski, J.; Bednarz, S.; SYNCAV; Synthetic Communications; English; 35; 23; 2005; 2973 - 2983; ISSN: 0039-7911.

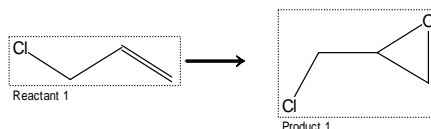
Reaction Details 10 of 11 (Beilstein(2008/02):Reactions:Q01 hit 8, RX.ID [747112](#))

Reaction Classification	Preparation
Product BRN	79785 2-chloromethyloxirane
Yield	38 percent
Reagent	O ₂
	AcOH
Catalyst	vanadyl porphyrin complex
Solvent	dimethylformamide
Temperature	60 - 70 C

Pressure	2280 Torr
Ref. 1	7000423;Original Document ; Journal; Miralamov, G. F.; Mamedov, Ch. I.; PECHAM; English; 46; 1; 2006; 25 - 27; NEFTAH; Neftekhimiya; Russian; 46; 1; 2006; 28 - 30.

Reaction Details 11 of 11 (Beilstein(2008/02):Reactions:Q01 hit 8, RX.ID [747112](#))

Reaction Classification	Chemical behaviour
Reagent	aq. H ₂ O ₂
Catalyst	Ti-MWW
Solvent	acetonitrile
Time	2 h
Temperature	59.84 C
Subject Studied	Product distribution
Prototype Reaction	Further Variations:
	Solvents
	Catalysts
	Temperatures
Ref. 1	7067024;Original Document ; Journal; Wang, Lingling; Liu, Yueming; Xie, Wei; Zhang, Haijiao; Wu, Haihong; Jiang, Yongwen; He, Mingyuan; Wu, Peng; JCTLA5; Journal of Catalysis; English; 246; 1; 2007; 205 - 214; DOI: 10.1016/j.jcat.2006.12.003; ISSN: 0021-9517.



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Reaction (Beilstein(2008/02):Reactions:Q01 hit 17, RX.ID [2521682](#))

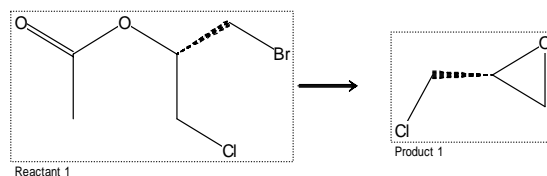
Reaction ID	2521682
Reactant BRN	4349861 (S)-2-Acetoxy-1-bromo-3-chloropropane
Product BRN	1420785 (R)- ⁽⁻⁾ -2-chloromethyloxirane
No. of Reaction Details	1
Find similar reactions	click here

Field Availability List (Beilstein(2008/02):Reactions:Q01 hit 17, RX.ID [2521682](#))

Code	Field Name	Occ.
RX	Reaction Details	1

Reaction Details (Beilstein(2008/02):Reactions:Q01 hit 17, RX.ID [2521682](#))

Reaction Classification	Preparation
Reagent	Na-ethane-1,2-diolate
Solvent	ethane-1,2-diol
Time	0.25 h
Note 1	Yield given
Ref. 1	5540098;Original Document ; Journal; Ellis, Martin K.; Golding, Bernard T.; Maude, Antony B.; Watson, William P.; JCPRB4; Journal of the Chemical Society, Perkin Transactions 1: Organic and Bio-Organic Chemistry (1972-1999); English; 4; 1991; 747 - 755; ISSN: 0300-922X.



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Reaction (Beilstein(2008/02):Reactions:Q01 hit 18, RX.ID [2522961](#))

Reaction ID	2522961
Reactant BRN	4353320 (1S,2R,4R,4'R)-4'-Chloromethyl-4,7,7-trimethylbicyclo<2.2.1>heptane-2-spiro-2'-(1',3'-dioxolan)-3-one
Product BRN	1420785 (R)- ⁽⁻⁾ -2-chloromethyloxirane

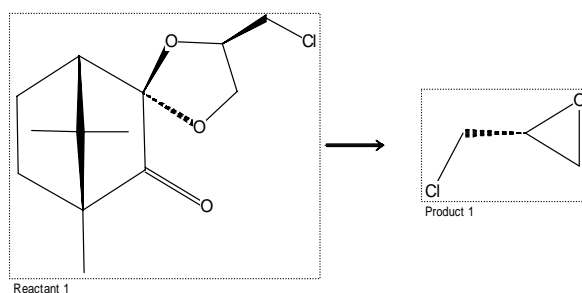
No. of Reaction Details	1
Find similar reactions	click here

Field Availability List (Beilstein(2008/02):Reactions:Q01 hit 18, RX.ID [2522961](#))

Code	Field Name	Occ.
RX	Reaction Details	1

Reaction Details (Beilstein(2008/02):Reactions:Q01 hit 18, RX.ID [2522961](#))

Reaction Classification	Preparation
Reagent	1.) 48percent HBr, 2.) NaOC ₂ H ₄ OH
Other Conditions	1.) AcOH, 60 deg C, 5 h,
Note 1	Yield given. Multistep reaction
Ref. 1	5887710;Original Document ; Journal; Ellis, Martin K.; Golding, Bernard T.; Watson, William P.; JCCCAT; Journal of the Chemical Society, Chemical Communications; English; 23; 1984; 1600 - 1602; DOI: 10.1039/c39840001600; ISSN: 0022-4936.



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Reaction (Beilstein(2008/02):Reactions:Q02 hit 7, RX.ID [59061](#))

Reaction ID	59061
Reactant BRN	1098262 ethyl ethylene
Product BRN	773645 2-methylpropene
No. of Reaction Details	11
Find similar reactions	click here

Field Availability List (Beilstein(2008/02):Reactions:Q02 hit 7, RX.ID [59061](#))

Code	Field Name	Occ.
RX	Reaction Details	11

Reaction Details 1 of 11 (Beilstein(2008/02):Reactions:Q02 hit 7, RX.ID [59061](#))

Reaction Classification	Preparation
Reagent	HCl
	AlCl ₃
Temperature	350 C
Ref. 1	1388977;Original Document ; Journal; Weizmann; Chem.Abstr.; 1943; 2392.
Ref. 2	1388978;Original Document ; Patent; Weizmann; US 2303362; 1939.

Reaction Details 2 of 11 (Beilstein(2008/02):Reactions:Q02 hit 7, RX.ID [59061](#))

Reaction Classification	Preparation
Temperature	200 - 380 C
Other Conditions	Umlagerung in Gegenwart verschiedener Katalysatoren
Ref. 1	1345114;Original Document ; Journal; Sharkowa; Moldawski; ZOKHA4; Zhurnal Obshchei Khimii; 17; 1947; 1270; ISSN: 0044-460X; Chem.Abstr.; 1948; 1869.

Reaction Details 3 of 11 (Beilstein(2008/02):Reactions:Q02 hit 7, RX.ID [59061](#))

Reaction Classification	Preparation
Catalyst	silicated Al ₂ O ₃
Temperature	400 C
Ref. 1	5533249;Original Document ; Journal; Basini, L.; Aragno, A.; Raffaelli, A.; JPCHAX; Journal of Physical Chemistry; English; 95; 1; 1991; 211 - 218; DOI: 10.1021/j100154a042; ISSN: 0022-3654.

Reaction Details 4 of 11 (Beilstein(2008/02):Reactions:Q02 hit 7, RX.ID [59061](#))

Reaction Classification	Chemical behaviour
Ref. 1	1344604;Original Document ; Book Review / Secondary Ref.; Egloff,G.; Hulla,G.; Komarewsky,V.I.; Isomerization of Pure Hydrocarbons <New York 1942> S.246-252.
Ref. 2	1693445;Original Document ; Journal; Voge; Good; Greensfelder; IECHAD; Industrial and Engineering Chemistry; 38; 1946; 1033,1039; DOI: 10.1021/ie50442a018; ISSN: 0019-7866.

Reaction Details 5 of 11 (Beilstein(2008/02):Reactions:Q02 hit 7, RX.ID [59061](#))

Reaction Classification	Chemical behaviour
Catalyst	silicated Al ₂ O ₃
Temperature	400 C
Subject Studied	Mechanism
Ref. 1	5533249 ; Original Document ; Journal; Basini, L.; Aragno, A.; Raffaelli, A.; JPCHAX; Journal of Physical Chemistry; English; 95; 1; 1991; 211 - 218; DOI: 10.1021/j100154a042; ISSN: 0022-3654.

Reaction Details 6 of 11 (Beilstein(2008/02):Reactions:Q02 hit 7, RX.ID [59061](#))

Reaction Classification	Chemical behaviour
Reagent	magnesium-containing aluminium phosphate (DAF-1)
Temperature	275 - 300 C
Other Conditions	other magnesium-containing aluminophosphates and aluminosilicates
Ref. 1	5900223 ; Original Document ; Journal; Natarayan, Srinivasan; Wright, Paul A.; Thomas, John Meurig; JCCCAT; Journal of the Chemical Society, Chemical Communications; English; 24; 1993; 1861 - 1863; ISSN: 0022-4936.

Reaction Details 7 of 11 (Beilstein(2008/02):Reactions:Q02 hit 7, RX.ID [59061](#))

Reaction Classification	Chemical behaviour
Reagent	ferrierite
Time	16 h
Temperature	399.9 C
Pressure	195.02 Torr
Other Conditions	other alkenes
Subject Studied	Product distribution
	Mechanism

Ref. 1	6081089;Original Document ; Journal; Meriaudeau, P.; Tuan, V. A.; Le, N. H.; Szabo, G.; JCTLA5; Journal of Catalysis; English; 169; 1; 1997; 397 - 399; DOI: 10.1006/jcat.1997.1656; ISSN: 0021-9517.
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Reaction Details 8 of 11 (Beilstein(2008/02):Reactions:Q02 hit 7, RX.ID [59061](#))

Reaction Classification	Chemical behaviour
Reagent	ferrierite catalyst (H-FER)
Temperature	399.9 C
Other Conditions	selective isomerization; var. ferrierite catalysts
Ref. 1	6091928;Original Document ; Journal; Meriaudeau, P.; Tuan, Vu A.; Hung, Le N.; Naccache, C.; Szabo, G.; JCTLA5; Journal of Catalysis; English; 171; 1; 1997; 329 - 332; DOI: 10.1006/jcat.1997.1773; ISSN: 0021-9517.

Reaction Details 9 of 11 (Beilstein(2008/02):Reactions:Q02 hit 7, RX.ID [59061](#))

Reaction Classification	Preparation
Reagent	H-ferrierite
Temperature	249.85 C
Reaction Type	Isomerization
Ref. 1	6230341;Original Document ; Journal; Paze, Costanza; Sazak, Birsal; Zecchina, Adriano; Dwyer, John; JPCBKF; Journal of Physical Chemistry B: Condensed Matter, Materials, Surfaces, Interfaces, & Biophysical Chemistry; English; 103; 45; 1999; 9978 - 9986; DOI: 10.1021/jp992117j; ISSN: 1520-6106.

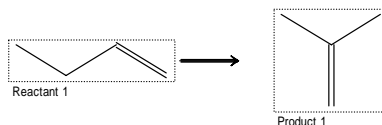
Reaction Details 10 of 11 (Beilstein(2008/02):Reactions:Q02 hit 7, RX.ID [59061](#))

Reaction Classification	Chemical behaviour
Catalyst	zeolite H-IM-5
Temperature	400 C
Pressure	75.7561 Torr
Subject Studied	Product distribution
Notes	Further Variations:

Reaction	
	Catalysts
Ref. 1	6400279;Original Document ; Journal; Lee, Song-Ho; Lee, Dong-Koo; Shin, Chae-Ho; Park, Yong-Ki; Wright, Paul A.; Lee, Won Mook; Hong, Suk Bong; JCTLA5; Journal of Catalysis; English; 215; 1; 2003; 151 - 170; DOI: 10.1016/S0021-9517(02)00178-1; ISSN: 0021-9517.

Reaction Details 11 of 11 (Beilstein(2008/02):Reactions:Q02 hit 7, RX.ID [59061](#))

Reaction Classification	Chemical behaviour
Reagent	H ₂
Catalyst	H-ferrierite zeolite
Temperature	400 C
Subject Studied	Product distribution
Prototype Reaction	Further Variations:
	Catalysts
Ref. 1	6436372;Original Document ; Journal; Lee, Song-Ho; Shin, Chae-Ho; Hong, Suk Bong; JCTLA5; Journal of Catalysis; English; 223; 1; 2004; 200 - 211; DOI: 10.1016/j.jcat.2004.01.029; ISSN: 0021-9517.



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Reaction (Beilstein(2008/02):Reactions:Q02 hit 10, RX.ID [61397](#))

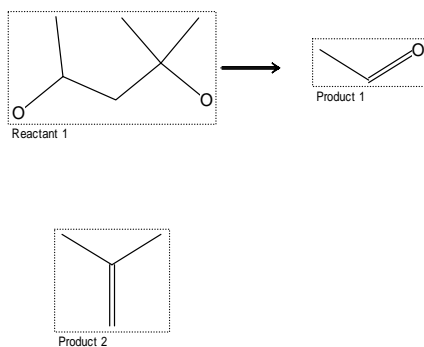
Reaction ID	61397
Reactant BRN	1098298 hexylene glycol
Product BRN	505984 acetic aldehyde
	773645 2-methylpropene
No. of Reaction Details	1
Find similar reactions	click here

Field Availability List (Beilstein(2008/02):Reactions:Q02 hit 10, RX.ID [61397](#))

Code	Field Name	Occ.
RX	Reaction Details	1

Reaction Details (Beilstein(2008/02):Reactions:Q02 hit 10, RX.ID [61397](#))

Reaction Classification	Preparation
Reagent	active Al ₂ O ₃
Temperature	427 C
Ref. 1	1338295;Original Document ; Journal; Schmerling; Friedman; Ipatieff; JACSAT; Journal of the American Chemical Society; 62; 1940; 2448; ISSN: 0002-7863.



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Reaction (Beilstein(2008/02):Reactions:Q02 hit 12, RX.ID [63983](#))

Reaction ID	63983
Reactant BRN	1098522 isovaleric acid
Product BRN	773645 2-methylpropene
No. of Reaction Details	3
Find similar reactions	click here

Field Availability List (Beilstein(2008/02):Reactions:Q02 hit 12, RX.ID [63983](#))

Code	Field Name	Occ.
RX	Reaction Details	3

Reaction Details 1 of 3 (Beilstein(2008/02):Reactions:Q02 hit 12, RX.ID [63983](#))

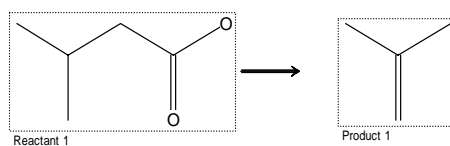
Reaction Classification	Preparation
Reagent	aluminium oxide
	copper
Temperature	600 - 630 C
Ref. 1	1323355;Original Document ; Journal; Mailhe; BSCFAS; Bulletin de la Societe Chimique de France; <4>31; 1922; 684; ISSN: 0037-8968; ANCPAC; Annales de Chimie (Cachan, France); <9>17; 1922; 323; CHZEA6; Chem. Zentralbl.; German; 94; III; 1923; 38.

Reaction Details 2 of 3 (Beilstein(2008/02):Reactions:Q02 hit 12, RX.ID [63983](#))

Reaction Classification	Preparation
Reagent	barium chloride
	copper
Temperature	580 - 600 C
Ref. 1	1133407;Original Document ; Journal; Mailhe; BSCFAS; Bulletin de la Societe Chimique de France; <4>37; 1925; 307; ISSN: 0037-8968.

Reaction Details 3 of 3 (Beilstein(2008/02):Reactions:Q02 hit 12, RX.ID [63983](#))

Reaction Classification	Preparation
Reagent	calcium chloride
	iron
Temperature	570 C
Ref. 1	1133407;Original Document ; Journal; Mailhe; BSCFAS; Bulletin de la Societe



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Reaction (Beilstein(2008/02):Reactions:Q02 hit 13, RX.ID [66664](#))

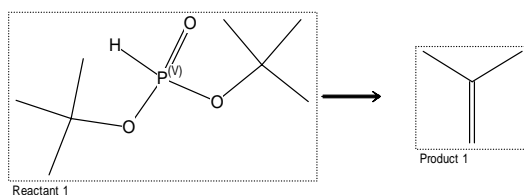
Reaction ID	66664
Reactant BRN	1100063 di-tert-butyl phosphite
Product BRN	773645 2-methylpropene
No. of Reaction Details	1
Find similar reactions	click here

Field Availability List (Beilstein(2008/02):Reactions:Q02 hit 13, RX.ID [66664](#))

Code	Field Name	Occ.
RX	Reaction Details	1

Reaction Details (Beilstein(2008/02):Reactions:Q02 hit 13, RX.ID [66664](#))

Reaction Classification	Chemical behaviour
Temperature	70 C
Ref. 1	1416780;Original Document ; Journal; Young; JACSAT; Journal of the American Chemical Society; 75; 1953; 4620; DOI: 10.1021/ja01114a534; ISSN: 0002-7863.



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Reaction (Beilstein(2008/02):Reactions:Q02 hit 15, RX.ID [93697](#))

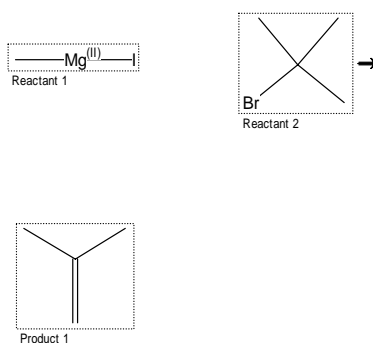
Reaction ID	93697
Reactant BRN	1209226 methyl magnesium iodide
	1730892 2-bromo-2-methylpropane
Product BRN	773645 2-methylpropene
No. of Reaction Details	1
Find similar reactions	click here

Field Availability List (Beilstein(2008/02):Reactions:Q02 hit 15, RX.ID [93697](#))

Code	Field Name	Occ.
RX	Reaction Details	1

Reaction Details (Beilstein(2008/02):Reactions:Q02 hit 15, RX.ID [93697](#))

Reaction Classification	Chemical behaviour
Ref. 1	1223221 ; Original Document ; Journal; Spaeth; MOCMB7; Monatshefte fuer Chemie; 34; 1913; 1998; ISSN: 0026-9247.



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Reaction (Beilstein(2008/02):Reactions:Q02 hit 16, RX.ID [99679](#))

Reaction ID	99679
Reactant BRN	1209246 Formic acid

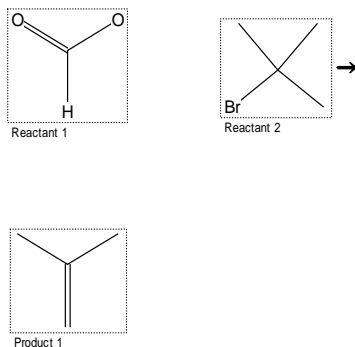
	1730892 2-bromo-2-methylpropane
Product BRN	773645 2-methylpropene
No. of Reaction Details	1
Find similar reactions	click here

Field Availability List (Beilstein(2008/02):Reactions:Q02 hit 16, RX.ID [99679](#))

Code	Field Name	Occ.
RX	Reaction Details	1

Reaction Details (Beilstein(2008/02):Reactions:Q02 hit 16, RX.ID [99679](#))

Reaction Classification	Chemical behaviour
Temperature	100 C
Other Conditions	Geschwindigkeit.Hydrolysis
Ref. 1	1328921 ; Original Document ; Journal; Bateman; Hughes; JCSOA9; Journal of the Chemical Society; 1940; 948; ISSN: 0368-1769.



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Reaction (Beilstein(2008/02):Reactions:Q02 hit 17, RX.ID [130754](#))

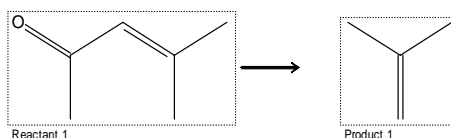
Reaction ID	130754
Reactant BRN	1361550 mesityl oxide
Product BRN	773645 2-methylpropene
No. of Reaction Details	1
Find similar reactions	click here

Field Availability List (Beilstein(2008/02):Reactions:Q02 hit 17, RX.ID [130754](#))

Code	Field Name	Occ.
RX	Reaction Details	1

Reaction Details (Beilstein(2008/02):Reactions:Q02 hit 17, RX.ID [130754](#))

Reaction Classification	Preparation
Reagent	H ₃ PO ₄
	SiO ₂
Temperature	270 C
Ref. 1	1382139;Original Document ; Journal; McAllister; Bailey; Bouton; JACSAT; Journal of the American Chemical Society; 62; 1940; 3212; ISSN: 0002-7863.
Ref. 2	1388901;Original Document ; Journal; Shell Devel Co; CHZEA6; Chem. Zentralbl.; German; 110; I; 1939; 2871,4393.
Ref. 3	1388902;Original Document ; Patent; Shell Devel. Co.; US 2143489; 1938.
Ref. 4	1388903;Original Document ; Patent; Shell Devel. Co.; US 2148294; 1938.



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Reaction (Beilstein(2008/02):Reactions:Q02 hit 29, RX.ID [177465](#))

Reaction ID	177465
Reactant BRN	1699506 acetic acid tert-butyl ester

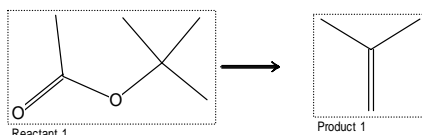
Product BRN	773645 2-methylpropene
No. of Reaction Details	1
Find similar reactions	click here

Field Availability List (Beilstein(2008/02):Reactions:Q02 hit 29, RX.ID [177465](#))

Code	Field Name	Occ.
RX	Reaction Details	1

Reaction Details (Beilstein(2008/02):Reactions:Q02 hit 29, RX.ID [177465](#))

Reaction Classification	Preparation
Reagent	glass wool
Temperature	350 C
Ref. 1	1143496;Original Document ; Journal; Houtman; van Steenis; Heertjes; RTCPA3; Recueil des Travaux Chimiques des Pays-Bas; 65; 1946; 786; ISSN: 0165-0513.



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Reaction (Beilstein(2008/02):Reactions:Q02 hit 41, RX.ID [208871](#))

Reaction ID	208871
Reactant BRN	1730720 2-methylpropane
Product BRN	773645 2-methylpropene
No. of Reaction Details	21
Find similar reactions	click here

Field Availability List (Beilstein(2008/02):Reactions:Q02 hit 41, RX.ID [208871](#))

Code	Field Name	Occ.
RX	Reaction Details	21

Reaction Details 1 of 21 (Beilstein(2008/02):Reactions:Q02 hit 41, RX.ID [208871](#))

Reaction Classification	Preparation
Reagent	Cr ₂ O ₃
	Al ₂ O ₃
Temperature	500 - 600 C
Other Conditions	Dehydrierung
Ref. 1	1343993;Original Document ; Journal; Grosse; Ipatieff; IECHAD; Industrial and Engineering Chemistry; 32; 1940; 271; ISSN: 0019-7866.

Reaction Details 2 of 21 (Beilstein(2008/02):Reactions:Q02 hit 41, RX.ID [208871](#))

Reaction Classification	Preparation
Reagent	charcoal
Temperature	550 C
Ref. 1	1388962;Original Document ; Journal; I.G. Farbenindustrie; CHZEA6; Chem. Zentralbl.; German; 107; II; 1936; 3970.
Ref. 2	1388963;Original Document ; Patent; I.G. Farbenind.; US 2127577; 1935.
Ref. 3	1388964;Original Document ; Patent; I.G. Farbenind.; FR 796987.
Ref. 4	1388965;Original Document ; Journal; Dow Chem. Co; CHZEA6; Chem. Zentralbl.; German; 108; I; 1937; 5045.
Ref. 5	1388966;Original Document ; Patent; Dow Chem. Co.; US 2069624; 1934.

Reaction Details 3 of 21 (Beilstein(2008/02):Reactions:Q02 hit 41, RX.ID [208871](#))

Reaction Classification	Preparation
Reagent	MgO
	Cr ₂ O ₃
Temperature	600 C
Other Conditions	und verschiedenen Schwermetall-Salzen
Ref. 1	1388960;Original Document ; Journal; Universal Oil Prod. Co; CHZEA6; Chem. Zentralbl.; German; 109; II; 1938; 2496.
Ref. 2	1388961;Original Document ; Patent; Universal Oil Prod. Co.; US 2122787; 1935.

Reaction Details 4 of 21 (Beilstein(2008/02):Reactions:Q02 hit 41, RX.ID [208871](#))

Reaction Classification	Preparation
Reagent	active Al ₂ O ₃
Temperature	600 C
Ref. 1	1384879;Original Document ; Patent; N.V. de Bataafsche Petr. Mij.; DE 763556; 1936; DRP/DRBP Org.Chem.; DE; German.
Ref. 2	1388958;Original Document ; Journal; Shell Devel. Co; Chem.Abstr.; 1940; 1991.
Ref. 3	1388959;Original Document ; Patent; Shell Devel. Co.; US 2182431; 1935.

Reaction Details 5 of 21 (Beilstein(2008/02):Reactions:Q02 hit 41, RX.ID [208871](#))

Reaction Classification	Preparation
Reagent	active Al ₂ O ₃
	water-vapour
Temperature	600 C
Ref. 1	1388951;Original Document ; Journal; Shell Devel. Co; CHZEA6; Chem. Zentralbl.; German; 110; I; 1939; 3071.
Ref. 2	1388952;Original Document ; Journal; Shell Devel. Co; CHZEA6; Chem. Zentralbl.; German; 108; II; 1937; 3995.
Ref. 3	1388953;Original Document ; Patent; Shell Devel Co.; GB 467470.
Ref. 4	1388954;Original Document ; Patent; Shell Devel Co.; GB 498859.
Ref. 5	1388955;Original Document ; Patent; Shell Devel Co.; US 2131089; 1935/1936.
Ref. 6	1388956;Original Document ; Patent; Shell Devel Co.; US 2168840; 1935/1936.

Reaction Details 6 of 21 (Beilstein(2008/02):Reactions:Q02 hit 41, RX.ID [208871](#))

Reaction Classification	Preparation
Reagent	active Al ₂ O ₃
	H ₂ S
Temperature	600 C

Ref. 1	1388951;Original Document ; Journal; Shell Devel. Co; CHZEA6; Chem. Zentralbl.; German; 110; I; 1939; 3071.
Ref. 2	1388952;Original Document ; Journal; Shell Devel. Co; CHZEA6; Chem. Zentralbl.; German; 108; II; 1937; 3995.
Ref. 3	1388953;Original Document ; Patent; Shell Devel Co.; GB 467470.
Ref. 4	1388954;Original Document ; Patent; Shell Devel Co.; GB 498859.
Ref. 5	1388955;Original Document ; Patent; Shell Devel Co.; US 2131089; 1935/1936.
Ref. 6	1388956;Original Document ; Patent; Shell Devel Co.; US 2168840; 1935/1936.

Reaction Details 7 of 21 (Beilstein(2008/02):Reactions:Q02 hit 41, RX.ID [208871](#))

Reaction Classification	Preparation
Reagent	Al ₂ O ₃
	Cr ₂ O ₃
Ref. 1	1388946;Original Document ; Journal; Universal Oil Prod Co; CHZEA6; Chem. Zentralbl.; German; 110; II; 1939; 3881.
Ref. 2	1388947;Original Document ; Patent; Universal Oil Prod. Co.; US 2167650; 1935.
Ref. 3	1388948;Original Document ; Journal; Shell Devel. Co; Chem.Abstr.; 1940; 2392,1941 1064.
Ref. 4	1388949;Original Document ; Patent; Shell Devel Co.; US 2184234; 1935.
Ref. 5	1388950;Original Document ; Patent; Shell Devel Co.; US 2217865; 1939.

Reaction Details 8 of 21 (Beilstein(2008/02):Reactions:Q02 hit 41, RX.ID [208871](#))

Reaction Classification	Preparation
Other Conditions	durch thermische Zersetzung
Ref. 1	1335590;Original Document ; Journal; Arnold; Oil Gas J.; 44; 9; 87; Chem.Abstr.; 1945; 4218.

Reaction Details 9 of 21 (Beilstein(2008/02):Reactions:Q02 hit 41, RX.ID [208871](#))

Reaction Classification	Preparation
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Temperature	600 - 700 C
Ref. 1	1314705;Original Document ; Journal; Hurd; Spence; JACSAT; Journal of the American Chemical Society; 51; 1929; 3359; ISSN: 0002-7863.

Reaction Details 10 of 21 (Beilstein(2008/02):Reactions:Q02 hit 41, RX.ID [208871](#))

Reaction Classification	Preparation
Temperature	520 - 740 C
Other Conditions	unter Druck
Ref. 1	1332935;Original Document ; Journal; Frey; Hepp; IECHAD; Industrial and Engineering Chemistry; 25; 1933; 444; ISSN: 0019-7866.
Ref. 2	1332962;Original Document ; Journal; Tropsch; Thomas; Egloff; IECHAD; Industrial and Engineering Chemistry; 28; 1936; 328; ISSN: 0019-7866.
Ref. 3	1332963;Original Document ; Journal; Egloff; Thomas; Linn; IECHAD; Industrial and Engineering Chemistry; 28; 1936; 1285; ISSN: 0019-7866.
Ref. 4	1334462;Original Document ; Journal; Schultze; Weller; OEKOA4; Oel und Kohle; 14; 1938; 1003; ISSN: 0369-7177; CHZEA6; Chem. Zentralbl.; German; 110; I; 1939; 4555.
Ref. 5	1335582;Original Document ; Journal; Steacie; Puddington; CNRBAX; Canadian Journal of Research, Section B: Chemical Sciences; 16; 1938; 264,265; ISSN: 0366-7391; CHZEA6; Chem. Zentralbl.; German; 110; I; 1939; 3134.
Ref. 6	1335597;Original Document ; Journal; Marek; Neuhaus; IECHAD; Industrial and Engineering Chemistry; 25; 1933; 516 - 519; DOI: 10.1021/ie50281a010; ISSN: 0019-7866.

Reaction Details 11 of 21 (Beilstein(2008/02):Reactions:Q02 hit 41, RX.ID [208871](#))

Reaction Classification	Preparation
Reagent	Cr ₂ O ₃
Temperature	525 C
Other Conditions	Dehydrierung
Ref. 1	1388945;Original Document ; Journal; Dementjewa; Sserebrjakowa; Frost; CHZEA6; Chem. Zentralbl.; German; 109; I; 1938; 53.

Reaction Details 12 of 21 (Beilstein(2008/02):Reactions:Q02 hit 41, RX.ID [208871](#))

Reaction Classification	Preparation
Reagent	I ₂
Temperature	251.9 C
Ref. 1	5721533;Original Document ; Journal; Garfinkle, Marvin; JCFTAR; Journal of the Chemical Society, Faraday Transactions 1: Physical Chemistry in Condensed Phases; English; 81; 1985; 717 - 726; DOI: 10.1039/f19858100717; ISSN: 0300-9599.

Reaction Details 13 of 21 (Beilstein(2008/02):Reactions:Q02 hit 41, RX.ID [208871](#))

Reaction Classification	Chemical behaviour
Reagent	carbonyl sulfide
Catalyst	SiO ₂
Temperature	599.9 C
Pressure	760 Torr
Subject Studied	Rate constant
Ref. 1	5774128;Original Document ; Journal; Akimoto, Masamichi; Sakatani, Takashi; Echigoya, Etsuro; BCSJA8; Bulletin of the Chemical Society of Japan; English; 56; 11; 1983; 3503 - 3504; DOI: 10.1246/bcsj.56.3503; ISSN: 0009-2673.

Reaction Details 14 of 21 (Beilstein(2008/02):Reactions:Q02 hit 41, RX.ID [208871](#))

Reaction Classification	Chemical behaviour
Reagent	O ₂
Catalyst	ZnO-TiO ₂
Temperature	569.9 C
Other Conditions	other catalysts and var. atomic ratio Zn/Ti; also without oxygen; other olefin
Subject Studied	Product distribution
Ref. 1	5847595;Original Document ; Journal; Lysova, N. N.; Tmenov, D. N.; Luk'yanenko, V. P.; JAPUAW; J. Appl. Chem. USSR (Engl. Transl.); English; 65; 8.2; 1992; 1500 - 1505; ZPKHAB; Zhurnal Prikladnoi Khimii (Sankt-Peterburg, Russian Federation); Russian; 65; 8; 1992; 1848 - 1855.

Reaction Details 15 of 21 (Beilstein(2008/02):Reactions:Q02 hit 41, RX.ID [208871](#))

Reaction Classification	Chemical behaviour
Reagent	nickel catalyst supported on γ -alumina (6percent Ni/5percent Cs-Ai ₂ O ₃) sulfided with DMSO
Temperature	599.9 C
Other Conditions	var. sulfided supported nickel catalysts; dehydrogenation rate; activation energy; effect of adding sulfur; activity variation as a function of time on stream; effect of varying the hydrogen/hydrocarbon feed ratio
Subject Studied	Product distribution
	Mechanism
	Thermodynamic data
Ref. 1	5855614 ; Original Document ; Journal; Resasco, Daniel E.; Marcus, Bonnie K.; Huang, Chen S.; Durante, Vincent A.; JCTLA5; Journal of Catalysis; English; 146; 1; 1994; 40 - 55; DOI: 10.1016/0021-9517(94)90006-X; ISSN: 0021-9517.

Reaction Details 16 of 21 (Beilstein(2008/02):Reactions:Q02 hit 41, RX.ID [208871](#))

Reaction Classification	Chemical behaviour
Reagent	H ₂
Catalyst	Pt/SiO ₂
Temperature	399.9 C
Pressure	760 Torr
Other Conditions	E _a ; other catalysts Pt/K, Pt/Sn, and Pt/Sn/K on SiO ₂ ; var. temp.
Subject Studied	Thermodynamic data
Ref. 1	6005293 ; Original Document ; Journal; Cortright, R. D.; Dumesic, J. A.; JCTLA5; Journal of Catalysis; English; 157; 2; 1995; 576 - 583; DOI: 10.1006/jcat.1995.1322; ISSN: 0021-9517.

Reaction Details 17 of 21 (Beilstein(2008/02):Reactions:Q02 hit 41, RX.ID [208871](#))

Reaction Classification	Chemical behaviour
Reagent	Cr ₂ O ₃ , La ₂ (CO ₃) ₃

Temperature	240 C
Pressure	1125.09 Torr
Other Conditions	var. amount of Cr ₂ O ₃
Subject Studied	Product distribution
Ref. 1	6091929;Original Document ; Journal; Hoang, Manh; Mathews, Joseph F.; Pratt, Kerry C.; JCTLA5; Journal of Catalysis; English; 171; 1; 1997; 320 - 324; DOI: 10.1006/jcat.1997.1799; ISSN: 0021-9517.

Reaction Details 18 of 21 (Beilstein(2008/02):Reactions:Q02 hit 41, RX.ID [208871](#))

Reaction Classification	Chemical behaviour
Reagent	oxygen, nickel oxide/ThO ₂
Temperature	300 - 450 C
Other Conditions	further catalysts and supports
Subject Studied	Product distribution
Ref. 1	6099572;Original Document ; Journal; Moriceau, P.; Grzybowska, B.; Barbaux, Y.; PJCHDQ; Polish Journal of Chemistry; English; 72; 5; 1998; 910 - 915; ISSN: 0137-5083.

Reaction Details 19 of 21 (Beilstein(2008/02):Reactions:Q02 hit 41, RX.ID [208871](#))

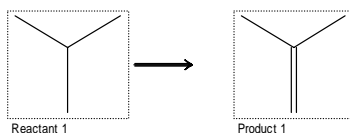
Reaction Classification	Chemical behaviour
Reagent	V2O5*γ-Al2O3
Time	0.5 h
Temperature	590 C
Subject Studied	Product distribution
Prototype Reaction	Further Variations:
	Reagents
Ref. 1	6371998;Original Document ; Journal; Ma, H.-C.; Wang, Z.-L.; Zhu, W.-C.; Jing, S.-B.; Ji, D.-H.; Wang, G.-J.; PJCHDQ; Polish Journal of Chemistry; English; 76; 12; 2002; 1733 - 1738; ISSN: 0137-5083.

Reaction Details 20 of 21 (Beilstein(2008/02):Reactions:Q02 hit 41, RX.ID [208871](#))

Reaction Classification	Chemical behaviour
Catalyst	V ₂ O ₅ /γ-Al ₂ O ₃
Temperature	600 C
Subject Studied	Product distribution
Prototype Reaction	Further Variations:
	Temperatures
Ref. 1	6409820 ; Original Document ; Journal; Ma, H.-C.; Fu, Y.-H.; Li, Y.; Wang, Z.-L.; Zhu, W.-C.; Wang, G.-J.; PJCHDQ; Polish Journal of Chemistry; English; 77; 7; 2003; 903 - 908; ISSN: 0137-5083.

Reaction Details 21 of 21 (Beilstein(2008/02):Reactions:Q02 hit 41, RX.ID [208871](#))

Reaction Classification	Preparation
Product BRN	773645 2-methylpropene
Yield	4 percent Spectr.
Reagent	NaBAr ^F 4
	PhINTs
Catalyst	(copper-[2.1.1]-(2,6)-pyridinophane)Cu(OTf) ₂
Solvent	CH ₂ Cl ₂
Temperature	20 C
Ref. 1	6448043 ; Original Document ; Journal; Vedernikov, Andrei N.; Caulton, Kenneth G.; CHCOFS; Chemical Communications (Cambridge, United Kingdom); English; 2; 2004; 162 - 163; DOI: 10.1039/b309519c; ISSN: 1359-7345.



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Reaction (Beilstein(2008/02):Reactions:Q02 hit 44, RX.ID [208890](#))

Reaction ID	208890
Reactant BRN	1730722 neopentane-d ₀
Product BRN	773645 2-methylpropene
No. of Reaction Details	2
Find similar reactions	click here

Field Availability List (Beilstein(2008/02):Reactions:Q02 hit 44, RX.ID [208890](#))

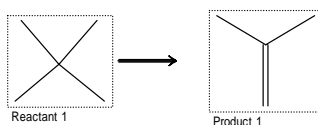
Code	Field Name	Occ.
RX	Reaction Details	2

Reaction Details 1 of 2 (Beilstein(2008/02):Reactions:Q02 hit 44, RX.ID [208890](#))

Reaction Classification	Preparation
Temperature	575 C
Pressure	400 - 600 Torr
Ref. 1	1388908;Original Document ; Journal; Frey; Hepp; IECHAD; Industrial and Engineering Chemistry; 25; 1943; 444; ISSN: 0019-7866.

Reaction Details 2 of 2 (Beilstein(2008/02):Reactions:Q02 hit 44, RX.ID [208890](#))

Reaction Classification	Chemical behaviour
Temperature	1140 - 1300 C
Pressure	1520 - 2280 Torr
Other Conditions	Irradiation
Subject Studied	Rate constant
Ref. 1	5787605;Original Document ; Journal; Bernfeld, Diane; Skinner, Gordon B.; JPCHAX; Journal of Physical Chemistry; English; 87; 19; 1983; 3732 - 3735; DOI: 10.1021/j100242a032; ISSN: 0022-3654.



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Reaction (Beilstein(2008/02):Reactions:Q02 hit 45, RX.ID [208935](#))

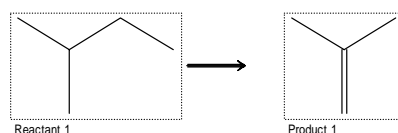
Reaction ID	208935
Reactant BRN	1730723 Isopentane
Product BRN	773645 2-methylpropene
No. of Reaction Details	1
Find similar reactions	click here

Field Availability List (Beilstein(2008/02):Reactions:Q02 hit 45, RX.ID [208935](#))

Code	Field Name	Occ.
RX	Reaction Details	1

Reaction Details (Beilstein(2008/02):Reactions:Q02 hit 45, RX.ID [208935](#))

Reaction Classification	Preparation
Reagent	platinum
Other Conditions	bei der langsamen Verbrennung
Ref. 1	1114230;Original Document ; Journal; v.Stepski; MOCMB7; Monatshefte fuer Chemie; 23; 1902; 801; ISSN: 0026-9247.



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Reaction (Beilstein(2008/02):Reactions:Q02 hit 48, RX.ID [210197](#))

Reaction ID	210197
Reactant BRN	1730872 2-chloro-2-methylpropane
Product BRN	773645 2-methylpropene
No. of Reaction Details	14
Find similar reactions	click here

Field Availability List (Beilstein(2008/02):Reactions:Q02 hit 48, RX.ID [210197](#))

Code	Field Name	Occ.
RX	Reaction Details	14

Reaction Details 1 of 14 (Beilstein(2008/02):Reactions:Q02 hit 48, RX.ID [210197](#))

Reaction Classification	Preparation
Reagent	ThO ₂
Temperature	160 - 200 C
Ref. 1	1335781;Original Document ; Journal; Senderens; COREAF; Comptes Rendus Hebdomadaires des Seances de l'Academie des Sciences; 200; 1935; 615; ISSN: 0001-4036.

Reaction Details 2 of 14 (Beilstein(2008/02):Reactions:Q02 hit 48, RX.ID [210197](#))

Reaction Classification	Preparation
Reagent	NH ₃
Temperature	65 C
Ref. 1	1253251;Original Document ; Journal; Darzens; COREAF; Comptes Rendus Hebdomadaires des Seances de l'Academie des Sciences; 208; 1939; 1503; ISSN: 0001-4036.

Reaction Details 3 of 14 (Beilstein(2008/02):Reactions:Q02 hit 48, RX.ID [210197](#))

Reaction Classification	Preparation
Reagent	p-nitrophenol sodium
	<i>tert</i> -butyl alcohol
Temperature	110 C
Ref. 1	1291834;Original Document ; Journal; Spiegel; Kaufmann; CHBEAM; Chemische Berichte; 39; 1906; 2640; ISSN: 0009-2940.

Reaction Details 4 of 14 (Beilstein(2008/02):Reactions:Q02 hit 48, RX.ID [210197](#))

Reaction Classification	Preparation
Reagent	quicklime
Ref. 1	1291522;Original Document ; Journal; Nef; JLACBF; Justus Liebig's Annalen der Chemie; 318; 1901; 20; ISSN: 0075-4617.

Reaction Details 5 of 14 (Beilstein(2008/02):Reactions:Q02 hit 48, RX.ID [210197](#))

Reaction Classification	Chemical behaviour
Other Conditions	in der Waerme
Ref. 1	1335854;Original Document ; Journal; Hughes; JCSOA9; Journal of the Chemical Society; 1935; 257; ISSN: 0368-1769.
Ref. 2	1335863;Original Document ; Journal; Woodburn; Whitmore; JACSAT; Journal of the American Chemical Society; 56; 1934; 1394; DOI: 10.1021/ja01321a055; ISSN: 0002-7863.

Reaction Details 6 of 14 (Beilstein(2008/02):Reactions:Q02 hit 48, RX.ID [210197](#))

Reaction Classification	Chemical behaviour
Reagent	DO ⁻ (D2O)
Solvent	gas
Other Conditions	reaction efficiency
Subject Studied	Rate constant
Ref. 1	5517828;Original Document ; Journal; DePuy, Charles H.; Gronert, Scott; Mullin, Amy; Bierbaum, Veronica M.; JACSAT; Journal of the American Chemical Society; English; 112; 24; 1990; 8650 - 8655; DOI: 10.1021/ja00180a003; ISSN: 0002-7863.

Reaction Details 7 of 14 (Beilstein(2008/02):Reactions:Q02 hit 48, RX.ID [210197](#))

Reaction Classification	Chemical behaviour
Reagent	CF ₃ CH ₂ O ⁻
Solvent	gas
Other	reaction efficiency

Conditions	
Subject Studied	Rate constant
Ref. 1	5517828;Original Document ; Journal; DePuy, Charles H.; Gronert, Scott; Mullin, Amy; Bierbaum, Veronica M.; JACSAT; Journal of the American Chemical Society; English; 112; 24; 1990; 8650 - 8655; DOI: 10.1021/ja00180a003; ISSN: 0002-7863.

Reaction Details 8 of 14 (Beilstein(2008/02):Reactions:Q02 hit 48, RX.ID [210197](#))

Reaction Classification	Chemical behaviour
Reagent	CF ₃ CF ₂ CH ₂ O ⁻
Solvent	gas
Other Conditions	reaction efficiency
Subject Studied	Rate constant
Ref. 1	5517828;Original Document ; Journal; DePuy, Charles H.; Gronert, Scott; Mullin, Amy; Bierbaum, Veronica M.; JACSAT; Journal of the American Chemical Society; English; 112; 24; 1990; 8650 - 8655; DOI: 10.1021/ja00180a003; ISSN: 0002-7863.

Reaction Details 9 of 14 (Beilstein(2008/02):Reactions:Q02 hit 48, RX.ID [210197](#))

Reaction Classification	Chemical behaviour
Reagent	LiBi ₃ Cl ₂ O ₄
Temperature	200 C
Other Conditions	other t-butyl halide; var. alkali and alkaline earth cation containing bismuth chloride oxides and var. metal chloride oxides; var. temps.
Subject Studied	Product distribution
Ref. 1	5750884;Original Document ; Journal; Ueda, Wataru; Yamazaki, Masato; Morikawa, Yutaka; BCSJA8; Bulletin of the Chemical Society of Japan; English; 66; 1; 1993; 347 - 349; DOI: 10.1246/bcsj.66.347; ISSN: 0009-2673.

Reaction Details 10 of 14 (Beilstein(2008/02):Reactions:Q02 hit 48, RX.ID [210197](#))

Reaction Classification	Chemical behaviour
Solvent	gas

Temperature	466.9 - 596.9 C
Pressure	85 - 310 Torr
Other Conditions	ΔE
Subject Studied	Kinetics
	Thermodynamic data
Ref. 1	5788209;Original Document ; Journal; Lifshitz, A.; Bar-Nun, A.; Burcat, A.; Ofir, A.; Levine, R. D.; JPCHAX; Journal of Physical Chemistry; English; 86; 5; 1982; 791 - 798; ISSN: 0022-3654.

Reaction Details 11 of 14 (Beilstein(2008/02):Reactions:Q02 hit 48, RX.ID [210197](#))

Reaction Classification	Chemical behaviour
Catalyst	NaCl powder
Temperature	100 C
Pressure	99.8 Torr
Other Conditions	the absence of the effect of intermediates and products on reproducibility of the reaction
Ref. 1	5834990;Original Document ; Journal; Ueda, W.; Hiraiwa, J.; Yoshida, N.; Kishimoto, S.; BBPCAX; Berichte der Bunsen-Gesellschaft; English; 90; 1986; 353 - 356; ISSN: 0940-483X.

Reaction Details 12 of 14 (Beilstein(2008/02):Reactions:Q02 hit 48, RX.ID [210197](#))

Reaction Classification	Chemical behaviour
Catalyst	KBr, treated with Br ₂ or Cl ₂ vapor
Temperature	100 C
Pressure	90 Torr
Other Conditions	other temperatures, pressures; activation energy, heat of adsorption
Subject Studied	Thermodynamic data
	Kinetics
	Mechanism
Ref. 1	5835064;Original Document ; Journal; Yoshida; N.; Akebe; O.; Kishimoto; S.; BBPCAX; Berichte der Bunsen-Gesellschaft; English; 90; 1985; 742 - 747; ISSN:

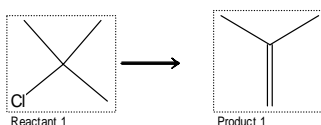
	0940-483X.
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Reaction Details 13 of 14 (Beilstein(2008/02):Reactions:Q02 hit 48, RX.ID [210197](#))

Reaction Classification	Chemical behaviour
Reagent	DMSO-d6
Temperature	120 C
Other Conditions	other solvents
Subject Studied	Rate constant
	Kinetics
Ref. 1	5895101 ; Original Document ; Journal; Mitsuhashi, Tsutomu; Hirota, Hiroshi; Yamamoto, Gaku; BCSJA8; Bulletin of the Chemical Society of Japan; English; 67; 3; 1994; 824 - 830; DOI: 10.1246/bcsj.67.824; ISSN: 0009-2673.

Reaction Details 14 of 14 (Beilstein(2008/02):Reactions:Q02 hit 48, RX.ID [210197](#))

Reaction Classification	Chemical behaviour
Reagent	ClO ⁽¹⁻⁾
Temperature	30.85 C
Pressure	0.5 Torr
Subject Studied	Kinetics
Ref. 1	6562842 ; Original Document ; Journal; Villano, Stephanie M.; Kato, Shuji; Bierbaum, Veronica M.; JACSAT; Journal of the American Chemical Society; English; 128; 3; 2006; 736 - 737; DOI: 10.1021/ja057491d; ISSN: 0002-7863.



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Reaction (Beilstein(2008/02):Reactions:Q02 hit 66, RX.ID [212900](#))

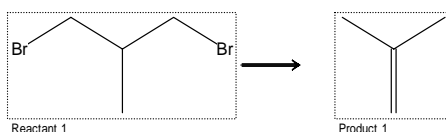
Reaction ID	212900
Reactant BRN	1731423 1,3-dibromo-2-methylpropane
Product BRN	773645 2-methylpropene
No. of Reaction Details	1
Find similar reactions	click here

Field Availability List (Beilstein(2008/02):Reactions:Q02 hit 66, RX.ID [212900](#))

Code	Field Name	Occ.
RX	Reaction Details	1

Reaction Details (Beilstein(2008/02):Reactions:Q02 hit 66, RX.ID [212900](#))

Reaction Classification	Preparation
Reagent	sodium iodide
	acetamide
Temperature	160 C
Ref. 1	1731402;Original Document ; Journal; Schubert; Leahy; JACSAT; Journal of the American Chemical Society; 79; 1957; 381,384; DOI: 10.1021/ja01559a039; ISSN: 0002-7863.



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Reaction (Beilstein(2008/02):Reactions:Q02 hit 67, RX.ID [213726](#))

Reaction ID	213726
Reactant BRN	1731810 2-methyl-2-isopropoxypropane
Product BRN	635639 isopropanol alcohol
	773645 2-methylpropene
No. of Reaction Details	1

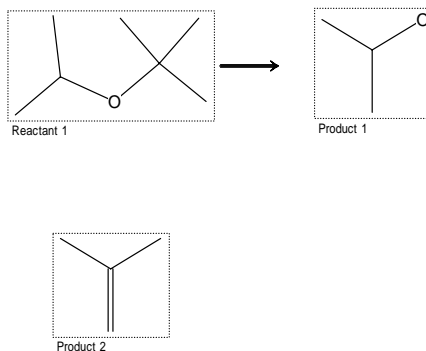
Find similar reactions	click here
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Field Availability List (Beilstein(2008/02):Reactions:Q02 hit 67, RX.ID [213726](#))

Code	Field Name	Occ.
RX	Reaction Details	1

Reaction Details (Beilstein(2008/02):Reactions:Q02 hit 67, RX.ID [213726](#))

Reaction Classification	Chemical behaviour
Other Conditions	Destillieren in einer Apparatur aus rostfreiem Stahl zersetzt
Ref. 1	1358380;Original Document ; Journal; Olson et al.; JACSAT; Journal of the American Chemical Society; 69; 1947; 2453; ISSN: 0002-7863.



Reaction (Beilstein(2008/02):Reactions:Q02 hit 108, RX.ID [534120](#))

Reaction ID	534120
Reactant BRN	3593646 sodium ethanolate
	3686686 isobutyl-dimethyl-sulfonium; iodide
Product BRN	773645 2-methylpropene
No. of Reaction Details	1
Find similar reactions	click here

Field Availability List (Beilstein(2008/02):Reactions:Q02 hit 108, RX.ID [534120](#))

Code	Field Name	Occ.
RX	Reaction Details	1

Reaction Details (Beilstein(2008/02):Reactions:Q02 hit 108, RX.ID [534120](#))

Reaction Classification	Chemical behaviour
Temperature	64 C
Subject Studied	Kinetics
Ref. 1	1563614;Original Document ; Journal; Hughes; Ingold; Maw; JCSOA9; Journal of the Chemical Society; 1948; 2072,2075; DOI: 10.1039/jr9480002072; ISSN: 0368-1769.

