

**Reaction (Beilstein(2008/01):Reactions:Q02 hit 1, RX.ID [299358](#))**

Reaction ID	<a href="#">299358</a>
Reactant BRN	<a href="#">2002649</a> 1,3,5-trimethyl-2,4,6-trinitro-benzene
Product BRN	<a href="#">3248668</a> 2,4,6-trimethyl-benzene-1,3,5-triyltriamine
No. of Reaction Details	5
Find similar reactions	<a href="#">click here</a>

**Field Availability List (Beilstein(2008/01):Reactions:Q02 hit 1, RX.ID [299358](#))**

Code	Field Name	Occ.
RX	Reaction Details	5

**Reaction Details 1 of 5 (Beilstein(2008/01):Reactions:Q02 hit 1, RX.ID [299358](#))**

Reaction Classification	Preparation
Reagent	Raney nickel
	ethanol
Pressure	58840.6 Torr
Other Conditions	Hydrogenation
Note 1	Handbook
Ref. 1	<a href="#">2257163</a> ; <a href="#">Original Document</a> ; Journal; Adams; Englund; JACSAT; J. Am. Chem. Soc.; 72; 1950; 135,136.

**Reaction Details 2 of 5 (Beilstein(2008/01):Reactions:Q02 hit 1, RX.ID [299358](#))**

Reaction Classification	Preparation
Reagent	tin
	hydrochloric acid
Note 1	Handbook
Ref. 1	<a href="#">692270</a> ; <a href="#">Original Document</a> ; Journal; Morgan; Davies; JCSAT; J. Chem. Soc.

123; 1923; 232.
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### Reaction Details 3 of 5 (Beilstein(2008/01):Reactions:Q02 hit 1, RX.ID [299358](#))

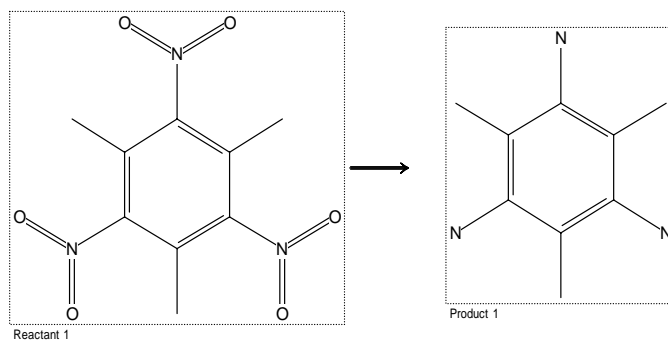
Reaction Classification	Preparation
Reagent	tin, conc. hydrochloric acid
Ref. 1	<a href="#">5913334;Original Document</a> ; Journal; Harada, Yukimasa; Matsunaga, Yoshio; BCSJA8; Bull. Chem. Soc. Jpn.; EN; 61; 8; 1988; 2739-2742.

### Reaction Details 4 of 5 (Beilstein(2008/01):Reactions:Q02 hit 1, RX.ID [299358](#))

Reaction Classification	Preparation
Yield	80 percent (BRN=3248668)
Reagent	NaBH <sub>4</sub> , Cu(OAc) <sub>2</sub>
Solvent	aq. ethanol
Ref. 1	<a href="#">5996723;Original Document</a> ; Journal; Angelis, Stefania de; Batsanov, Andre; Norman, Timothy J.; Parker, David; Senanayake, Kanthi; Vepsalainen, Jouko; JCCCAT; J. Chem. Soc. Chem. Commun.; EN; 22; 1995; 2361-2364.

### Reaction Details 5 of 5 (Beilstein(2008/01):Reactions:Q02 hit 1, RX.ID [299358](#))

Reaction Classification	Preparation
Yield	99 percent (BRN=3248668)
Reagent	H <sub>2</sub>
Catalyst	Pt on carbon
Solvent	ethanol
Time	3 day(s)
Temperature	20 C
Pressure	2068.59 Torr
Reaction Type	Hydrogenation
Ref. 1	<a href="#">6148471;Original Document</a> ; Journal; Parker, David; Senanayake, Kanthi; Vepsalainen, Jouko; Williams, Stefania; Batsanov, Andre; Howard, Judith A. K.



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### Reaction (Beilstein(2008/01):Reactions:Q02 hit 2, RX.ID [2052002](#))

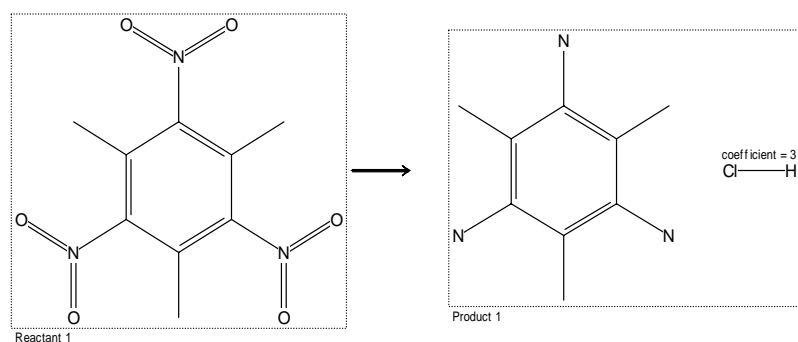
Reaction ID	<a href="#">2052002</a>
Reactant BRN	<a href="#">2002649</a> 1,3,5-trimethyl-2,4,6-trinitro-benzene
Product BRN	<a href="#">6240455</a> 2,4,6-Trimethyl-1,3,5-benzotriamin-trihydrochlorid
No. of Reaction Details	1
Find similar reactions	<a href="#">click here</a>

### Field Availability List (Beilstein(2008/01):Reactions:Q02 hit 2, RX.ID [2052002](#))

Code	Field Name	Occ.
RX	Reaction Details	1

## Reaction Details (Beilstein(2008/01):Reactions:Q02 hit 2, RX.ID [2052002](#))

Reaction Classification	Preparation
Yield	56 percent (BRN=6240455)
Reagent	glac. CH <sub>3</sub> COOH, aq. HCl, Sn, HCl
Other Conditions	Heating
Ref. 1	<a href="#">5768981;Original Document</a> ; Journal; Risch, Nikolaus; CHBEAM; Chem. Ber.; GE; 118; 12; 1985; 4849-4856.



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## Reaction (Beilstein(2008/01):Reactions:Q02 hit 5, RX.ID [8119909](#))

Reaction ID	<a href="#">8119909</a>
Reactant	eso-trinitro-mesitylene
Product BRN	<a href="#">3248668</a> 2,4,6-trimethyl-benzene-1,3,5-triyltriamine
No. of Reaction Details	1

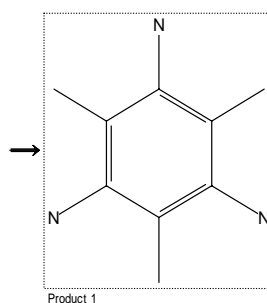
Find similar reactions	not available
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**Field Availability List (Beilstein(2008/01):Reactions:Q02 hit 5, RX.ID [8119909](#))**

Code	Field Name	Occ.
RX	Reaction Details	1

**Reaction Details (Beilstein(2008/01):Reactions:Q02 hit 5, RX.ID [8119909](#))**

Reaction Classification	Preparation (half reaction)
Reagent	tin
	hydrochloric acid
	acetic acid
Note 1	Handbook
Ref. 1	<a href="#">2226753;Original Document</a> ; Journal; Weidell; Wenzel; MOCMB7; Monatsh. Chem.; 19; 1898; 237.



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### Reaction (Beilstein(2008/01):Reactions:Q03 hit 1, RX.ID [132383](#))

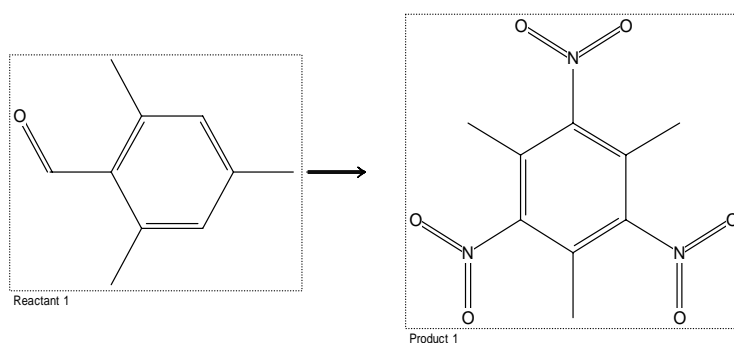
Reaction ID	<a href="#">132383</a>
Reactant BRN	<a href="#">1364114</a> 2,4,6-trimethyl-benzaldehyde
Product BRN	<a href="#">2002649</a> 1,3,5-trimethyl-2,4,6-trinitro-benzene
No. of Reaction Details	1
Find similar reactions	<a href="#">click here</a>

### Field Availability List (Beilstein(2008/01):Reactions:Q03 hit 1, RX.ID [132383](#))

Code	Field Name	Occ.
RX	Reaction Details	1

### Reaction Details (Beilstein(2008/01):Reactions:Q03 hit 1, RX.ID [132383](#))

Reaction Classification	Preparation
Reagent	concentrated H <sub>2</sub> SO <sub>4</sub>
	fuming nitric acid
Note 1	Handbook
Ref. 1	<a href="#">1702171</a> ; <a href="#">Original Document</a> ; Journal; Hinkel; Ayling; Morgan; JCSOA9; J. Chem. Soc.; 1931; 1170.



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### Reaction (Beilstein(2008/01):Reactions:Q03 hit 3, RX.ID [826148](#))

Reaction ID	<a href="#">826148</a>
Reactant BRN	<a href="#">906806</a> 1,3,5-trimethyl-benzene
Product BRN	<a href="#">2002649</a> 1,3,5-trimethyl-2,4,6-trinitro-benzene
No. of Reaction Details	6
Find similar reactions	<a href="#">click here</a>

**Field Availability List (Beilstein(2008/01):Reactions:Q03 hit 3, RX.ID [826148](#))**

Code	Field Name	Occ.
RX	Reaction Details	6

**Reaction Details 1 of 6 (Beilstein(2008/01):Reactions:Q03 hit 3, RX.ID [826148](#))**

Reaction Classification	Preparation
Reagent	HNO <sub>3</sub> +H <sub>2</sub> SO <sub>4</sub>
Note 1	Handbook
Ref. 1	<a href="#">1666178;Original Document</a> ; Journal; Fittig; JLACBF; Justus Liebigs Ann. Chem.; 141; 1867; 134.
Ref. 2	<a href="#">1666179;Original Document</a> ; Journal; Hofmann,A. W.; JLACBF; Justus Liebigs Ann. Chem.; 71; 1849; 129.
Ref. 3	<a href="#">2151248;Original Document</a> ; Journal; Cahours; ANCPAC; Ann.Chim.(Paris); <3> 25; 1849; 6, 11; JLACBF; Justus Liebigs Ann. Chem.; 69; 1849; 230, 232.

**Reaction Details 2 of 6 (Beilstein(2008/01):Reactions:Q03 hit 3, RX.ID [826148](#))**

Reaction Classification	Preparation
Reagent	sulfuric acid
Other Conditions	man giesst die Loesung in Salpetersaeure
Note 1	Handbook
Ref. 1	<a href="#">1514124;Original Document</a> ; Journal; Blanksma; RTCPA3; Recl. Trav. Chim. Pays-Bas; 21; 1902; 325.

**Reaction Details 3 of 6 (Beilstein(2008/01):Reactions:Q03 hit 3, RX.ID [826148](#))**

Reaction Classification	Chemical behaviour
Yield	95 percent (BRN=2002649)
Reagent	NO <sub>2</sub> , O <sub>3</sub> , MeSO <sub>3</sub> H
Solvent	CH <sub>2</sub> Cl <sub>2</sub>



Temperature	-10 - 0 C
Other Conditions	other arenes
Subject Studied	Product distribution
Ref. 1	<a href="#">5579476;Original Document</a> ; Journal; Suzuki, Hitomi; Murashima, Takashi; Shimizu, Kazuhiro; Tsukamoto, Kenkichi; JCCCAT; J. Chem. Soc. Chem. Commun.; EN; 15; 1991; 1049-1050.

#### Reaction Details 4 of 6 (Beilstein(2008/01):Reactions:Q03 hit 3, RX.ID [826148](#))

Reaction Classification	Preparation
Yield	95 percent (BRN=2002649)
Reagent	MeSO <sub>3</sub> H, NO <sub>2</sub> , O <sub>3</sub>
Solvent	CH <sub>2</sub> Cl <sub>2</sub>
Temperature	-10 - 0 C
Ref. 1	<a href="#">5579476;Original Document</a> ; Journal; Suzuki, Hitomi; Murashima, Takashi; Shimizu, Kazuhiro; Tsukamoto, Kenkichi; JCCCAT; J. Chem. Soc. Chem. Commun.; EN; 15; 1991; 1049-1050.

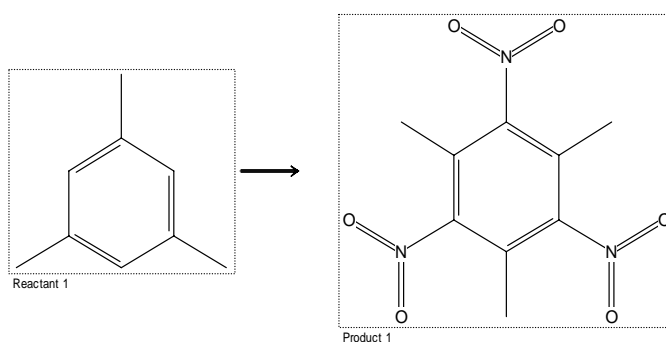
#### Reaction Details 5 of 6 (Beilstein(2008/01):Reactions:Q03 hit 3, RX.ID [826148](#))

Reaction Classification	Preparation
Yield	97 percent (BRN=2002649)
Reagent	conc. H <sub>2</sub> SO <sub>4</sub> , fuming nitric acid
Other Conditions	8-12 deg C, r.t., 30 min
Ref. 1	<a href="#">5768981;Original Document</a> ; Journal; Risch, Nikolaus; CHBEAM; Chem. Ber.; GE; 118; 12; 1985; 4849-4856.

#### Reaction Details 6 of 6 (Beilstein(2008/01):Reactions:Q03 hit 3, RX.ID [826148](#))

Reaction Classification	Preparation
Yield	92 percent (BRN=2002649)
Reagent	90percent HNO <sub>3</sub> , 94percent H <sub>2</sub> SO <sub>4</sub>

Time	1 hour(s)
Temperature	75 C
Ref. 1	<a href="#">6044209;Original Document</a> ; Journal; Adamson, George A.; Rees, Charles W.; JCPRB4; J. Chem. Soc. Perkin Trans. 1; EN; 13; 1996; 1535-1544.



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### Reaction (Beilstein(2008/01):Reactions:Q03 hit 4, RX.ID [947055](#))

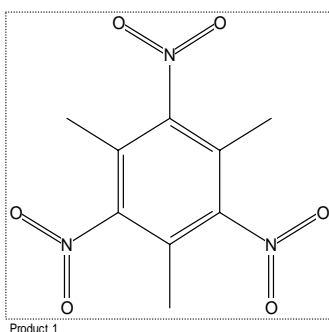
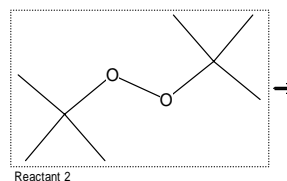
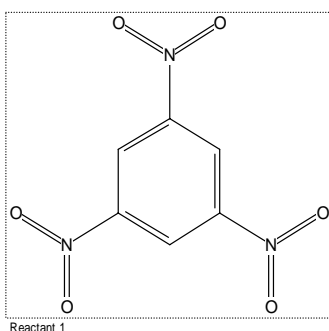
Reaction ID	<a href="#">947055</a>
Reactant BRN	<a href="#">1252144</a> 1,3,5-trinitro-benzene
	<a href="#">1735581</a> di- <i>tert</i> -butyl peroxide
Product BRN	<a href="#">2002649</a> 1,3,5-trimethyl-2,4,6-trinitro-benzene
No. of Reaction Details	1
Find similar reactions	<a href="#">click here</a>

### Field Availability List (Beilstein(2008/01):Reactions:Q03 hit 4, RX.ID [947055](#))

Code	Field Name	Occ.
RX	Reaction Details	1

### Reaction Details (Beilstein(2008/01):Reactions:Q03 hit 4, RX.ID [947055](#))

Reaction Classification	Preparation
Solvent	chlorobenzene
Other Conditions	Heating
Ref. 1	<a href="#">159234;Original Document</a> ; Journal; Jackson,R.A.; Waters,W.A.; JCSOA9; J. Chem. Soc.; EN; 1960; 1653-1657.



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### Reaction (Beilstein(2008/01):Reactions:Q03 hit 11, RX.ID [7443420](#))

Reaction ID	<a href="#">7443420</a>
Reactant	mesitylene-sulfonic acid-(2)

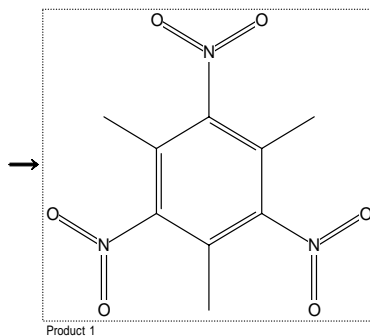
Product	4.6-dinitro-mesitylene-sulfonic acid-(2)
Product BRN	<a href="#">2002649</a> 1,3,5-trimethyl-2,4,6-trinitro-benzene
No. of Reaction Details	1
Find similar reactions	not available

**Field Availability List (Beilstein(2008/01):Reactions:Q03 hit 11, RX.ID [7443420](#))**

Code	Field Name	Occ.
RX	Reaction Details	1

**Reaction Details (Beilstein(2008/01):Reactions:Q03 hit 11, RX.ID [7443420](#))**

Reaction Classification	Preparation (half reaction)
Reagent	HNO <sub>3</sub> +H <sub>2</sub> SO <sub>4</sub>
Temperature	10 - 40 C
Note 1	Handbook
Ref. 1	<a href="#">1683050</a> ; <a href="#">Original Document</a> ; Journal; Gibson; JCSOA9; J. Chem. Soc.; 117; 1920; 950.



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### Reaction (Beilstein(2008/01):Reactions:Q03 hit 9, RX.ID [7443418](#))

Reaction ID	<a href="#">7443418</a>
Reactant	barium salt of/the/ mesitylene-sulfonic acid-(2)
Product	4.6-dinitro-mesitylene-sulfonic acid-(2)
Product BRN	<a href="#">2002649</a> 1,3,5-trimethyl-2,4,6-trinitro-benzene
No. of Reaction Details	1
Find similar reactions	not available

### Field Availability List (Beilstein(2008/01):Reactions:Q03 hit 9, RX.ID [7443418](#))

Code	Field Name	Occ.
RX	Reaction Details	1

### Reaction Details (Beilstein(2008/01):Reactions:Q03 hit 9, RX.ID [7443418](#))

Reaction Classification	Preparation (half reaction)
Reagent	absolute nitric acid
Temperature	15 - 30 C
Note 1	Handbook
Ref. 1	<a href="#">1538264;Original Document</a> ; Journal; de Lange; RTCPA3; Recl. Trav. Chim. Pays-Bas; 45; 1926; 45.

