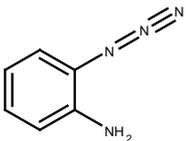
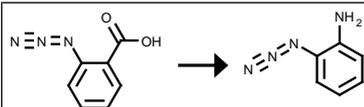
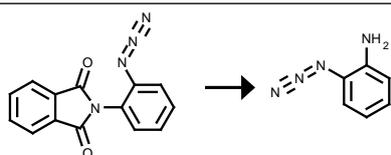


## Query

	Query	Results	Date
1. Query	 <p>Search as: Product, As drawn, No salts, No mixtures</p>	11 reactions	2011-11-23 00h:17m:23s (EST)


 Rx-ID: 14341210 [View in Reaxys](#)

Yield	Conditions & References
19 %	<p>Example Name 28.28.2</p> <p>28.2; 2-Azido-benzoic acid (3.7 g, 22.7 mmol) in dimethylformamide (75 mL) was cooled to -10°C and treated with ethylchloroformate (2.6 g, 24 mmol). After stirring for 1 h at -10°C, NaN<sub>3</sub> (7.28g, 112 mmol) dissolved in H<sub>2</sub>O (50 mL) was added and the mixture allowed to reach ambient temperature. H<sub>2</sub>O (300 ml) was added and the mixture extracted 3 times with ethylacetate. The ethylacetate phases were dried with Na<sub>2</sub>SC<sup>^</sup> and stirred for 96 hrs at ambient temperature. The precipitate that had formed was filtered and chromatographed on SiO<sub>2</sub> with ethylacetate/hexane as eluent to give 304 mg (19percent) of 2-azido-phenylamine. MS (ES<sup>+</sup>): 135 (M+H).</p> <p><b>Stage 1:</b> With chloroformic acid ethyl ester in N,N-dimethyl-formamide, Time= 1h, T= -10 °C  <b>Stage 2:</b> With sodium azide in water, N,N-dimethyl-formamide, T= 20 °C</p> <p><b>Patent:</b> F. HOFFMANN-LA ROCHE AG; WO2008/643; (2008); (A1) English  <a href="#">View in Reaxys</a></p>
	<p>Reaction Steps: 3</p> <p>1: NEt<sub>3</sub> / CH<sub>2</sub>Cl<sub>2</sub> / 1 h / 0 °C</p> <p>2: 113 g / NH<sub>3</sub> / CH<sub>2</sub>Cl<sub>2</sub> / -35 °C</p> <p>3: 52 percent / aq. NaOCl / 20 °C</p> <p><b>With</b> sodium hypochlorite, ammonia, triethylamine in dichloromethane, 3: Hofmann rearrangement</p> <p><b>Hahn, F. Ekkehardt; Langenhahn, Volker; Meier, Nicole; Luegger, Thomas; Fehlhammer, Wolf Peter;</b> Chemistry--A European Journal; <b>vol.</b> 9; nb. 3; (2003); p. 704 - 712  <a href="#">View in Reaxys</a></p>
	<p>Reaction Steps: 3</p> <p>1: Et<sub>3</sub>N / CH<sub>2</sub>Cl<sub>2</sub> / 2 h / 0 °C</p> <p>2: NH<sub>3</sub>(gas) / CH<sub>2</sub>Cl<sub>2</sub> / 10 h</p> <p>3: NaOBr / H<sub>2</sub>O / (1.) 6 h, room temperature; 2.) 30 min, 60 deg C</p> <p><b>With</b> sodium hypobromide, ammonia, triethylamine in dichloromethane, water</p> <p><b>El-Shihi, Taha; Herrmann, Rudolf;</b> Zeitschrift fuer Naturforschung, Teil B: Anorganische Chemie, Organische Chemie; <b>vol.</b> 41; nb. 1; (1986); p. 132 - 133  <a href="#">View in Reaxys</a></p>

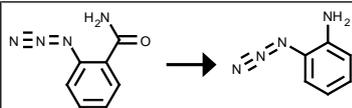

 Rx-ID: 23238350 [View in Reaxys](#)

Yield	Conditions & References
62 %	<p><b>With</b> hydrazine hydrate in methanol, Time= 1.33333h, Inert atmosphere</p> <p><b>Shen, Meihua; Driver, Tom G.;</b> Organic Letters; <b>vol.</b> 10; nb. 15; (2008); p. 3367 - 3370  <a href="#">View in Reaxys</a></p>
25 %	<p>Example Name 3.D</p> <p>D. To a suspension of the of 2-(2-azido-phenyl)-isoindole-1,3-dione (373 mg, 1.4 mmol) in ethanol (10 mL) was added hydrazine (140 µL, 4.24 mmol) followed by stirring for 15 minutes. The reaction mixture was poured into water and was extracted with ethyl acetate (3.x.25 mL). The combined extracts were washed with water and brine and were dried over magnesium sulfate. Filtration and concentration in vacuo gave a residue which was purified via radial chromatography (1 mm plate, 10percent 5ethyl acetate/hexanes to 33percent ethyl acetate/hexanes gradient elution) to give 48 mg (25percent) of 2-azidophenylamine as a solid: <sup>1</sup>H NMR (300 MHz, DMSO-d<sub>6</sub>) δ 6.98 (m, 1H), 6.86 (m, 1H), 6.66-6.55 (m, 2H).</p>

With hydrazine in ethanol, Time= 0.25h

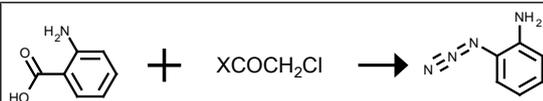
Patent: Darwin Molecular Corporation; US6777432; (2004); (B1) English

[View in Reaxys](#)



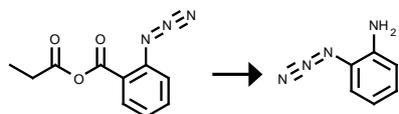
Rx-ID: 1991572 [View in Reaxys](#)

Yield	Conditions & References
52 %	<p>With sodium hypochlorite, T= 20 °C , Hofmann rearrangement</p> <p><b>Hahn, F. Ekkehardt; Langenhahn, Volker; Meier, Nicole; Luegger, Thomas; Fehlhammer, Wolf Peter;</b> Chemistry--A European Journal; <b>vol.</b> 9; nb. 3; (2003); p. 704 - 712</p> <p><a href="#">View in Reaxys</a></p>
	<p>With sodium hypobromide in water, 1.) 6 h, room temperature; 2.) 30 min, 60 deg C, Yield given</p> <p><b>El-Shihi, Taha; Herrmann, Rudolf;</b> Zeitschrift fuer Naturforschung, Teil B: Anorganische Chemie, Organische Chemie; <b>vol.</b> 41; nb. 1; (1986); p. 132 - 133</p> <p><a href="#">View in Reaxys</a></p>



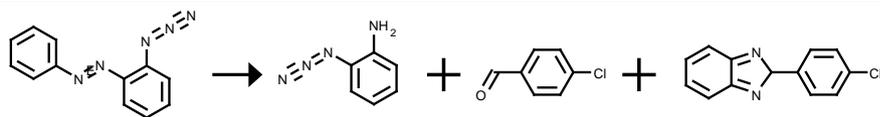
Rx-ID: 14348335 [View in Reaxys](#)

Yield	Conditions & References
	<p>Reaction Steps: 4</p> <p>1.1: NaNO<sub>2</sub>; aq. HCl / 0.5 h / -5 °C</p> <p>1.2: 98 percent / aq. NaN<sub>3</sub></p> <p>2.1: NEt<sub>3</sub> / CH<sub>2</sub>Cl<sub>2</sub> / 1 h / 0 °C</p> <p>3.1: 113 g / NH<sub>3</sub> / CH<sub>2</sub>Cl<sub>2</sub> / -35 °C</p> <p>4.1: 52 percent / aq. NaOCl / 20 °C</p> <p>With hydrogenchloride, sodium hypochlorite, ammonia, triethylamine, sodium nitrite in dichloromethane, 4.1: Hofmann rearrangement</p> <p><b>Hahn, F. Ekkehardt; Langenhahn, Volker; Meier, Nicole; Luegger, Thomas; Fehlhammer, Wolf Peter;</b> Chemistry--A European Journal; <b>vol.</b> 9; nb. 3; (2003); p. 704 - 712</p> <p><a href="#">View in Reaxys</a></p>

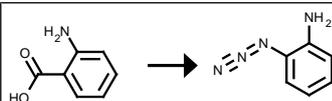


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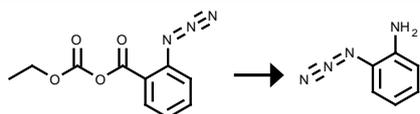
Yield	Conditions & References
	<p>Reaction Steps: 2</p> <p>1: 113 g / NH<sub>3</sub> / CH<sub>2</sub>Cl<sub>2</sub> / -35 °C</p> <p>2: 52 percent / aq. NaOCl / 20 °C</p> <p>With sodium hypochlorite, ammonia in dichloromethane, 2: Hofmann rearrangement</p> <p><b>Hahn, F. Ekkehardt; Langenhahn, Volker; Meier, Nicole; Luegger, Thomas; Fehlhammer, Wolf Peter;</b> Chemistry--A European Journal; <b>vol.</b> 9; nb. 3; (2003); p. 704 - 712</p> <p><a href="#">View in Reaxys</a></p>


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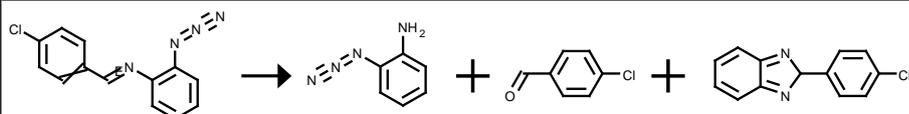
Yield	Conditions & References
44 %	<p><b>With boron trifluoride in benzene, Ambient temperature</b></p> <p><b>Spagnolo, Piero; Zanirato, Paolo</b>; Journal of the Chemical Society, Perkin Transactions 1: Organic and Bio-Organic Chemistry (1972-1999); (1988); p. 2615 - 2620  <a href="#">View in Reaxys</a></p>
	<p><b>With boron trifluoride in benzene, Ambient temperature</b></p> <p><b>Spagnolo, Piero; Zanirato, Paolo</b>; Journal of the Chemical Society, Perkin Transactions 1: Organic and Bio-Organic Chemistry (1972-1999); (1988); p. 2615 - 2620  <a href="#">View in Reaxys</a></p>


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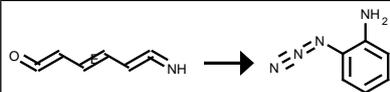
Yield	Conditions & References
	<p>Reaction Steps: 4</p> <p>1: 1) NaNO<sub>2</sub>; 2) NaN<sub>3</sub> / 2) water</p> <p>2: Et<sub>3</sub>N / CH<sub>2</sub>Cl<sub>2</sub> / 2 h / 0 °C</p> <p>3: NH<sub>3</sub>(gas) / CH<sub>2</sub>Cl<sub>2</sub> / 10 h</p> <p>4: NaOBr / H<sub>2</sub>O / 1.) 6 h, room temperature; 2.) 30 min, 60 deg C</p> <p><b>With sodium azide, sodium hypobromide, ammonia, triethylamine, sodium nitrite in dichloromethane, water</b></p> <p><b>El-Shihi, Taha; Herrmann, Rudolf</b>; Zeitschrift fuer Naturforschung, Teil B: Anorganische Chemie, Organische Chemie; vol. 41; nb. 1; (1986); p. 132 - 133  <a href="#">View in Reaxys</a></p>


 Rx-ID: 18888078 [View in Reaxys](#)

Yield	Conditions & References
	<p>Reaction Steps: 2</p> <p>1: NH<sub>3</sub>(gas) / CH<sub>2</sub>Cl<sub>2</sub> / 10 h</p> <p>2: NaOBr / H<sub>2</sub>O / 1.) 6 h, room temperature; 2.) 30 min, 60 deg C</p> <p><b>With sodium hypobromide, ammonia in dichloromethane, water</b></p> <p><b>El-Shihi, Taha; Herrmann, Rudolf</b>; Zeitschrift fuer Naturforschung, Teil B: Anorganische Chemie, Organische Chemie; vol. 41; nb. 1; (1986); p. 132 - 133  <a href="#">View in Reaxys</a></p>

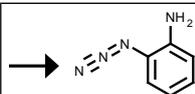

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Yield	Conditions & References
	<p><b>With boron trifluoride in benzene, Ambient temperature</b></p> <p><b>Spagnolo, Piero; Zanirato, Paolo;</b> Journal of the Chemical Society, Perkin Transactions 1: Organic and Bio-Organic Chemistry (1972-1999); (1988); p. 2615 - 2620  <a href="#">View in Reaxys</a></p>



Rx-ID: 4584268 [View in Reaxys](#)

Yield	Conditions & References
	<p><b>With sodium hydroxide, hydrazine hydrate, 1.) MeOH, 30 min, Yield given. Multistep reaction</b></p> <p><b>Tomioka, Hideo; Matsushita, Takeshi; Murata, Shigeru; Koseki, Shiro;</b> Liebigs Annalen; nb. 12; (1996); p. 1971 - 1980  <a href="#">View in Reaxys</a></p>



Rx-ID: 7022986 [View in Reaxys](#)

Yield	Conditions & References
	<p>N-(o-Azidophenyl)-phthalimid, N<sub>2</sub>H<sub>4</sub>*H<sub>2</sub>O/wss.A.</p> <p><b>Smith; Hall;</b> Journal of the American Chemical Society; <b>vol.</b> 84; (1962); p. 480,481  <a href="#">View in Reaxys</a></p>
	<p>N-(2-Azidophenyl)-succinimid, 10percentig.NaOH &lt;Δ&gt;</p> <p><b>Krbecek; Takimoto;</b> Journal of Organic Chemistry; <b>vol.</b> 29; (1964); p. 3630,3631  <a href="#">View in Reaxys</a></p>
	<p>3-Oxamidoanilin</p> <p><b>Patent; Bayer;</b> NL6606456; (1966); Chem.Abstr.; <b>vol.</b> 67; nb. 21620  <a href="#">View in Reaxys</a></p>