

547.36:382.3

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## SYNTHESIS OF TRANS-2-HEXENAL

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**Abstract.** *Presents a laboratory method for obtaining trans-2-hexenal from available starting compounds, in which the main stage is the Wittig reaction between butanal and formylmethylenetriphenylphosphorane. This method has proven to be quite effective: during the synthesis, there are no problems with intermediate compounds and it has a stable yield of the finished product.*

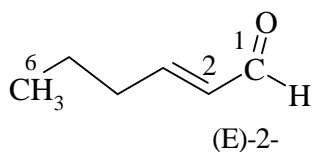
**Keywords:** unsaturated aldehydes, hexenal, stereospecificity, chemical synthesis, fractional distillation.

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C<sub>6</sub>H<sub>10</sub>O.



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= 85

°, d=0,7490 7490

n<sup>20</sup>= 1,4522 [1].

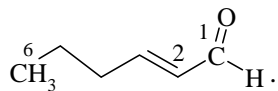
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Eurycotis floridana

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,  $n_D^{20} = 1,4522$  [1].

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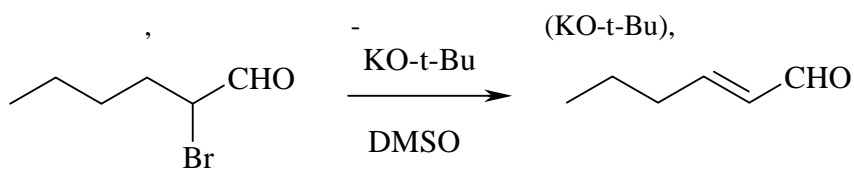
Eurycotis floridana

[2]

[3].

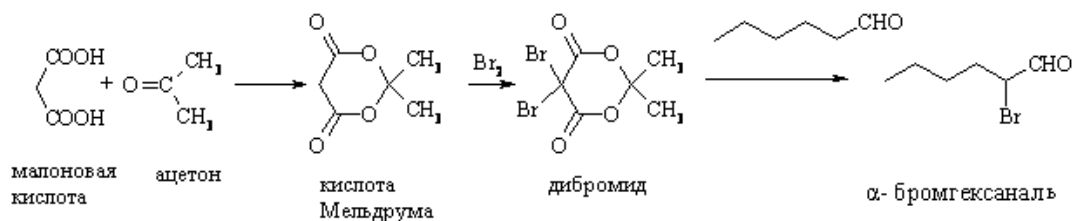
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1.



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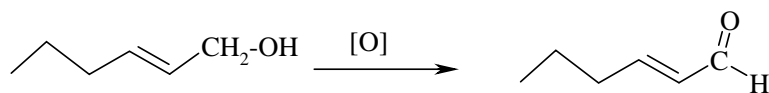
[4]



28 %.

15-20 %.

2.



- DDQ

- 16

- 20 °

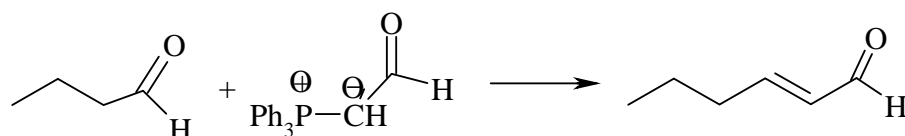
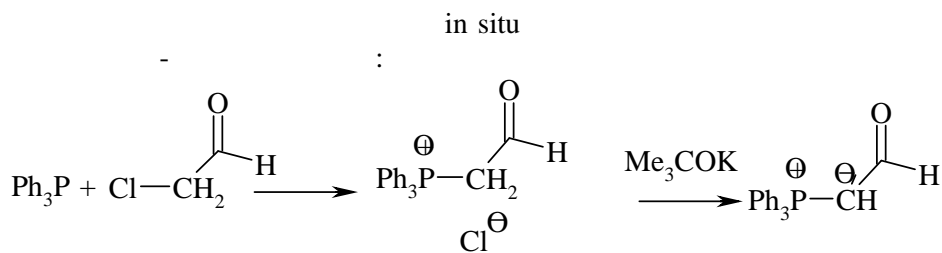
[5];

0,05 / <sup>2</sup>

4,5 [6].

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[7].



300

83–87 ° . 5,7 , (74 % ) .

1. / . . . , 1984. . 192–193.
2. Turnbull M.W., Fashing N.J. Efficacy of the Ventral Abdominal Secretion of the Cockroach *Euryctis floridana* (Blattaria : Blattidae) as a Defense Allomone // *Journal of Insect Behavior*, 2002. V. 15, N 3. . 369–384.
3. . . : . . . , 2019. 39 .
4. . . . . . . . . , 2004. 70 c.
5. Healy A.R., Vinale F., Lorito M., Westwood N. Total Synthesis and Biological Evaluation of the Tetramic Acid Based Natural Product Harzianic Acid and its Stereoisomers // *J. Organic Letters*. 2015. V. 17, N 3. . 692–695.
6. Kashparova V.P., Klushin V.A., Zhukova I.Yu. et al. A Tempo-like nitroxide combined with an alkyl-substituted pyridine: An efficient catalytic system for the selective oxidation of alcohols with iodine // *Tetrahedron Letters*. 2017. V. 58. P. 3517–3521.
7. . . . . . . . . , 2004. 117 c.