



"Technology of Synthesis of Monovinyl Esters, Classification of Production and Its Feasibility"

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Annotation: As a result of the research of various scientists in this article the idea that propargyl alcohol is the cause of the opening of new biological properties expressed. Propargyl part the retaining active center is important in the synthesis of any compounds it is calculated from chemical compounds. Defoliant of synthesized vinyl ethers (mono-Divinyl) the idea is given that the activity is braided.

Keywords: Aminomethylation reaction, Mannich reaction, vinyl ether, butin 2-diol-1,4;3,6-dimethyloctin 4-diol-3,6; two and three-component high-base systems, defoliant property.

Amine derivatives of propargyl alcohol in different areas such as, herbicide in agriculture, as a fungicide, pain of various kinds in medicine it serves as the basis in the production of leave-in drugs. Different research by various scientists on these substances is now propargil the impetus for the opening of New-new biological properties of alcohol it is happening. Another important reaction is the aminomethylation reaction aminoacetylenes, which are formed from insecticidal, antioxidant and widely used as stabilizers for polymerization reaction coming. Currently, the practical significance of the aminomethylation reaction growing. Salvaror and Simons are secondary amines to propargyl alcohol and taking aminospirts with high unum by acting on formaldehyde. They are PH value in the optimal environment by studying the effect of PH on the Mannix reaction They found that 8,4.It can be seen from the Mannix reaction only by opening too many unopened aspects of acetylene alcohol not to mention its important importance in the national economy and agriculture showed. A lot of Uzbek on the amine derivative of Propargil alcohol scientists conducted scientific research, among which Maksumov and his a lot of his disciples ' work can be cited. Maxsumovsynthesized aminomethylation product to high herbicidal activity in agriculture has, with biostimulating properties, is used in many areas. In short, the propargil part is the retaining active center of any important in the synthesis of compounds are considered chemical compounds.

Obtaining vinyl ether of Butine-2-diol-1,4 principle technological scheme

1-Butine-2-bunker for dial-1,4, 2-solvent Bunker, 3-catalyst Bunker, 4-reactor, 5-separator, 6-Filter, 7-extractor, 8-evaporator, 9- rectification column. In the technological process, initially the reactor (4) is constantly mixed solvent (2), catalyst (3) and Butine-2-diol in the standing position-1,4 (1) will be given. When the reaction is completed, the catalyst is sent to the separator (5). Next in the process, it is

filtered (6), extraction (7) is made on diethyl ether. The organic part is sent to vaporization (8) and has not reacted in this.

Butine-2-diol based on Formalin, methylethylketone and acetylene-1,4, Technological process of obtaining catalyst 3,6-dimethyloctin-4-diol-3,6 created; acetylene diols and resorcinine under atmospheric pressure conditions vinylation methods have been developed; butin-2-diol-1,4 and 3,6-dimethyloctin-4-diol-3,6 ni two-component MeON-DMSO and three-component CsF-MeOH-DMSO high-base vinylation with acetylene has been proven in systems; kinetic parameters of the synthesis of Butine-2-diol-1,4 vinyl ether and physical and chemical properties of the resulting acetylene diols and vinyl ethers, electron structure, quantum-chemical properties determined; Processes of synthesis of Butine-2-diol-1,4 and its vinyl ethers modeled and created mathematical equations; Butin-2-diol-1,4 for agriculture based on vinyl ethers Butin-2-diol-1,4 and producing its vinyl ether release technology and product description, butin-2-Dial-1,4 given the material balance of the production of monovinil ether, the technological process of obtaining vinyl ether of Butine-2-diol-1,4 is created.

The scientific significance of the research results is synthesized Butine-2-Dial-1,4; 3,6-dimethyloctin-4-dial-3,6 and resorcinine atmospheric homogenous catalytic in the presence of high-base systems at pressure the fact that vinylation is investigated, the charge in molecules this is explained by the fact that a scientific basis for the distribution and density of electrons is created. Practical significance of the research results from acetylene and formalin butin-2-diol-1,4 and the fact that the technology for obtaining its vinyl ether was created and made it from cotton the fact that it is recommended as an active defoliant is to take vinyl ethers butin-2-diol-1,4 developed technologies. Biologically active based on diols and their vinyl ethers based on the scientific results obtained on the study of the synthesis, application of compounds:

butin-2-diol-1,4 Organization standard for monovinil ether Registered by the agency" uzstandart " (Ts23940504-01:2018). The result is based on local raw material resources which made it possible to produce Butine-2-diol-1,4 monovinil ether; monovinil ether of the created Butine-2-diol-1,4 in farms of cotton leaf introduced into practice (agriculture and water management reference book of the Ministry dated January 18, 2017 No. 03/20-92) JV-AJ 2018 Reference No. 212 of April 12 of the year). The result is the time to lower the leaf of the cotton Reducing the effect on unripe blueberries by 30-40% and yield by 2-3% gave the opportunity to increase to; technology for obtaining ethers of Butine-2-diol-1,4 Introduced into practice at JSC "Elektrokimyo zavod" ("Elektrokimyo zavod" JV-AJ No. 212 of April 12, 2018 reference). The result is the production of vinyl ethers of Butine-2-diol-1,4 gave the opportunity.

Acetylene diols and their vinyl ethers are biologically active compounds are calculated. Therefore, the synthesis of vinyl ethers (mono- and divinil) defoliant activity was studied. Experiments spraying preparations on a cotton plant in a sprayer carried out through. In exceptional cases, Butine-2-diol-1,4 and 0.025% aqueous emulsion of mono - and Divinyl esters of resorcin applied. Spraying preparations on cotton (each drug is 0.5 ha) dry in the air, it was carried out in the amount of 10 kg / ha, and after 8-10 days it was interrupted the percentage of fallen leaves was determined. In this case, the color of the leaves break off without changing and leave the cotton stem dry observed.

Analysis of the results of the study shows that the vinyl ethers used are defoliant having activity, butin-2-diol-1,4 mono - and Divinyl esters; suitable for mono - and Divinyl esters of resorcinine its value is 89; 92; 82 and 86% respectively. So in the studied preparations butin-2-diol-1,4 the vinyl ether of has a relatively high defoliant property (92%) and it it was recommended for widespread use as a cotton defoliant. Besides him The technical condition of Butine-2-diol-1,4 vinyl ether has been developed and Registered with Uzstandart agency. These vinyl ethers As a cotton defoliant in Bukhara, Samakand and Navoi regions the annual economic efficiency of the application is 427 million. brought to som.

Conclusion:

1 Butine-2-diol based on formaldehyde and methylethylketone-1,4 and The main factors affecting the formation of 3,6-dimethyloctin-4-diol-3,6 offered. Butin-2-diol under conditions of pressure of 2

atmospheres-1,4; 3,6-dimethyloctin-4-diol-3,6 and high-base resorcinine with acetylene in the presence of systems, vinylation processes were recommended. 3 two-component MON-DMSO and three in Vinylation conditions use of component CsF-KOH-DMSO high-base systems the main characteristics and the role of CsF in this are indicated. 4 mathematical processing of the value of the results of the experiment and based on the quantum-chemical properties of the compounds used reaction capabilities and reaction centers of molecules analysis made and explained compatibility with the results of the experiment. 5 created Butine-2-Dial-1,4 and cotton its vinyl ethers it has been shown to have high defoliant properties in its plant. 6 Butin-2-diol-1,4 and its production of vinyl ether the technological process is recommended.

List of literature

1. H.S. Tajimukhamedov. Structure and reactivity of organic compounds. Part I. The interaction of atoms in a molecule. T.: 1997y.
2. Berezin B.D., Berezin D.B. Course sovremennoyorganicheskoykhimii. M.: "Visshaya scale", 2003 g. 3. Kuzmenka N.E., Eremin V.V., Popkov V.A. Nachalakhimii. M.: "Examen", 2005 g.
3. R.V. Hoffman. Mechanism ximicheskix reaction. Nem.language.TARC. M.: "Khimiya" 1979 g.
4. O. Maksumova, S. Turobjonov textbook on the technology of organic synthesis products. Tashkent 2010y.
5. Tacimukhamedov X.S., Shakhidoyatov H.M. Structure and reactivity of organic compounds. Part II. Mechanisms of organic reactions. T.: "Abu Ali Ibn Sina". 2001 y.