MAMEDOV, Shamkal; BAGRAMOVA, A.; AVANESYAN, M.A.

Glycol ethers and their derivatives. Part 62: Synthesis of alkoxymethyl benzyl ethers of 2,3-butanediol. Zhur.ob.khim. 33 no.12:3839—3841 D 63.

1. Institut neftekhimicheskikh protsessov AN Azerbaydzhanskoy SSR.

<u> APPROVED FOR RELFASE; 06/23/11: CIA-RDP86-00513R001032000010-6</u>

MAMEDOV, Shamkhal; MAMEDOVA, A.R.; AVANESYAN, M.A.

Glycol ethers and their derivatives. Part 57: Synthesis of alkoxymethyl A-aryloxyethyl ethers. Zhur. ob. khim. 33 no.5:1451-1455 My *63. (MIRA 16:6)

1. Institut neftekhimicheskikh protsessov AN AzSSR. (Ethanol) (Ethers)

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001032000010-6

MAMEDOV, Shamkhal; SHAMILOV, Kh. Kh.; KHYDYROV, D.N.

Glycol ethers and their derivatives. Part 56: 1-Phenyl-1,3-propanediol alkoxymethyl ethers. Zhur. ob. khim. 33 no.5: 1446-1451 My 163. (MIRA 16:6)

1. Institut neftekhimicheskikh protsessov AN AZSAR.
(Propanediol) (Ethers)

<u> APPROVED FOR RELEASE; 06/23/11: CIA-RDP86-00513R001032000010-6</u>

MAMEDOV, Shamkhal; NIZKER, I.L.

Glycol ethers and their derivatives. Part 52: Synthesis of alkoxy derivatives of methyl ethers of 1,2-cyclohexanediol. Zhur.ob.khim. 33 no.3:841-845 Mr '63. (MIRA 16:3)

1. Institut neftekhimicheskikh protsessov AN Azerbaydzhanskoy SSR.

(Cyclohexanediol)
(Ethers)

APPROVED FOR RELEASE; 06/23/11: CIA-RDP86-00513R001032000010-6

MAMEDOV, Shamkhal; DZHAGUPOVA, Ye.G.; AVANESYAN, M.A.

Glycol ethers and their derivatives. Part 51: Synthesis of alkoxy derivatives of methyl ethers of o- and p-methylbenzyl alcohols. Zhur.ob.khim. 33 no.3:836-841 Mr '63. (MIRA 16:3)

1. Institut neftekhimicheskikh protsessov AN Azerbaydzhanskoy SSR.

(Benzyl alcohol)
(Ethers)

MAMEDOV, Shamkhal; GADZHIZADE, F. Glycol ethers and their derivatives. Part 50: Synthesis of alkoxymethyl ethers of 1-chloro-3-alkoxy-2-propanol. Zhur.cb.khim. 33 no.3:831-836 Mr 163. (MIRA 16:3) 1. Institut neftekhimicheskikh protsessov AN Azerbaydzhanskoy SSR. (Propyl alcohol) (Ethers)

MAMEDOV, Shamkhal; KHYDYROV, D.N.

Glycol ethers and their derivatives, Part 49: Synthesis of aromatic -bromo ethers. Zhur.ob.khim. 33 no.2:457-462 F

'63.

1. Institut neftekhimicheskikh protsessov AN AzerSSR.

(Ethers) (Glycol) (Aromatic compounds)

MAMEDOV, Shankhal; NIZKER, 1.L.; ISMATIZADE, I.G.; MAMEDOV, F.A.; MAMEDOV, I.M.

Synthesis and study of Raman spectra of alicyclis/d.-chlore ethers.

Dokl. AN Amerb. SSR 19 no.1123-26 °63. (MINA 16:4)

1. Institut eftekhimicheskikh protsessov AN AzSSR. Predstavleno akademikom AN ArSSR M.A.Dalinym.

(Cyclic compounds—Spectra)

MAMEDOV, Shamkhal; AVANESYAN, M.A.; ALIYEVA, B.M.

Glycol ethers and their derivatives. Part 48: Synthesis of alkoxymethylbenzyl ethers. Zhur.ob.khim. 32 mo.ll:3635-3639 N '62.

1. Institut neftekhimicheskikh protsessov AN Azerbaydzhanskoy SSR.

(Glycols) (Ethers)

MAMEDOV, Shamkhal; AVANESYAN, M.A.

Glycol ethers and their derivatives. Part 47: Synthesis of acetals or aromatic and heterocyclic aldehydes. Zhur.ob.khim. 32 no.9:2834-2838 S '62.

1. Institut neftekhimicheskikh protessov AN / zerbaydzhanskoy SSR. (Acetaldehyde) (Heterocyclic compounds)

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001032000010-6

MAMEDOV, Shamkhal; KHYDYROV, D.N.

Ethers of glycols and their derivatives. Fart 46: Synthesis of alkoxy derivatives of methyl ether of phenylethanol. Zhur.ob. khim. 32 no.5:1427-1432 My '62. (MIRA 15:5)

1. Institut neftekhimicheskikh protsessov AN SSSR. (Ethanol) (Ethers)

MAMEDOV, Shamkhal; AVANESYAN, M.A.

Glycol ethers and their derivatives. Part 45; Synthesis of alkoxy derivatives of ethylene glycol methyl ethers. Zhur.ob.-khim. 32 no.3:813-817 Mr '62. (MIRA 15:3)

1. Institut neftekhimicheskikh protsessov AN AzerbSSR. (Ethanediol)

MAMEDOV, Shamkhal; NIZKER, I. Glycol ethers and their derivatives. Part 44# Alicyclic Y-chloro ethers. Zhur.ob.khim. 32 no.3:808-813 Mr 162. (MIRA 15:3) 1. Institut neftekhimicheskikh protsessov AN AzerbSSR. (Glycols)

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001032000010-6

MAMEDOV, Shremkhal; AGAYEV, A.S.

Glycol ethers and their derivatives. Part 43: Synthesis of dihalo ethers of the aliphatic series. Zhur.ob.khim. 32 no.3:803-808 Mr '62. (MIRA 15:3)

1. Institut neftekhimicheskikh protsessov AN AzerbSSR. (Glycols)

MAMEDOV, Shamkhal; GADZHIZADE, F.

Glycol ethers and their derivatives. Part 42: Synthesis of esters and mixed ether-esters of 2,2,2-trichloro-1,1-ethanediol. Zhur.ob.khim. 32 no.3:799-802 Mr 162.

1. Institut neftekhimicheskikh protsessov AN AzerbSSR. (Ethanediol)

CIA-RDP86-00513R001032000010-6 MAMEDOV, Shamkhal; MAMEDOVA, A.R. Simple glycol ethers and their derivatives. Part 41: Synthesis of alkoxy derivatives of methyl ethers of dihydric phenols. Zhur.ob.khim. 32 no.2:407-410 F 162. (MIRA 15:2) 1. Institut neftekhimicheskikh protsessov AN Azerbaydzhanskoy SSR. (Ethers) (Phenols)

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001032000010-6

MAMEDOV, Shamkhal; LERNER, G.

Investigation in the field of simple glycol ethers and their derivatives. Part 40: Synthesis of chloral acetals. Zhur.ob.khim. 32 no.2:403-407 F '62. (MIRA 15:2)

1. Institut neftekhimicheskikh protsessov AN Azerbaydzhanskoy SSR.

(Chloral) (Acetals)

MAMEDOV, Shamkhal; OSIPOV, O.B.; DZHALILOV, T.N.; GRIZHINA, Ye.N.

New contact poisonous chemicals "efiran-168" and "efiran" 169."

Dokl. AN Azerb. SSR 18 no.9:19-23 '62. (MIRA 17:1)

1. Institut neftekhimicheskikh protsessov AN AzerSSR.

Predstavleno akademikom AN AzSSR I.D. Mustafayevym.

APPROVED FOR RELEASE; 06/23/11: CIA-RDP86-00513R001032000010-6

Synthesis of new plasticizers from ... S/204/62/002/005/006/007
E075/E136

distilled under 1 mm Hg. The fraction boiling between 200 and 240 °C (yield 76%) constituted the new plasticizer named "AHA3" (ANAZ). The plasticizer has negligible volatility (0.044-0.9% at 100 °C), good light resistance, low freezing temperature (-40 to -65 °C) and good compatibility with plastics (does not sweat out from plastic films) and their solvents. It is insoluble in water, stable to heat and cold and non-poisonous. "ANAZ" (5-7%) successfully replaces dibutylphthalate in collodion cotton and butadiene-nitrile rubber and castor oil in dermateen. It also replaces satisfactorily tricresylphosphate in perchlorvinyl enamels.

There are 3 tables.

ASSOCIATION: Institut neftekhimicheskikh protsessov AN AZSSR (Institute of Petrochemical Processes, AS AZ.SSR)

SUBMITTED: March 31, 1962

Card 2/2

5/204/62/002/005/006/007 E075/E136

AUTHORS:

Mamedov, Shamkhal, Rzayev, A.S., and Nizker, I.L.

TITLE:

Synthesis of new plasticizers from kerosene

naphthenic acids

PERIODICAL: Neftekhimiya, v.2, no.5, 1962, 788-792

A search for new methods of producing cheap, high quality plasticizers led to the utilization of naphthenic acids as the raw material. The new plasticizers were obtained as

CH₂C1 Nauocr CH₂OOCR CH⁵óock CH2C1 + 2NaCl NaOOCR

where R - naphthenic radical (mol.wt 140-160). fractions of the acids (kerosene naphthenic acids: 55-60% fraction, 110 to 140 °C - acid value ~300; 25-30% fraction, 140 to 160 °C acid value \sim 270-280) were neutralised with solid NaOH at 50-100 °C. Dichloroethane was introduced at 170-190 °C, the reaction being continued for 6-8 hours. The products were

MAMEDOV, Shamkhal; AGAYEV, A.S. (MIRA 16:5) MAMEDOV, Shamkhal; ALIYEVA, Kh.M.; OSIPOV, O.B. Utilization of olefinic components from the liquid pyrolysis products of petroleum hydrocarbons. Neftekhimia 2 no.1:115-120 Ja-F 62. (MTRA (MIRA 15:5) 1. Institut neftekhimicheskikh protsessov AN AzSSR. (Olefins) (Herbicides)

Materials of the Scientific Conference (Cont.)

Yosayan, G. T. Synthesis of Some Organic Compounds of Sulfur
With Insecticidal and Acaricidal Activity

ANALYTICAL CHEMISTRY

Bagbanly, I. L., and T. R. Mirzoyeva. Volumetric-Iodatometric Method of Determining Small Amounts of Zinc Employing Complex Compounds of Trivalent Chromium

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CHEMICAL ENGINEERING

Melik-Aldmazaryan, A. F. Investigation of the Electrical
Mamedov, Shamkhel, and I. Nizker, and A. Rzayev. Synthesis

Of Flasticizer AHA3-y

Card 10/11

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	Materials of the Scientific Conference (Cont.)	so v/ 6195
	Vartanyan, S. A., S. K. Pirenyan, and G. A. Musakhanyan. Polymerization and Reaction Mechanism of Acetylene in Acetylene	Vinyl 192
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	Azatyan, V. D. Synthesis and Conversion of Cyclooctotetr	aene 241
	Lagidze, R. M. Investigation of the Condensation Reaction Acetic Esters of 1,3- and 1,4-Butanediols and γ-Acetyl Clycols With Aromatic Hydrocarbons in the Presence of Anhydrous Aluminum Chloride	n of enic 252
	Sadykh-Zade, S. I. Direct and Organometallic Synthesis of Organosilicon Compounds With Functional Groups. (Inst khimii, Akademiya nauk Azerbaydzhanskoy SSR)	f 1tut 279
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<u> APPROVED FOR RELFASE: 06/23/11: CIA-RDP86-00513R001032000010-6</u>

MAMEDOU, Sh

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307/6195

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Nauchnaya konferentsiya institutov khimii Akademiy nauk Azerbaydshanskoy, Armyanskoy i Gruzinskoy SSR. Yerevan, 1957.

PHASE I BOOK EXPLOITATION

Material's nauchnoy konferentsii institutov khimii Akademiy nauk Azerbaydzhanskoy, Armyanskoy i Gruzinskoy SSR (Materials of the Scientific Conference of the Chemical Institutes of the Academies of Sciences of the Azerbaydzhan, Armenian, and Georgian SSR) Yerevan, Izd-vo AN Armyanskoy SSR, 1962. 396 p. 1100 copies printed.

Sponsoring Agency: Akademiya nauk Armyanskoy SSR. Institut organicheskoy khimii.

Resp. Ed.: L. Ye. Ter-Minasyan; Ed. of Publishing House: A. G. Slkuni; Tech. Ed.: G. S. Sarkisyan.

PURPOSE: This book is intended for chemists and chemical engineers, and may be useful to graduate students engaged in chemical research.

COVERAGE: The book contains the results of research in physical, inorganic, organic, and analytical chemistry, and in chemical engineering, presented at the Scientific Conference held in Yerevan, 20 through 23 November 1957. Three reports of particular interest are reviewed below. No personalities are mentioned. References accompany individual articles.

MAMEDOV, SHAMKHAL; KHYDYROV, D.N.

Glycol ethers and their derivatives. Part 39: Synthesis of y-Chloroethers of the aromatic series. Zhur.ob.khim. 31 no.12:3905-3909 D'61. (MIRA 15:2)

1. Institut neftekhimicheskikh protsessov AN Azerbaydshanskoy SSR. (Ethers)

MAMEDOV, Shamkhal; AVANESYAN, M.A.

Glycol ethers and their derivatives. Part 38: Synthesis of alkoxy derivatives of glycerol methyl ethers. Zhur. ob. khim, 31 no. 11:3566-3571 N '61.

(MIRA 14:11)

1. Institut neftekhimicheskikh protsessov AN Azerbaydzhanskoy SSR.

(Glycerol) (Ethers)

<u> APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001032000010-6</u>

MAMEDOV, Shamkhal; RZAYEV, A.S.

Glycol ethers and their derivatives. Part 37: Synthesis of alkyl-\$\beta\$-chloroethyl and alkyl-\beta-alkoxyethyl ethers of methylene glycol. Zhur. ob. khim. 31 no. 11:3561-3568 N '61. (MIRA 14:11)

1. Institut neftekhimicheskikh protsessov AN Azerbaydzhanskoy SSR. (Glycols) (Ethers)

MAMEDOV, Shamkhal; AVANESYAN, M.A.

Glycol ethers and their derivatives. Part 36: Synthesis and chemical transformation of ethers of methylene glycol. Zhur. (MIRA 14:11) ob. khim. 31 no. 11:3556-3560 N '61.

1. Institut neftekhimicheskikh protsessov AN Azerbaydzhanskoy SSR. (Glycols) (Ethers)

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001032000010-6

MAMEDOV, Shamkhal; ARABOV, A.K.

Synthesis of %-diethylaminoethylalkyl ethers of methylene glycol.

Dokl. AN Azerb. SSR 17 no.12:1139-1142 '61. (MIRA 15:2)

1. Institut neftekhimicheskikh protsessov AN AzSSR. Predstavleno akademikom AN AzSSR Yu. G. Mamedaliyevym.
(Ethers)

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001032000010-6

MAMEDOV, Shamkhal; GADZHI-ZADE, F.

Synthesis of alkoxymethylalkyl esters of 2, 2, 2-trichloroethanediol. Dokl.AN Azerb.SSSR 17 no.11:1023-1026 '61. (MIRA 15:2)

1. Institut neftekhimicheskikh protsessov AN AzSSR. Predstavleno skademikom AN AzSSR M.A.Dalinym.

(DDT (Insecticide))

MAMEDOV, Shamkhal; NIZKER, I.L.; RZAYEV, A.S.

Alcoholless method of promucing esters. Dokl.AM Azerb.SSR 17 no.9; 789-791 '61. (MIRA 15:3)

1. Institut neftekhimicheskikh protsessov AN AzSSR. Predstavleno akademikom AN AzSSR M.A.Dalinym. (Esters)

MAMEDOV, Shamkhal

, Shamkhal;
, O.B.; GRISHINA, Ye.N.

Eiran-59 and efiran-94, new highly effective chemicals for bollworm control. Dokl. AN Azerb. SSR 17 no.8:691-695 '61.

(MIRA 14:10)

1. Institut neftekt imicheskikh protessov AnzerbSSR.

Predstavleno akademikom AN Azerbaydzhanskoy SSR I.D. Mustafayevym.

(Bollworm)

(Insecticides)

MAMEDOV, Shamhal; OSIPOV, O.B.; ALIYEVA, Kh.M.; ZEYNALOVA, V.M. Efiran-66, a new herbicide. Dokl.AN Azerb.SSR 17 no.4:331-334 '61. (MIRA 14 (MIRA 14:6) 1. Institut neftekhimicheskikh protsessov AN AzerSSR.
Predstavleno akademikom AN Azerbaydzhanskoy SSR V.R. Volobuyevym.
(Herbicides) (Isopropyl ether)

MAMEDOV, Shamkhal; GADZHIZADE, F. Synthesis of mixed ether-esters of 2,2,2-trichlor-1,1-ethanediol. Dokl. AN Azerb. SSR 17 no. 3:203-206 '61. (MIRA 14;5) 1. Institut neftekhinicheskikh protsessov AN AzerbSSR. Predstavleno akademikon AN Azerbaydzhanskoy SSR M.A.Dalinym.

(Chloral) MAMEDOV, Shamkhal; LERNER, G.Ya. "Trifan", a new DDT analog. Azerb.khim.zhur. no.6:87-93 '61. (MIRA 15:5) (DDT (Insecticide))

MAMEDOV, Shamkhal; OSIPOV, O.B.; ALIYEVA, Kh.M. "Betaefiran" (ether preparation). Azerb.khim.zhur. no.5:59-63
'61. (MIRA 15:5) (Ethers) (Insecticides)

MAMEDOV, Shamkhal; KHYDYROV, D.N. Synthesis of simple aromatic chloroethers. Azerb.khim.zhur. no.2:29-38 '61. (MII (MIRA 14:8) (Ether)

<u> APPROVED FOR RELFASE; 06/23/11: __CIA-RDP86-00513R001032000010-6</u>

MAMEDOV, Shamkhal; KHYDYROV, D.N.; AGAYEV, A.S.

Utilization of "styrene resin" of the Sumgait synthetic rubber plant. Neftekhimiia 1 no.5:691-694 S-0 '61. (MTRA 15:2)

1. Instatut neftekhimicheskikh protsessov AN AzSSR. (Sumgait—Rubber, Synthetic)(Styrene)

MAMEDOV, Shamkhal; MAGERRAMOV, B,G.; OSIPOV, O.B.; ALESKEROV, A.S. Bactericidal properties of certain ether preparations. Azerb. khim.zhur. no.1:65-69 '61. (MIRA 14:8) (Ether) (Bactericides) MAMEDOV, Shamkhal, doktor khim. nauk, prof.; MEKHTIYEV, S.D., red.;

KEGAMTAN, V., red. izd-va; ISMAYLOV, T., tekhn. red.

[Clycol ethers] Prostye efiry glikolei. Baku, Izd-vo Akad. nauk
Azerbaidzhanskoi SSR, 1961. 210 p. (MIRA 15:5)

1. Chlen-korrespondent Akademii nauk Azerbaidzhanskoy SSR (for Mekhtiyev). (Glycols)

MAMEDOV, Shakhmal; RZAYEV, A. Synthesis and analysi. o. ...kyl 6-ethoxyethyl esters of methylene glycol. Dokl. An Azerb. SSR 16 no. 12:1171-1175 '60. (MIRA 14:2) 1. Institut neftekhimicheskikh protsessov AN AzerSSR. Predstavleno akademikom AN AzerSSR M.F. Nagiyevym. (Methanediamine)

MAMEDOV, Sh.A.; RZAYEV, A.S. Synthesis and study of alkoxy, 3-chloro-butene-2-oxymethane.
Azerb.khim.zhur. no.6:83-90 '60. (Min (Methanediol) (Ether) (MIRA 14:8) MAMEDOV, Shamkhal; RZAYEV, A. Synthesis of alkyl \beta -chloroethyl ethers of methylene glycol.

Azerb.khim.zhur. no.5:47-56 '60. (MTRI

(Methanediol) (MIRA 14:8) MAMEDOV, Shamkhal; OSIPOV, O.B.; ALIYEVA, Kh.M. Catalytic alkoxymethylchlorination of olefons. Azerb.khim. zhur. no.2:83-91 '60. (MIRA 14:8 (Olefins) (Ether) (MIRA 14:8) APPROVED FOR RELEASE; 06/23/11: CIA-RDP86-00513R001032000010-6 MAMEDOV, Shamkhal Synthesis and investigation of y-halo ethers of the aliphatic series. Trudy Inst.khim.AN Azerb.SSR 17:138-145 159. (MIRA 13:4) (Ethers)

<u> APPROVED FOR RELEASE; 06/23/11: CIA-RDP86-00513R001032000010-6</u>

The New Plasticizer ANAZ

67787 \$/064/59/000/07/007/035 B005/B123

while the glycol esters of the naphthenic acids are distilled off at 180-210°, which are already the ready product. The first runnings are once more esterified. The yield of the plasticizer amounts to 70-80%, compared to the used naphthenic acid mixture. Production costs of ANAZ are comparatively low. The new plasticizer was tested in the dermatino-kleyenochnaya fabrika im. Nogina (Dermatin Oil Cloth Works imeni Nogin) in Kuntsevo for the production of dermatin and nitrolinoleum. Results satisfy technical demands. Moreover, ANAZ was successfully used instead of tricresylphosphate as a plasticizer for enamels of the type PKhV, and instead of ricinus oil for the production of nitro dyes in GIPI-4 (State Design and Planning Scientific Research Institute of Varnish and Paint Industry). It was found that coatings containing ANAZ can be cooled off to -50° without any loss of stability. In NII rezinovoy promyshlennosti (Scientific Research Institute of Rubber Industry) good results were achieved with the new plasticizer. There are 1 figure, 1 table, and 6 references, 5 of which are Soviet.

Card 3/3

<u> APPROVED FOR RELFASE: 06/23/11: CIA-RDP86-00513R001032000010-6</u>

£2787

The New Plasticizer ANAZ

S/064/59/000/07/007/035 B005/B123

100° for 6 hours) are compared to qualities of other popular plasticizers. ANAZ is a pale yellow, nearly odorless oily liquid. For the production of 1 mol of this plasticizer one needs 1.1 mol of the naphthenic acid mixture, 0.15 mol of sodium hydroxide and 0.2 mol of dichloroethane. For the esterification of the acid mixture distilled in vacuum, it is neutralized at 120-160° with solid sodium hydroxide. The water produced is distilled off. The temperature is then increased to 180°. At this temperature dichloroethane vapors are led through the mixture while mixing it thoroughly. The melted sodium salts of the naphthenic acids react with the dichloroethane according to the

following scheme: RCOONa + ClCH₂ \rightarrow 2 NaCl + RCOOCH₂ RCOOCH₂

After cooling off the reaction mixture to 50-40°, water is added. The addition of water causes the precipitation of sodium chloride in crystalline form which deposits readily. The ester is decanted and distilled in a vacuum. With a pressure of 2 torr up to 170-180°, the excess naphthenic acids are distilled off,

Card 2/3

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001032000010-6

15.8600 5 (1), 5 (2)

AUTHORS:

Mamedov, Sh. A., Rzayev, A. S.,

67787 \$/064/59/000/07/007/035 B005/B123

TITLE:

The New Plasticizer ANAZ

PERIODICAL:

Khimicheskaya promyshlennost', 1959, Nr 7, pp 580 - 582 (USSR)

ABSTRACT:

In the present paper the manufacture and qualities of the new plasticizer ANAZ (abbreviation for AN Azerbaydzhanskoy SSR (AS of the Azerbaydzhanskaya SSR)), are discussed. This plasticizer which was for the first time produced in 1949-1950, consists of glycol esters of naphthenic acids and is especially suitable for plasticizing colloxylin. In the beginning the strong odor of this plasticizer - caused by the content of crude naphthenic acids - prevented its being used to a larger extent. This odor can, however, be removed by a vacuum distillation of the naphthenic acid mixture used for synthesis, or of the ready product (Ref 3). In a table the most important physicochemical qualities of ANAZ (molecular weight, boiling point, freezing

point, ignition point, d_4^{20} , refraction index at 20° , saponification number, content of volatile ingredients when heated to

Card 1/3

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001032000010-6

MAMEDOV, Sh.A.; OSIPOV, O.B.; MAMEDOVA, A.R.

"Etheran" - a new type of agricultural poison [in Azerbaijani with summary in Russian]. Izv. AN Azerb. SSR. Ser. fiz.-tekh. i khim. nauk no.1:125-131 '59. (MIRA 12:6) (Ether) (Insecticides)

MAMEDOV, Shamkhal; KHYDYROV, D.

Glycol ethers and derivatives. Part 35: Synthesis of \$\beta\gamma\gamma\defined no.10:
2812-2816 0 58. (MIRA 11:12)

1. Azerbaydzhanskiy gosudarstvenmyy pedagogicheskiy institut.

(Methanediol)

Investigation in the Field of Glycol Ethers and Their SOV/79-28-7-23/64 Derivatives. XXXIV. The Chemical Conversions of the γ -Ethylene Chloride

EASE: 06/23/11: CIA-RDP86-00513R001032000010-6

- 1. Glycol ethers--Chemical properties
- 2. Ethylene chlorides--Chemical reactions
- 3. Ethylene chlorides---Catalysis

Card 3/3

<u> APPROVED FOR RELFASE: 06/23/11: CIA-RDP86-00513R001032000010-6</u>

Investigation in the Field of Glycol Ethers and Their SOV/79-26-7-23/64 Derivatives. XXXIV. The Chemical Conversions of the y-Ethylene Chloride

corresponding γ -halogen ethers appeared as reaction products, according to the Markovnikov rule. The reaction with the catalyst can be represented by scheme 1 according to Kondakov (Ref 11). Hydrogen bromide acts on the allyl ethers in the presence of ZnBr $_2$ under the formation of γ -ethyl bromide (V). In the case

of excess HBr, however, a certain amount of 1,3-dibrono derivatives of the hydrocarbons (Scheme 2) is formed. In the oxidation of the organomagnesium compounds produced of γ -ethylene chloride the mono- β -glycolethers form as magnesium halogen glycolates. CO₂ acts on the organomagnesium compounds produced of γ -ethylene chloride under the formation of ethers of the γ -oxy acids. There are 3 tables and 12 references, 7 of which are Soviet.

ASSOCIATION: Azerbaydzhanskiy gosudarstvennyy pedagogicheskiy institut

(Azerbaydzhan State Pedagogical Institute)

SUBMITTED: April 1, 1957

Card 2/3

<u> APPROVED FOR RELEASE; 06/23/11; CIA-RDP86-00513R001032000010-6</u>

AUTHORS:

Mamedov Shamkhal, Pishnamazzade, B.

sov/79-28-7-23/64

TITLE:

Investigation in the Field of Glycol Ethers and Their Derivatives (Issledovaniye v oblasti prostykh efirov glikoley i ikh proizvodnykh) XXXIV. The Chemical Conversions of the γ -Ethylene Chlorides(XXXIV. Khimicheskiye prevrashcheniya prostykh γ -khlor-firov)

PERIODICAL:

Zhurnal obshchey khimii, 1958, Vol 28, Nr 7,

pp 1834 - 1838 (USSR)

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ABSTRACT:

It was of interest to the authors to investigate the properties of the ether homologs of the allyl alcohol (Formula II) in detail, which has remained little investigated as far as can be judged from publications. On the action of hydrogen halides on allylether(II) the double ether compound remains preserved and only the oxygen bridge is destroyed under the formation of unsaturated (III) and saturated (IV) halogen derivatives of the hydrocarbons. The experiments showed, however, that even in the cold (0°) HCl and HBr can combine in the presence of a catalyst (ZnCl₂) with the allyl ethers at their double bond. The

Card 1/3

Investigation in the Field of Glycol Ethers and Their SOV/79-28-7-22/64
Derivatives. XXXIII. On Some Chemical Conversions of the γ-Ethyl Bromides of the Fatty Series

1. Ethyl bromides—Hydrolysis 2. Ethyl bromides—Chemical reactions
3. Glycol ethers—Chemical properties

Card 3/3

<u> APPROVED FOR RELFASE; 06/23/11: _CIA-RDP86-00513R001032000010-6</u>

Investigation in the Field of Glycol Ethers and Their 50V/79-28-7-22/64 Derivatives. XXXIII. On Some Chemical Conversions of the γ -Ethyl Bromides of the Fatty Series

yield organomagnesium compounds (III), which form 1,4-glycolether (IV) with α-chloric ether. This reaction process (see reaction scheme) points to the possibility of a new synthesis of glycol ether with various alkoxy groups in the positions 1,4(IV). 1,3-dihalogen derivatives (V) form on the action of HBr or HJ on the γ-ethyl bromide. This way six new 1,3-dihalogen derivatives of fatty hydrocarbons were synthetized (Table). All above mentioned conversions make possible the production of further compounds on the same basis. There are 1 table and 5 references, 4 of which are Soviet.

ASSOCIATION: Azerbaydzhanskiy gosudarstvennyy pedagogicheskiy institut

(Azerbaydzhan State Pedagogic Institute)

SUBMITTED: April 1, 1957

Card 2/3

CIA-RDP86-00513R001032000010-6

AUTHORS:

Mamedov, Shamkhal, Zeynalov, B. K.

SOV/79-28-7-22/64

TITLE:

Investigation in the Field of Glycol Ethers and Their Derivatives (Issledovaniye v oblasti prostykh efirov glikoley i ikh proizvodnykh) XXXIII. On Some Chemical Conversions of the γ-Ethyl Bromides of the Fatty Series (XXXIII. O nekotorykh Knimicheskikh prevrashcheniyakh prostykh γ-bromefirov zhirnogo ryada)

PERIODICAL:

Zhurnal obshchey khimii, 1958, Vol 28, Nr 7,

pp 1831 - 1834 (USSR)

ABSTRACT:

Continuing an earlier paper (Ref 1) the authors carried out some little-known conversions of γ -ethyl bromide. The hydrolysis experiments of these ethers carried out in the presence of $\mathrm{Na_2}\mathrm{CO_3}$ and CaCO3 (10-12 hours) showed that on this occasion HBr is split

off under the formation of ethers of the homologs of allyl alcohol (II). In all these cases none of the incomplete γ-εl, ol ethers to be expected, but only unsaturated ethers resulted. In the case of heating the y-ethyl bromides (I) with alcoholate the HBr cleavage takes only 2-3 hours and no etherification but a formation of allyl ethers (II) takes place which corresponds to the Markovnikov rule (Ref 1). The y-ethyl bromides easily

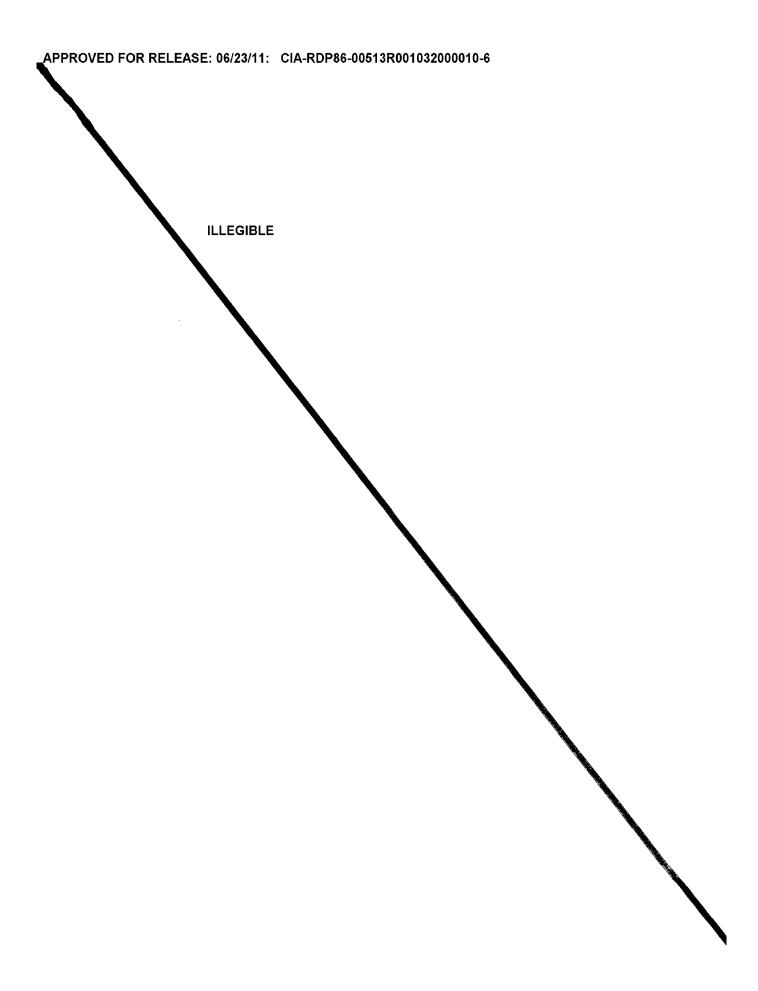
Card 1/3

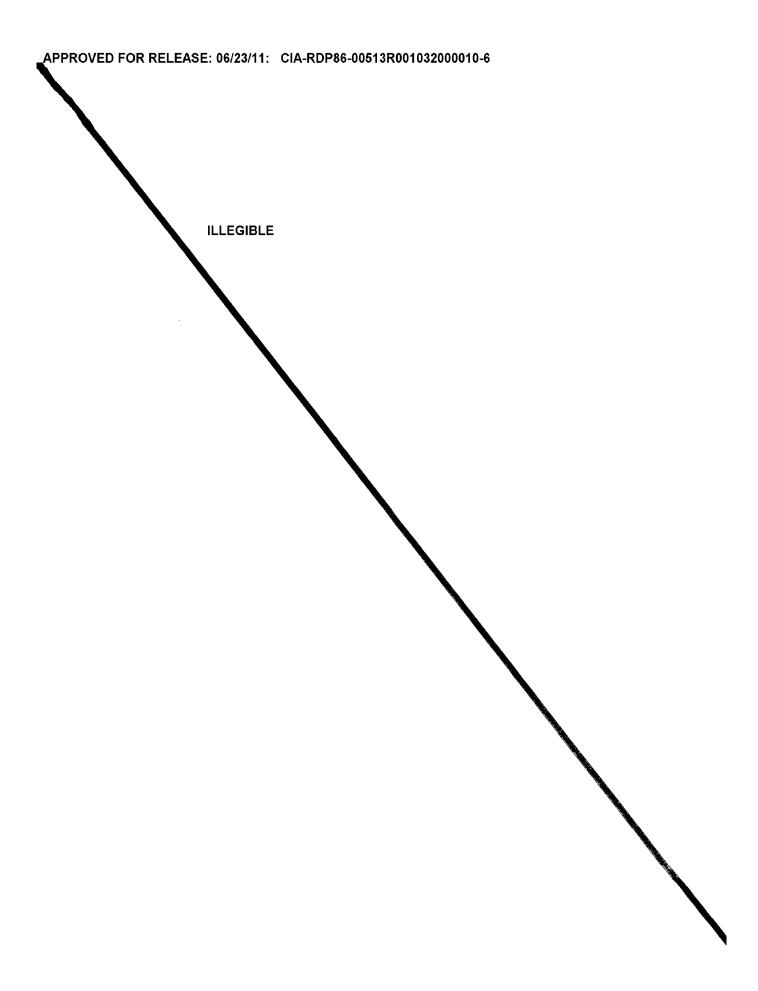
MAMEDOV, Shamkhal; ALIYEV, A.F.

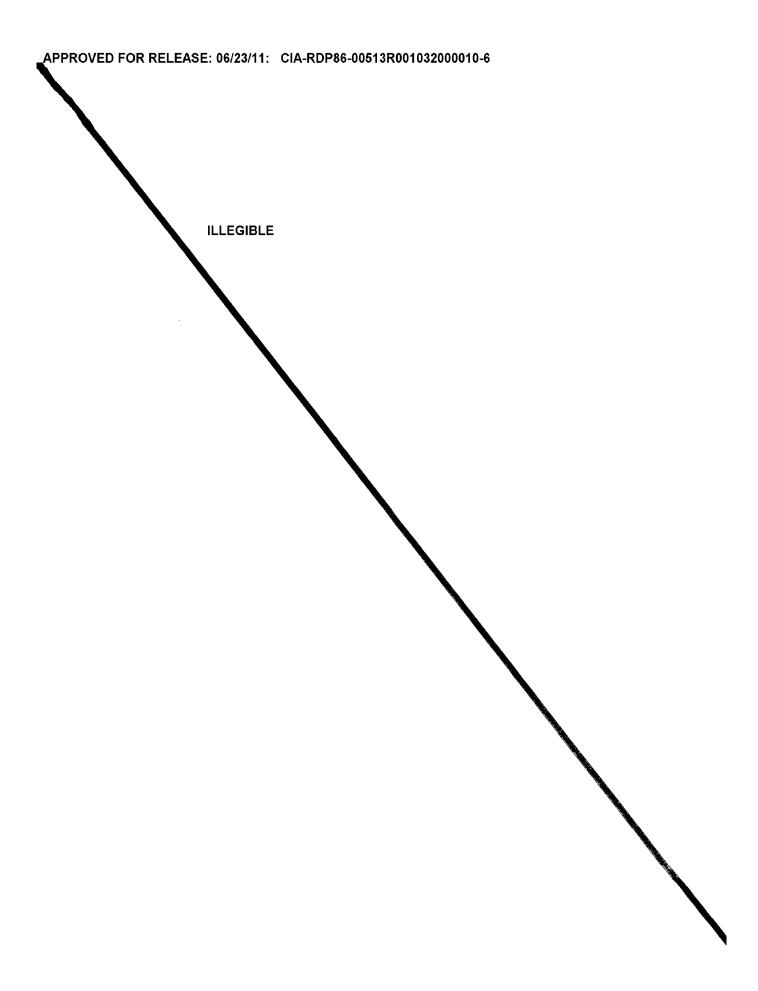
Ethers of glycols and their derivatives. Part 32: Synthesis of monoethers of Y -glycols and their alkoxyethyl derivatives. Zhur. ob. khim. 28 no.4:923-928 Ap 158. (MIRA 11:5)

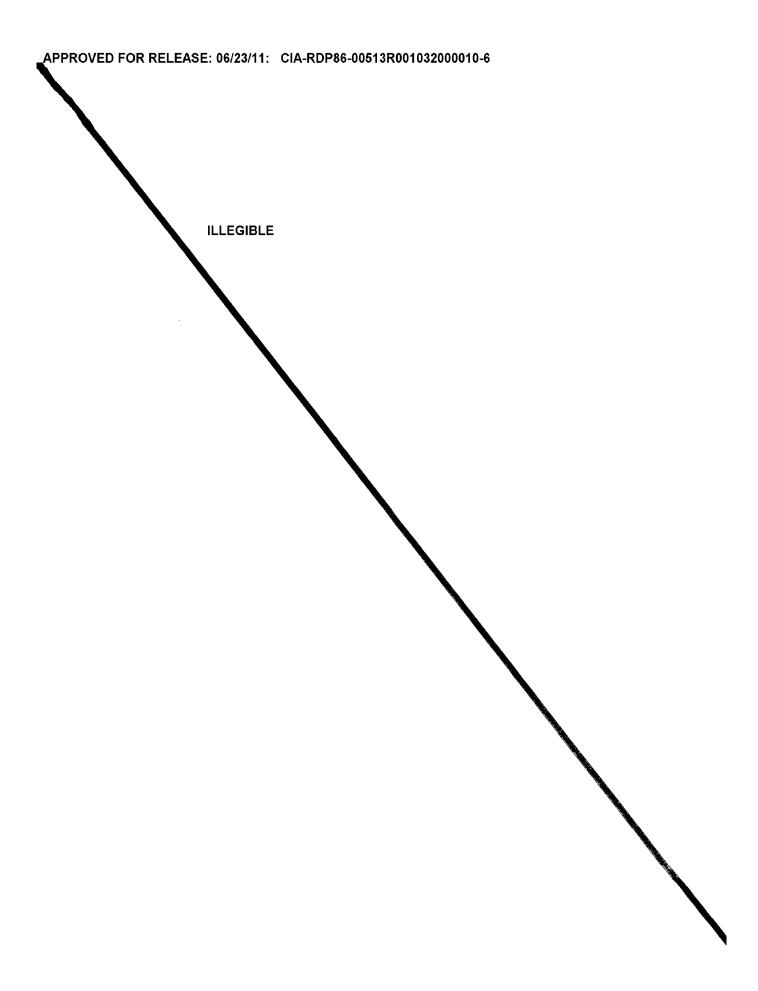
1. Azerbaydzhanskiy gosudarstvennyy pedagogicheskiy institut. (Pentanol) (Butanol) (Ethers)

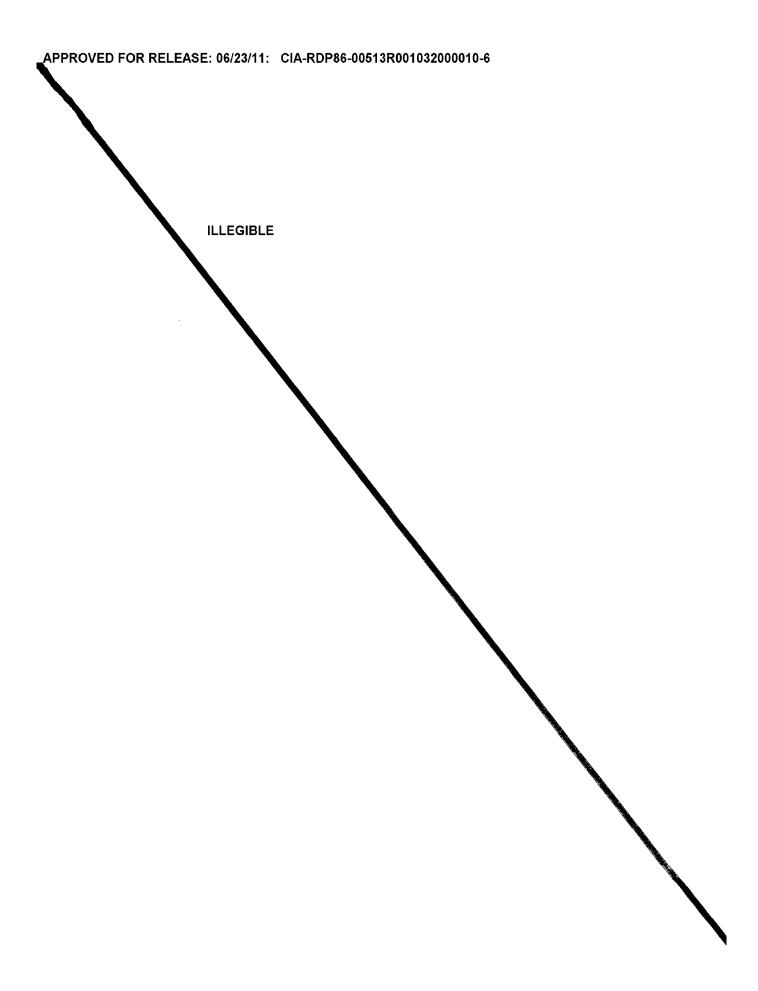
<u> APPROVED FOR RELEASE; 06/23/11: CIA-RDP86-00513R001032000010-6</u> MAMEDOV, Shankhal Investigations in the field of simple giped ethers, last 31: Lynthesis of simple Y-helide others of the fatty series. From the both 27 no.6: 1499-1507 be 197. (1995-16:8) 1.Azerbayázhanskiy apsulanstvennyv podagovicheckiy institut. (athera) (Glycols)











-RDP86-00513R001032000010-6 MAMEDOV, Shamkhal.; ABDULLAYEV, A.I. Synthesis of dialkoxydimethyl ethers of tetraarylethylene glycol.

Trudy Inst.khim.AN Azerb.SSR 15:99-105 '56. (MLBA 9:11 (Rithylene glycol) (Ethers) (MLBA 9:11)

06/23/11: CIA-RDP86-00513R001032000010-6 MAMEDOV, Shamkhal Nomenclature of ethers and their derivatives. Izv.AN Azerb.SSR (MURA 10:2) no.11:11-20 '56. (Ethers-Terminology)

MANEDOV. Shamkhal; GIMPELEVICH, E.D. Investigating the glycol ethers. Izv. AN Azerb. SSR no.10:41-48 0 '56. (MIRA 10:3) (Glycols) (Polymers)

MAMEDUN SHAMKHAL

USSR/Organic Chemistry. Synthetic Organic Chemistry.

E-2

Abs Jour: Ref Zhur-Khimiya, No 6, 1957, 19051.

Mamedov Shankhal, Abdullayev A. Author :

· WANTER STATE OF THE PARTY OF Inst

: Synthesis of Simple Glycol Ethers. 25. Synthesis Title

of Dialcomyderivatives of Dimethyl Ethers of Tetraalkyl

Substituted Ethylene Glycole.

Orig Pub: Azerb SSR elmler Akad. kheberleri, Izv. AN AzSSR,

1956, No 5, 49-56.

The authors synthesized alcoxyderivates of dimethyl Abstract: ethers of tetraalkyl substituted glycoles of the type [R2C(OCH2OR')] (I) according to a previously described method (Tr. In-takhimiyi AN Azssk, 1946, 6) by the action of ClCH₂OR' (II) on $/\overline{R}_2$ C (OMgX)/₂ (III) a product of the interaction of RMgX with ethyl either of

succinic acid (ether solution, time of reaction 4-5

: 1/2 Card

APPROVED FOR RELEASE; 06/23/11: CIA-RDP86-00513R001032000010-6

MUMEDOV, Sh.

Dissertation: "An Investigation in the Field of Simple Esters of Glycol." Dr Chem Sci. Inst of Organic Chemistry imeni N. D. Zelinskiy, Acad Sci USSR, 18 Jun 54. (Vechernyaya Moskva, Moscow, 8 Jun 54)

SO: SUM 318, 23 Dec 1954

APPROVED FOR RELEASE; 06/23/11: CIA-RDP86-00513R001032000010-6

MAMEDOV, Sh. (Co-author)

XXXXXXXXXXXXXXXX

ALIYEV, A. and MAMEDOV, Sh.

"Investigations in the field of the synthesis of simple ethers", Report 25: Sh. Mamedov and A. Aliyev, "The synthesis of simple monoethers of 1,4-diols from the products of the interaction of alpha-chlro ethers with unsaturated hydrocarbons", Izvestiya Akad. nauk Azerbaydzh. SSR, 1949, No. 4, p. 106-24, (Resume in Azerbaijani), - Bibliog: 5 items.

SO: U-4630, 16 Sept. 53, (Letopis 'Zhurmal 'nykh Statey, No. 23, 1949).

MAMEDOV, Sh.

Mamedov Sh. and A. Niyazov, "Research in the area of synthesis of simple ethers,"

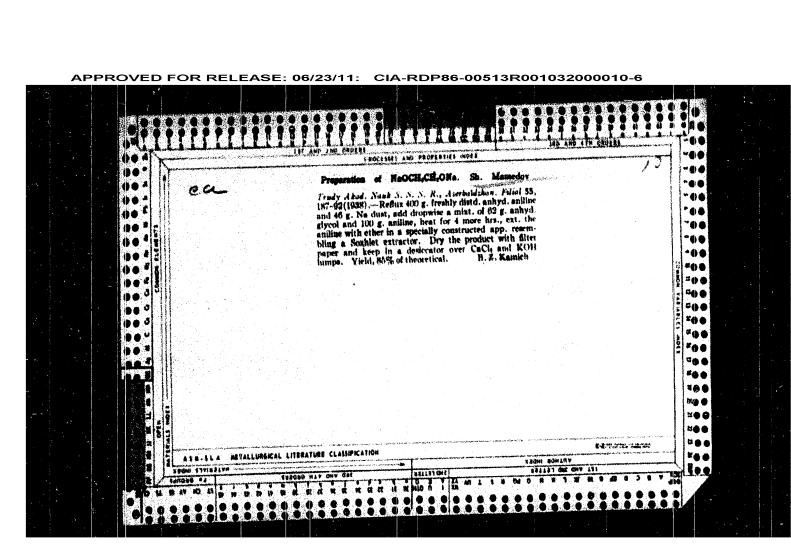
Collection 21, "Synthesis of simple bithreated eithers of nothflene gluedly"

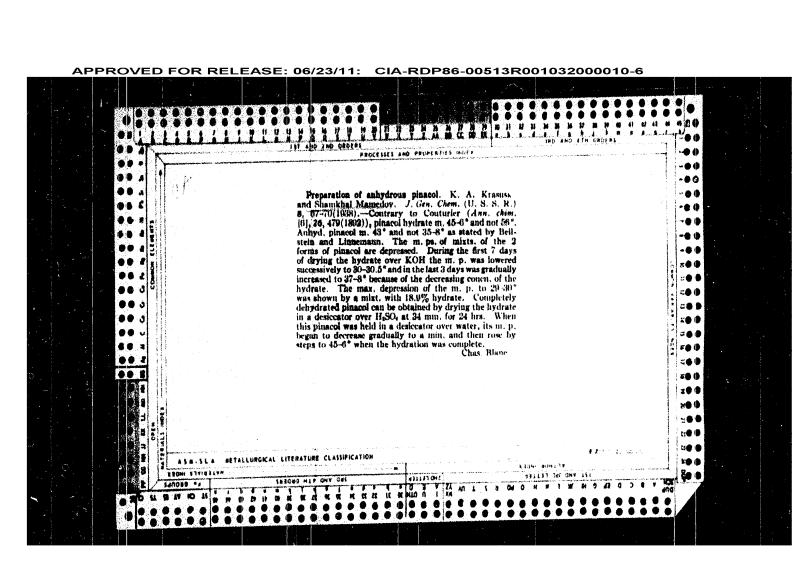
Izvestiya Mad. nauk Azerbaydsh. SSR, 1948, No. 9, p. 30-52 - Resume in Azerbaydsian language

SO: U-3850, 16 June 53, (Letopis 'Zharnal 'nykh States, No. 5, 1949).

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001032000010-6 ... PROCESSES AND PROPERTYS MORE "Derivatives of coetylenis y glycols. II. The dimethylether of tetramethyleutynediel. Shamking Mannedev and N. A. Ter-Petrosores. Invest. Assistication, Private Ahod. Nask 1941, No. 1, 71-2; Khim. Referat. Zhu. 4, No. 9, 53; cf. C. A. 37, 1899;—Terramethylbutynediel di-Mecthor, synthesized by the Arbusov method by lissifing tetramethylbutynediel with McOH in the presence of cryst. lodine for 40 hrs. at 60-5°, b. 163°, di 20.3741, st 1.433. Aliphatic acetylene y-glycols are etherified with greater difficulty than are the aromatic glycols.

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MANTON Shirali Mesirovich, professor, doktor tekhnicheskikh nauk;
MESTERBOO, Arr., Fedaktor; AL'TMAN, T.B., redaktor izdatatel'stva

[Shaft working of petroleum deposita] Shakhtmais rezrebetake
nefttanykh mestoroshdenii. Beku, Aserbeidshanekoe gos.isd-vo
neft. i nauchno-tekhn.lit-ry, 1956. 128 p. (MLRA 10:8)

(Petroleum engineering)

MAMEDOV. SH. A.

Mamedov. Sh. A. "The scientific principles for the classification of systems of underground dressing of ore", Izvestiya Akad. nauk Azerbaydzh. SSR, 1949, No. 4, p. 90-105, (Resume in Azerbaijani), - Bibliog: 25 items.

So: U-4630, 16 Sept. 53, (Letopis 'Zhurnal 'nykh Statey, No. 23, 1949).

MAMEDOV, Sh. A.

Mamedov, Sh. A. "The selection of the chief directions in the system of shaft-mining of petroleum," Izvestiya Akad. nauk Azerbaydzh. SSR, 1949, No. 1, p. 61-71, (Resume in Azerbaijani), - Bibliog: 7 items.

So: U-3736, 21 May 53, (Letopis 'Zhurnal 'nykh Statey, No. 17, 1949).

MAMEDOV, Sh. A.

Mamedov, Sh. A. - "Means for rational utilization of the specific gravity of petroleum in working strata by the mining method," Doklady (Akad. nauk Azerbaydzh. SSR), 1949, No. 1, p. 3-7 ---- Stmmary in azerbaydzhani

So: U-3566, 15 $^{\rm M}$ arch 53, (Letopis 'Zhurnal 'nykh Statey, No. 13, 1949)

MAMEDOV, Sh. A.

Mamedov, Sh. A. "On the suitability of a system of level block cabing in the mining of pyritic ores," Izvestiya Akad. nauk Azerbaydzh. SSR, 1948, No. 9, p. 107-13 - Resume in Azerbaydzhian language - Bibliog: 15 items

SO: U-3850, 16 June 53, (Letopis 'Zhurnal 'nykh Statey, No. 5, 1949).

MAMEDOV, S.R. New method for phosphore removal and desulfuration of steel. Sbornauch.-tekh.inform.azerb.inst.nauch.-tekh.inform.Ser.mashinostroi. prom. no.3254-57 '62. (MIRA 18:8)

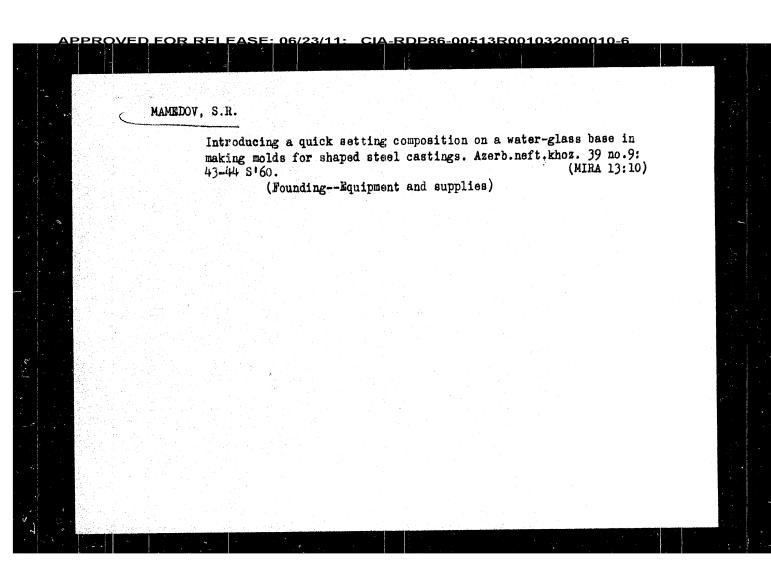
MAMEDOV, S.R. Steel for the casting of thick-walled parts for column heads.

Lit. proizv. no.9:48 S '61. (MIRA 14:9)

(Steel castings) MAMEDOV, S.R. Core mixture on a sodium silicate base with good knockout properties.

Lit. proizv. no. 5:44 My '61. (MIRA 14:5)

(Coremaking)



On the Problem of Deoxidation of Steel by Aluminum is attainable. In the author's opinion, this proposition cannot be accepted as it implies an overheating of the metal by 100° - 150°C. There are 2 tables and 6 Soviet references.

-RDP86-00513R001032000010-6

18(5,7)AUTHOR:

Mamedov S.R., Engineer

SOV/128-59-9-23/25

TITIE:

PERIODICAL:

ABSTRACT:

On the Problem of Deoxidation of Steel by Aluminum Liteynoye proizvodstvo, 1959, Nr 9, pp 47-48 (USSR)

This article deals with the selection of an optimum dosage of aluminum for deoxidation of steel. The author refers to the article by N.N.Dobrokhotov(appeared in "Liteynoye proizvodstvo" Nr 12, 1958, and criticizes it. He also refers to the opinions of other Soviet experts who state that aluminum affects the plasticity of steel owing to the forming of Alo 03 inclusions, and by raising the solubility of iron and manganese oxides. The author indicates that Yu. A. Nekhendzi, I.S.Gayev and V.V.Polovnikov maintain that inoculation of 0.02 - 0.22%Al increases the steel porosity and decreases its compactness. In Fig : pertaining figures specifying mechanical and other properties of steel inoculated by aluminum are given. N.N Dobrokhotov proposes the use of iron-alloys in quantities of 3% of the liquid steel weight, and maintains that in steels alloyed with chrome, manganese and silicon a uniform distribution of elements

Card 1/2

MAMEDOV, SH.O.

21733

MAMEDOV, SH.O. O sistemakh redzemnoy razrobotkh rednykh mestorozideny.
Doklady (akad. Nauk azerbuydzh SSR), 1949, No.5, S. 201-05 -- Rezyume
na azertaydzh. Yaz.

SO: Letopis' Zhurnal'nykh Statey, No. 29, Noskva, 1949

CIA-RDP86-00513R001032000010-6 KREMS, A.Ya.; MAMEDOV, Sh.N.; MIRZOYEV, R.Kh. Concerning the expansion in the use of underground (mining) and open-pit methods of developing oil fields. Izv. AN Azerb.

SSR Ser.geol.-geog.nauk nefti no.1:51-61 '62. (MIRA 15:5)

(Azerbaijan-Patroleum mining) (MIRA 15:5)

MAMEDOV, Sh.N.; OSIPOVA, B.A. Ground pressure in the Nakhichevan Salt Mine. Izv.AN Azerb.SSR. Ser.geol.-geog.nauk i nefti no.3:47-58 '61. (MIRA 15: (Nakhichevan A.S.S.R.--Salt deposits) (Rock pressure) (MIRA 15:1)

MAMEDOV, Sh.N.; MUKHTAROV, G.G., red.; ZEYNALOVA, T., red. izd-va; BAGIROVA, S., tekhn. red.

[Effective development of solid mineral deposits in the Azerbaijan S.S.R.]Ratsional naia razrabotka mestorozhdenii tverdykh poleznykh iskopaemykh Azerbaidzhanskoi SSR. Baku, Azerbaidzhanskoe gos. izd-vo, 1961. 327 p. (MIRA 15:12) (Azerbaijan-Mining engineering)

GUSEYNOV, M.M.; SALAKHOV, M.S.; MAMEDOV, S.M.

Exhaustive chlorination of piperylene. Azerb, khim. zhur. no. 4217-20 165.

1. Institut neftekhimicheskikh protsessov AN AzSSR.

GUSEYNOV, M.M.; KICHIYEVA, D.D.; AKHUNDOVA, P.B.; MAMEDOV, S.M.

Thermal conversion of carbon chlorides. Azerb. khim. zhur. no.3:
(MIRA 19:1)

1. Institut neftekhimicheskikh protsessov AN AzerSSR.

OUCHTWON, M.M., SHOURSON, CO.J., EARLYSIAN, A. C. WELL, M. Sympactic of Enganhance employments here them the systematic times the hypermatic separation of games. Inches commanders and the solution of the solutions MAMEDALIYEV, Yu.G.; GUSEYNOV, M.M.; KICHIYEVA, D.D.; MAMEDOV, S.M. Producing hexachlorobenzene by the thermal decomposition of carbon perchlorides. Dokl. AN Azerb. SSR 17 no. 2:109-113 '61. (MIRA 14:4) 1. Institut neftekhimicheskikh protsessov AN Azerbaydzhanskoy SSR. (Carbon chlorides) (Benzene)

(.7.8)

Production of Carbon-chloride Compounds by Chlorination of Pentanes in a Beiling Catalyst Layer

S07/20-130-2-39/69

of crystelline products; mainly octachlorocyclopentone. A catalyzate with high content of the desired carbon chloride can be obtained by temperature change; modification of the reactants, contact time, and other characteristics of the process. Also in the case of a considerable chlorine excess, a smooth reaction course without explosion and with high yield in carbon chlorides is ensured. There are 1 table and 1 Soviet reference.

ASSOCIATION:

Institut neftekhimicheskikh protsessor Akademii nauk AzerbSSR (Institute of Petroleum-chemical Processes of the Academy of Sciences, Azerbaydzhanskaya SSR)

SUBMITTED:

September 29, 1959

Card 3/3

62381

Production of Carbon-chloride Compounds by Chlorination of Pentanes in a Boiling Catalyst Layer

507/20-130-2-39/69

paper deals with the chlorination of normal pentane from the rectification of Karadag gas condensate on pumice since the latter proved to be best suitable. The apparatus, and the order of operations, were similar to those in reference 1. Chlorine and pentane, however, were not mixed before but introduced separately into the catalyst. Table 1 shows the investigation results of the catalyzates at 350-450°; Cl₂:C₅H₁₂=+1:1; chlorine velocity 49 l/h, pentane velocity 14 g/h. It shows that the 1st fraction (boiling out between 75 and 80°) corresponded to CCl₄. Its constants were near those of pure CCL₄. The yield in CCl₄ was 10-14% depending on the reaction temperature. The fraction 80-118° was low in quantity and consisted of CCl₄ and C₂Cl₄. The fraction corresponding to C₂Cl₄ boiled out at between 118 and 123°. The yield was 12-23% of C₂Cl₄. The fraction 185-235° consisted of hexachlorobutadiene with a small admixture of hexachloroethane. The fraction distilled off at between 235 and 238° corresponded to hexachlorocyclopentadiene (yield 23-40%). The distillation residue consisted

Card 2/3

AUTHORS:

Mamedaliyev, Yu. C., Corresponding

Member AS USSR, Guseynov, M.M.

Mamedov, S.M.

TITLE:

Production of Carbon-chloride Compounds by Chlorination of

⁶²⁹⁸⁾ g0**7**/20+130-2-39/69

Pentanes in a Boiling Catalyst Layer

PERIODICAL:

Doklady Akademii nauk SSSR, 1960, Vol 130, Nr 2, pp 379-38;

(USSR)

ABSTRACT:

The chain reaction of chlorination of alkanes with chlorine excess proceeds explosively and is controlled with difficulty Carbon black, HCl and other undesired reaction products are formed. Therefore, the authors developed a method of producing carbon tetrachloride, hexachloroethane, tetrachloroethylene, / hexachlorobutadiene/and hexachlorocyclopentadiene. The method is based on exhaustive chlorination of pentanes in a boiling catalyst layer. The authors made experiments of chlorination of methane, ethane, propane, butane and pentanes, and determined the dependence of the yield in individual carbon chlorides on temperature, reaction time, ratic between reactants, and other characteristics of the process. The production of CCl, from methane was described in a previous paper (Ref i). The present

Card 1/3

MAMEDALIYEV, Yu.G.; GUSEYNOV, M.M.; MISHIYEV, D.Ye.; MAMEDOV, S.M.

Producing hexachlorobutadiene by the chlorination of butane in a fluidized catalyst bed. Dokl. AN Azerb. SSR 16 no. 11:1063-1066 "60. (MIRA 14:2)

1. Institut neftekhimicheskikh protsessov AN AzerssR.

(Butadiene) (Butane) (Chlorination)

RDP86-00513R001032000010-6 MAMEDOV, S.M. Establishing groups of saline soils for silvicultural purposes in the Kura-Aras Lowland. Izv.AN Azerb.SSR.Ser.biol. i sel'khoz.nauk (MIRA 12:1)

USSR / Plant Physiology. Respiration and Metabolism.

I-2

Abs Jour

: Ref Zhur - Biol., No 10, 1958, No 43718

Author

: Alekperov, S. E.; Kolotova, M. G.; Mamedov, S. M.;

Khrzhanovskaya, T. Ye.

Inst

: AS AzerbSSR

Title

: The Rate of Respiration and Activity of Catalysts in the Leaves of Certain Trees and Bushes Growing on the Saline

Soils of Mil Steppe.

Orig Pub

: Izv. AN AzerbSSR, 1957, No. 2, 71-78

Abstract

: Experiments were set up in 1951 within the Mil Shirvan Forest Shelter Belt to study the effect of salinization on the oak (Quercus longipes), the white mulberry tree (Morus alba), the honey locust (Gleditschia triacanthos), the indigobush (Amlrpha fruticosa), Saphora japonica, the wild olive Elaeagnus angustifolia and the Siberian acacia

(Caragana arborescens) growing on two plots: (1) a stongly

Card 1/2