SOURCE: Plasticheskiye massy, no. 8, 1964, 50-51

molecular weight, organic nitrogen compound, macromolecular chemistry

ABSTRACT: A chemical method was de eloped for the determination of the average molecular weight of polyaminotriazoles based on potentiometric titration of the terminal hydrazide groups with potassium iodate in sulfuric acid. The reaction proceeds rapidly and quantitatively, with a distinct potential drop at the equivalence point. The amino group bound to the heterocyclic ring did not react with potassium iodate. The results of the new method were compared with potentiometric titration with sodium nitrite in sulfuric acid and gave good coincidence of results. An empirical equation is graphically derived for the relationship between the intrinsic viscosity and the

Card 1/2

L 51497-65
ACCESSION NR: AP5016621

... weight. There was satisfactory agreement between molecular weights ... terminal groups method and that ... Orig. art. has: 1 figure, 1 graph, 1 table.

ASSOCIATION: none

| | | |
|---|---|---|
| SUBMITTED: 00 | ENCL: 00 | SUB CODE: GC, GC |
| NO REF SOV: 001 | OTHER: 003 | JPRS |

Card 2/2 mfs

45
42
41

Study of the kinetics of the photochemical graft copolymerization of [illegible] to Kapron fiber

SOURCE: AN UkrSSR, Institut khimii vysokomolekulyarnykh soyedineniy. Sintez i [illegible] polimerov; sbornik statey po rezul'tatam nauchno-issledovatel'skikh rabot (Synthesis and physical chemistry of polymers; collection of articles on the results of scientific research work). Kiev, Naukova dumka, 1964, 109-114

TOPIC TAGS: graft copolymerization, photochemical copolymerization, copolymerization, [illegible], acrylonitrile copolymer, polycaprolactam, Kapron fiber, free radical

ABSTRACT: Experiments on the photochemically initiated graft copolymerization of [illegible] to polycaprolactam (Kapron) fiber were carried out to study the [illegible] efficiency of the process. [illegible] polymer, the reaction [illegible] temperature, and increased linearly with the rate of the

L 25772-65

ACCESSION NR: AT5002666

... The quantum yield of the process, calculated per amount of ... cleavage of C-N bonds and formation ... radicals have- ... $CH_2$-$CH_2$- and $CH_2CH_2CO$. Orig. art. has: 2 figures and 5 formulas.

... khimii vysokomolekulyarnykh soyedineniy AN UkrSSR (High ... molecular Institute, AN UkrSSR)

L 51868-65 EWT(m)/EPF(c)/EWG(v)/EPR/EWP(j)/T Pc-4/Pe-5/Pr-4/Ps-4/Pi-4 RPL
AM6/JW, GD, RM

ACCESSION NR: AT5002667 S/0000/64/000/000/0115/0121

[illegible] A. A.; [illegible]

[illegible]

[illegible] AN UkrSSR, Institut khimii vysokomolekulyarnykh soyedineniy. Sintez [illegible]

[illegible] abstract states [illegible]

[illegible]

[illegible]

[illegible] acrylonitrile copolymer, caprone fiber, [illegible] swelling, ultra- [illegible], photochemical [illegible]

[illegible] kinetics

[illegible] continuing previous experiments, which established [illegible] radiolysis [illegible] acrylonitrile to a caprone fiber [illegible] was analyzed [illegible] acrylonitrile, [illegible]

$$x = \frac{2.3K_p\mu_x}{K_0}\lg(K_0C_i + 1)_0$$

Card 1/2

ACCESSION NR: AT5002667

...makes it possible to calculate the ...

... (apparent), ...

... Chemistry of High Polymers, ...

ENCL: 00

OTHER: 000

KORNEV, K.A. [Korniev, K.A.]; GNYP, N.P. [Hnyp, N.P.]; KACHAN, A.A. [Kachan, O.O.]; CHERVYATSOVA, L.L.

Photochemical graft copolymerization of acrylonitrile to capron fiber. Dop. AN URSR no.2:224-226 '64. (MIRA 17:5)

1. Institut khimii polimerov i monomerov AN UkrSSR. 2. Chlen-korrespondent AN UkrSSR (for Kornev).

ACCESSION NR: AP4043733 S/0021/64/000/008/1080/1084

AUTHOR: Kornyev, K. A. (Kornev, K. A.)(Corresponding member AN UkrSSR); Yancheva'ky'y, V. A. (Yanchevskiy, V. A.); Gryekov, A. P. (Grekov, A. P.)

TITLE: Kinetics of the polycondensation of dihydroxylic acid dihydrazides with dicarboxylic acids

SOURCE: AN UkrRSR. Dopovidi, no. 8, 1964, 1080-1084

TOPIC TAGS: polycondensation, polycondensation kinetics, sebacic acid dihydrazide, sebacic acid, adipic acid, polyazide

ABSTRACT: The kinetics of the polycondensation of sebacic acid dihydrazide with adipic or sebacic acid in m-cresol has been studied at 140, 160, and 180C. The study was undertaken because polyazides of carboxylic acids exhibit valuable properties (stability to acids, alkalis, and organic solvents and heat resistance) and form fibers and films and because of the absence of data on the kinetics of this polycondensation. The study showed that the polycondensation obeys a second-order equation and proceeds through the step of the forma-

Card 1/2

ACCESSION NR: AP4043733

tion of the reaction products of one molecule of the dihydrazide with one molecule of the acid ("dimer" step). The rate constants, the activation energies, and the entropies of activation of the "dimer" and "polymer" steps were determined. Orig. art. has: 2 figures and 1 table.

ASSOCIATION: Instytut khimiyi polimeriv i monomeriv AN UkrSSR (Institute of the Chemistry of Polymers and Monomers, AN UkrSSR)

SUBMITTED: 06Dec63 ENCL: 00

SUB CODE: OC, GC NO REF SOV: 008 OTHER: 004

Card 2/2

GREKOV, A.P.; YANCHEVSKIY, V.A.; KORNEV, K.A.

Quantitative determination of hydrazides of dibasic carboxylic acids by potentiometric titration with sodium nitrite. Zhur. anal. khim. 19 no.2:260-261 '64.

(MIRA 17:9)

1. Institut khimii polimerov i monomerov AN UkrSSR, Kiyev.

SHILOV, S.V.; TSYPINA, O.N.; KORNEV, K.A.

Improving the adhesion of bitumen and stone materials. Avt. dor. 27 no.7:19 Jl '64. (MIRA 17:12)

L 63588-65 EPF(c)/EWP(j)/EWA(c)/EWT(m) Pc-4/Pr-4 RPL RM/GS

ACCESSION NR: AT5002655 S/0000/64/000/000/0010/0015

25
B+1

AUTHOR: Smirnova-Zamkova, S. Ye.; Kornev, K. A.; Mikhaylova, M. D.

TITLE: Polyamides based on aliphatic-aromatic diamines with methoxy groups in the benzene ring

SOURCE: AN UkrSSR. Institut khimii vysokomolekulyarnykh soyedineniy. Sintez i fiziko-khimiya polimerov; sbornik statey po rezul'tatam nauchno-issledovatel'skikh rabot (Synthesis and physical chemistry of polymers; collection of articles on the results of scientific research work). Kiev, Naukova dumka, 1964, 10-15

TOPIC TAGS: interphase condensation, polyamide synthesis, methoxy group substitution, xylylene diamine, dicarboxylic acid, diamine condensation, polyamide solubility, polyamide thermal stability

ABSTRACT: The authors synthesized 42 new polyamides by interphase (water-benzene) condensation polymerization (of aliphatic or aromatic dicarboxylic acids with o-, m- or p-xylylene diamines containing methoxy substituents in the aromatic ring) to clarify the effect of methoxy groups on the solubility and thermal stability of polyamides. It was shown that the solubility was not increased significantly by the substitution of methoxy for methyl

Card 1/2

L 63588-65

ACCESSION NR: AT5002655

groups. The melting point dropped sharply when methoxy groups were introduced into the automatic ring of p-xylylene diamine; for m-xylylene diamine, however, it remained unchanged or even rose somewhat. Orig. art. has: 4 tables.

ASSOCIATION: Institut khimii vysokomolekulyarnykh soyedineniy AN UkrSSR (Institute of the Chemistry of High Polymers, AN UkrSSR)

SUBMITTED: 22Jun64 ENCL: 00 SUB CODE: OC,GC

NO REF SOV: 003 OTHER: 004

Card 2/2

SARZHEVSKAYA, V.P.; KORNEV, K.A.; SMIRNOVA-ZAMKOVA, S.Ye.; LEVIN, S.Z.; KUCHINSKIY, V.N.; GRIZ, V.Ye.

Polyamides with aromatic and heterocyclic links in the chain. Part 5: Polyamides based on bis-(4-aminocyclohexyl) methane and some heterocyclic dicarboxylic acids. Ukr. khim. zhur. 30 no.1:83-86 '64. (MIRA 17:6)

1. Institut khimii polimerov i monomerov AN UkrSSR i Vsesoyuznyy institut neftekhimicheskikh protsessov.

ACCESSION NR: AP4021980 S/0073/64/030/002/0208/0211

AUTHOR: Smirnova-Zamkova, S. Ye.; Kornev, K. A.; Mikhaylova, M. D.

TITLE: Polyamides with aromatic and heterocyclic rings in the chain. VI. Polyamides based on cis- and trans-cyclohexane-1, 4-dicarboxylic acids and aliphatic-aromatic diamines.

SOURCE: Ukrainskiy khimicheskiy zhurnal, v. 30, no. 2, 1964, 208-211

TOPIC TAGS: polyamide, aromatic polyamide, alkyl substituted aromatic polyamide, spatial configuration, stereoisomer, stereoisomeric polyamide, solubility, thermal stability, melting point, cyclohexane dicarboxylic acid, heterocyclic polyamide

ABSTRACT: The effect of the spatial configuration of cyclohexane-1, 4-decarboxylic acid stereoisomers on the properties of their derivatives was investigated. Polyamides were prepared by interphase polycondensation of the chloroanhydrides of cis- and trans-cyclohexane-1 4-dicarboxylic acid with hexamethylenediamine and with the following aliphatic-aromatic diamines: p-xylylenediamine, 2,4-di-(aminomethyl)-toluene, 4,6-di-(aminomethyl)- m-xylene, 4,4'-di-(aminomethyl)-diphenyl ether and 2,5-di-(aminomethyl)- thiophene. The stereoisomeric polyamides

Card 1/2

ACCESSION NR: AP4021980

differ by their external appearance, their solubility and thermal stability. The cis- isomers have a lower fusion temperature (usually over 100C lower) and give thermally stable melts. "We express appreciation to S. Z. Levin (VNIINeftekhim) for supplying the dimethyl ethers of cyclohexanedicarboxylic acid." Orig. art. has: 2 tables.

ASSOCIATION: Institut khimii polimerov i monomerov AN UkrSSR(Institute of Polymer and Monomer Chemistry AN UkrSSR)

SUBMITTED: 29Mar63 DATE ACQ: 09Apr64 ENCL: 00

SUBCODE: CH NO REF SOV: 007 OTHER: 010

Card 2/2

ACCESSION NR: AP4021981 S/0073/64/030/002/0211/0216

AUTHOR: Smirnova-Zamkova, S. Ye.; Kornev, K.A.; Chernyavskaya, G. A.

TITLE: Polyamides with aromatic and heterocyclic rings in the chain. VII. Polyamides based on di-(aminomethyl)-toluene and di-(aminomethyl)-xylene

Source: Ukrainskiy khimicheskiy zhurnal, v. 30, no. 2, 1964, 211-216

TOPIC TAGS: polyamide, aromatic polyamide, heterocyclic polyamide, alkyl aromatic polyamide, aminomethylation, diamine synthesis, diamine characterization, melting point, steric hindrance, molecular symmetry, proof of structure, interphase polycondensation

ABSTRACT: Polyamides condensed from the chloranhydrides of certain dicarboxylic acids were characterized. 2,4-di-(aminomethyl)-toluene, 4,5-di-(aminomethyl)-o-xylene, 4,6-di-(aminomethyl)-m-xylene and 2,5-di-(aminomethyl)-p-xylene were synthesized by aminomethylating aromatic compounds:

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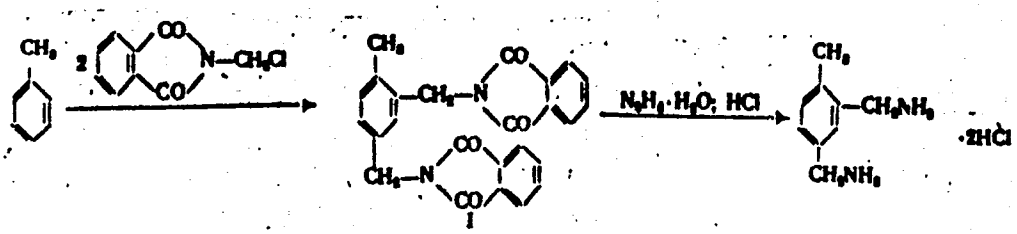
ACCESSION NR: AP4021981



These diamines were characterized by their dibenzoyl derivatives and their dipicrates. Their structure was proven by oxidation to the corresponding acid and identification of the methyl ester. Polyamides were prepared from these diamines by interphase polycondensation with the chloranhydrides of the following dicarboxylic acids: adipic, pimelic, azelaic, sebacic, isophthalic and terephthalic. the melting point of the polyamides depends little on the nature of the acid component. Introduction of the methyl groups into the aromatic diames of different structure has different effects on the melting point of the polyamides: it lowers

Card 2/3

ACCESSION NR: AP4021981

the melting point of p-xylylenediamine and raises that of the m-xylylenediamine. The causes for this are explained on the basis of symmetry and steric hindrance in the molecules. Orig. art. has: 1 figure, 7 tables, 1 equation and 3 formulas.

ASSOCIATION: Institut khimii polimerov i monomerov AN UkrSSR (Institute of Polymers and Monomers Chemistry, AN UkrSSR)

SUBMITTED: 29Mar63 DATE ACQ: 09Apr64 ENCL: 00

SUB CODE: CH NO. REF. SOV:007 OTHER: 019

Card 3/3

ACCESSION NR: AP4021982 S/0073/64/030/002/0217/0219

AUTHOR: Sarzhevskaya, V. P.; Kornev, K. A.; Smirnova-Zamkova, S. Ye.

TITLE: Polyamides with aromatic and heterocyclic rings in the chain. VIII. Polyamides based on certain aliphatic-aromatic diamines and pyridine dicarboxylic acid.

SOURCE: Ukrainskiy khimicheskiy zhurnal, v. 30, no. 2, 1964, 217-219

TOPIC TAGS: polyamide, aromatic polyamide, heterocyclic polyamide, interphase polycondensation, melting point, pyridine dicarboxylic diamide, property, solubility, molecular symmetry

ABSTRACT: This is a continuation of a series of works on determining and explaining the properties of polyamides containing heterocyclic groups in the basic chain. Polyamides of pyridine-2,5- and pyridine-2,6-dicarboxylic acids were prepared by interphase polycondensation with 2,5-di (aminomethyl)-p-xylene (p-XY), 4,6-di-(aminomethyl)-m-xylene (m-XY), 2,5-di- (aminomethyl)-thiophene (TF), p-xylylene-diamine (p-XD), 4,4'-di (aminomethyl)-diphenylether (DFE), 4,4'-di- (aminomethyl)-diphenylmethane (DFM), 4,4'-di- (aminomethyl)-diphenyl (DiF). The more densely

Card 1/2

ACCESSION NR: AP4021982

packed symmetrical pyridine-2,5-diamides are higher melting and less soluble . The temperature increase within the series depends on the structure of the diamine component. For the pyridine-2,5- derivatives the temperature increases in the series: p-XY, m-XY, TF, DFM, DFE, DiF (highest melting). This relationship does not hold true for the pyridine-2,6-diamides. Orig. art. has: 2 tables and 1 figure.

ASSOCIATION: Institut khimii polimerov i monomerov AN UkrSSR(Institute of Polymer and Monomer Chemistry AN UkrSSR)

SUBMITTED: 06Apr64 DATE ACQ: 09Apr64 ENCL: 00

SUB CODE: CH NO. REF SOV: 005 OTHER: 000

Card 2/2

ACCESSION NR: AP4037056 S/0073/64/030/005/0499/0502

AUTHOR: Sarzhevskaya, V. P.; Kornev, K. A.; Smirnova-Zamkova, S. Ye.

TITLE: Polyamides with aromatic and heterocyclic rings in the chain. IX. Polyamides based on furan-2,5- and thiophene-2,5-dicarboxylic acids and some aryl -aliphatic diamines

SOURCE: Ukrainskiy khimicheskiy zhurnal, v. 30, no. 5, 1964, 499-502

TOPIC TAGS: furan polyamide, thiophene polyamide, aromatic ring, heterocyclic ring, furan ring, thiophene ring, aliphatic diamine

ABSTRACT: The authors refer to their previous work, where they ascertained that the substitution of the furan for the thiophene ring in the acid component results in notably lowered melting point of polyamides based on aliphatic diamines. The present article is a study of the same situation with aryl -aliphatic diamines. Polyamides were prepared by interphase polycondensation from hydrochloric salts of aryl -aliphatic diamines and chloroanhydrides of furan-2,5- and thiophene-2,5-dicarboxylic acids. The following diamines were used in these condensations: p-xylylenediamine, 2,5-di-(aminomethyl)-p-xylene, 4,6-di-(aminomethyl)-m-xylene,

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ACCESSION NR: AP4037056

2,5-di-(aminomethyl)-thiophene, 4, 4'-di-(aminomethyl)diphenyl ether, 4,4'-di-(aminomethyl)diphenylmethane and 4,4'-di-(aminomethyl)-diphenyl. The polycondensation compounds have not been described before. It was found that the polyamides of furan-2,5- and thiophene-2,5-dicarboxylic acids with the above diamanines are less heat resistant than the corresponding polyterephthalamides. However, their solubility is better due to the presence of dicartoxylic acids. Orig. art. has: 1 figure and 3 tables.

ASSOCIATION: Institut khimii monomerov i polymerov AN UkrSSR (Institute of Monomer and Polymer Chemistry, AN UkrSSR)

SUBMITTED: 22May63 DATE ACQ: 05Jun64 ENCL: 00

SUB CODE: OC NO REF SOV: 003 OTHER: 002

Card 2/2

L 25238-65 EWG(j)/EWG(r)/EWT(m)/EPF(c)/EPF(n)-2/EPR/EWP(j)/T/EWA(h)/EWA(1)
Pc-4/Pe-5/Pr-4/Ps-4/Pu-4/Peb RPL GG/RM/WW

ACCESSION NR: AP5002760 S/0073/64/030/012/1318/1321

AUTHOR: Kornev, K.A.; Kachan, A.A.; Chervyatsova, L.L.; Polak, L.S.; Mertvichenko, Ye. F.; Demchenko, S.S.

TITLE: Kinetics of the radiochemical graft copolymerization of acrylonitrile with capron fiber

SOURCE: Ukrainskiy khimicheskiy zhurnal, v. 30, no. 12, 1964, 1319-1321

TOPIC TAGS: vapor seeding copolymerization, capron fiber, acrylonitrile vapor, copolymerization constant, radiation polymerization, graft copolymer, polyacrylonitrile

ABSTRACT: Degreased, drawn, capron fiber was irradiated ($Co^{60}$ source, 1600 curies, 100 rad/sec, $10^{-3}$ mm Hg, room temperature, 0.25 Mrad) and exposed to an acrylonitrile vapor at 80 mm pressure in a study of the kinetics of vapor seeding graft copolymerization which does not involve formation of a homopolymer. Graphs illustrate the effects of temperature (22-60C, 0-24 hrs), radiation dosage (0-20 Mrad) and monomer vapor pressure (30-80 mm Hg, 0-10 hrs). The authors calculated constants for the rate of chain growth, rate of chain disruption, the apparent activation energy (1.9 Kcal/mol), activation energy of chain growth and chain disruption, the average distance between initiation centers (120 A) and the average lengths of chains. An increase in monomer

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L 25238-65

ACCESSION NR: AP5002750

vapor pressure led to an increase in the quantity of copolymerized polyacrylonitrile. An increase in temperature decreased the amount of copolymerization, while an increase in radiation dosage above 2 Mrad had little effect. "The authors are indebted to A. Ya. Rozovskiy for participating in the evaluation of the results". Orig. art. has: 4 figures and 1 formula.

ASSOCIATION: Institut vysokomolekulyarnykh soyedineniy AN SSSR (High polymer institute, AN SSSR)

SUBMITTED: 25Dec63 ENCL: 00 SUB CODE: OC

NO REF SOV: 003 OTHER: 005

Card 2/2

LITVINENKO, L.V. [Lytvynenko, L.V.]; KOVARSKAYA, B.M. [Kovars'ka, B.M.] kand. tekhn. nauk; KORNEV, K.A. [Korniev, K.A.], doktor khim. nauk

Thermomechanical properties of epoxy resins based on diglycide esters, diglycide ethers and phthalic anhydride. Khim. prom. no.4:10-12 O-D '64. (MIRA 18:3)

SMIRNOVA-ZAMKOVA, S.Ye.; KORNEV, K.A.; BURMAKOV, A.I.; SHAMIS, Ye.M.

Polyamides with aromatic and heterocyclic links in the chain. Part 10: Effect of C-methylation on the properties of aliphatic-aromatic polyamides. Ukr. khim. zhur. 30 no.8:856-859 '64. (MIRA 17:11)

1. Institut khimii vysokomolekulyarnykh soyedineniy AN UkrSSR.

KORNEV, K.A., doktor khim. nauk, glav. red.; BYCHKOVA, R.I., red.

[Modification of the properties of polymers and polymeric materials] Modifikatsiia svoistv polimerov i polimernykh materialov; Kiev, Naukova dumka, 1965. 150 p.
(MIRA 19:1)

1. Akademiya nauk URSR, Kiev.

YANCHEVSKIY, V.I.; GREKOV, A.P.; KURNEV, K.A.

Reactions of condensation with hydrazine derivatives. Part 1: Kinetics of aliphatic dicarboxylic acid reactions with dihydrazide of sebacic acid in m-cresol. Zhur. org. khim. 1 no.1:40-44 Ja '65. (MIRA 18:5)

1. Institut khimii polimerov i monomerov AN UkrSSR.

L 23064-65 EWG(j)/EWT(m)/EPF(c)/EPF(n)-2/EWP(j)/T/EWA(h)/EWA(l) Pc-4/Pr-4/Pu-4/Peb GG/RM

ACCESSION NR: AP5004249 S/0021/65/000/001/0064/0066

AUTHOR: Kostyl'ova, Z. O. (Kostyleva, Z. A.); Kornyev, K. A. (Kornev, K. A.) (Corresponding member UkrSSR); Kachan, O. O. (Kachan, A. A.); Chervyatsova, L.L.; Pazenko, Z. N. (Pazenko, Z. N.)

TITLE: The radiation chemical linking of polystyrene by linking agents

SOURCE: AN UkrRSR. Dopovidi, no. 1, 1965, 64-66

TOPIC TAGS: triallyl isocyanurate, irradiation in air, elastic state cross linking

ABSTRACT: The efficacy of using triallyl isocyanurate (TAIC) in radiational chemical cross linking of polystyrene was established. It is shown that polystyrene is practically completely linked on adding 20 p.c. TAIC and irradiating in air with a dose of 50 megarads. The cross-linked polymer retains a highly elastic state up to a temperature of 300°C. Orig. art. has: 3 figures and 1 table.

ASSOCIATION: Instytut khimiyi vysokomolekulyarnykh spoluk (Institute of Chemistry of High Molecular Compounds)

Card 1/2

L 23064-65

ACCESSION NR: AP5004249 0

SUBMITTED: 26Mar64 ENCL: 00 SUB CODE: OC, GC

NO REF SOV: 005 OTHER: 002

Card 2/2

L 16173-66 EWT(m)/EWP(j)/T WW/RM

ACC NR: AP5025346 SOURCE CODE: UR/0366/65/001/010/1742/1743

AUTHOR: Chovnik, L. I.; Pazenko, Z. N.; Kornev, K. A.; Khomenkova, K. K. 63 60 B

ORG: Institute of Chemistry of High-Molecular-Weight Compounds, Academy of Sciences, Ukrainian SSR (Institut khimii vysokomolekulyarnykh soyedineniy Akademii nauk Ukrainskoy SSR)

TITLE: Synthesis of 5-alkyl-1,3-diallylisocyanurates

SOURCE: Zhurnal organicheskoy khimii, v. 1, no. 10, 1965, 1742-1743

TOPIC TAGS: copolymerization, copolymer, polymer, heat resistance, chemical reaction, heterocyclic base compound

ABSTRACT: The title compounds (I) are heavy liquids of a characteristic odor; they are of interest as potential grafting agents for the production of heat-resistant copolymers. The syntheses were carried out by the reaction of an alkyl bromide with a Na salt of a diallylisocyanurate in $HCONMe_2$. E. g., 41.8 g diallylisocyanurate (see Franzier T.C., et al., J. Org. Ch. 25, 1944, 1960) was

Card 1/2 UDC: 547.491.3

L 16173-66

ACC NR: AP5025346

3

mixed with 130 ml water, 8 g NaOH were added, and the mixture was heated, filtered, and evaporated. The residue was dried at 90C to yield 45 g 1,3-diallylisocyanurate Na salt. This (56 g) was dissolved in $HCONMe_2$ and the hot solution treated with 35 g PrBr. After 3-5 minutes of heating, NaBr was filtered off, and the filtrate evaporated under reduced pressure to give 56 g 5-propyl-1,3-diallylisocyanurate. Similarly were synthesized the following I (alkyl, % yield, b.p.C/mm, $n_D^{20}$, $d^{20}$ given): methyl, -, 124/2, 1.5145, 1.1956; ethyl, 94, 113/0.5, 1.5145, 1.1956; propyl, 90, 136/2, 1.5000, 1.1443; butyl,72, 140/2, 1.4970, 1.1248; isobutyl, 67, 139/1 (m.p. 26),-, -; amyl, 82, 136/1 (m.p. 16), 1.4962,-; hexyl, 79, 156/2, 1.4940, 1.0909; heptyl, 89, 146/1, 1.4919, 1.0720; octyl, 96, 164/2, 1.4900, 1.0560; nonyl, 167/2, 1.4890, 1.0466; decyl, 58, 172/2, 1.4879, 1.0305. All the compounds synthesized were capable of copolymerization. Orig. art. has: 1 table.

14455

SUB CODE: 07/ SUBM DATE: 09Sep64/ ORIG REF: 001/ OTH REF: 003

Card 2/2

KAURKOVA, G.K. [Kaurkova, H.K.]; KACHAN, A.A., kand.khim.nauk; KORNEV, K.A. [Korniev, K.A.], doktor khim.nauk; CHERVYATSOVA, L.L. [Cherviatsova, L.L.], kand.khim.nauk

Using the method of photochemical cross-linking in the presence of sulfur monochloride to increase the resistance to heat of polyethylene. Khim.prom. [Ukr.] no.2:8-9 Ap-Je '65. (MIRA 18:6)

L 36289-65 EWT(m)/EWP(j) Pc-4 RM

ACCESSION NR: AP5008148 S/0286/65/000/005/0024/0024

AUTHORS: Grekov, A. P.; Kornev, K. A.; Yanchevskiy, V. A.

TITLE: A method for purifying ε-caprolactam. Class 12, No. 168705

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 5, 1965, 24

TOPIC TAGS: caprolactam, monomer, acetic anhydride, acetic acid, sodium hydroxide

ABSTRACT: This Author Certificate introduces a method for purifying ε-caprolactam by distillation in a vacuum, preceded by a chemical treatment with acid and alkaline agents. To increase the degree of purity of the monomer, the commercial product is treated at the temperature of 95C with a mixture of acetic anhydride, acetic acid, and solid sodium hydroxide. These reagents are used in the amounts of 0.5%, 0.25%, and 2% by the weight of caprolactam.

ASSOCIATION: none

SUBMITTED: 18Apr62 ENCL: 00 SUB CODE: OC

NO REF SOV: 000 OTHER: 000

Card 1/1

L 27198-65 EWG(j)/EWT(m)/EPF(c)/EPF(n)-2/EWP(j)/T/EWA(h)/EWA(l) Pc-4/Pr-4/Peb/Pu-4 GG/RM

ACCESSION NR: AP5003841 S/0190/65/007/001/0183/0183

AUTHORS: Kaurkova, G. K.; Kachan, A. A.; Kornev, K. A.; Chervyatsova, L. L.

TITLE: Radiation chemical cross-linking of polyethylene

SOURCE: Vysokomolekulyarnyye soyedineniya, v. 7, no. 1, 1965, 183

TOPIC TAGS: polyethylene, radiation polymerization, gamma radiation, sulfur monochloride, polymer, polyolefin

ABSTRACT: Starting with the premise that radiation chemical cross-linking of polyethylene takes place at relatively large doses of γ-radiation (up to 100 Mrad), the authors show that by using 5-10% sulfur monochloride a practically complete cross-linking (up to 99%) of polyethylene is attained with doses of 0.1 Mrad. The sulfur monochloride was introduced into the polymer from the vapor phase, and the irradiation was performed at room temperature with doses of 100 rad/second. The modified polyethylene turned out to be approximately 10% stronger than the ordinary polymer at room temperature. With a rise in temperature, the difference between the two polyolefins increased as shown in Fig. 1 on the Enclosure. It was also found that during the cross-linking process the atoms of sulfur from

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L 27198-65
ACCESSION NR: AP5003841

$S_2Cl_2$ embed themselves into the high-molecular weight compound, apparently forming bonds (according to ultraviolet absorption spectra) of monosulfidic character between macromolecular chains. The radiation chemical yield of the process was $1.25 \times 10^3$. Orig. art. has: 1 figure.

ASSOCIATION: none

SUBMITTED: 03Aug64 ENCL: 00 SUB CODE: OC, GC

NO REF SOV: 000 OTHER: 000

Card 2/3

L 27198-65

ACCESSION NR: AP5003841

ENCLOSURE: 01

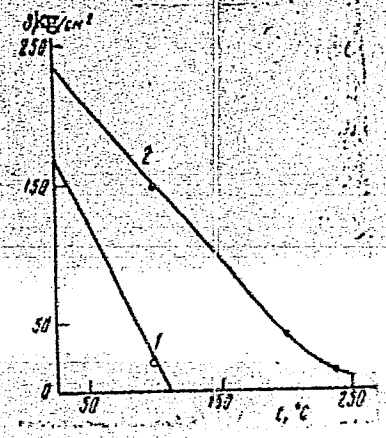


Fig. 1. Tensile strength of original polyethylene films (1) and of polyethylene films cross-linked in the presence of 10% $S_2Cl_2$ with $\gamma$-rays with a 0.1 Mrad dose (2) in relation to temperature

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L 42974-66 EWT(m)/EPF(n)-2/EWP(j)/T/EWA(h)/EWA(1) GG/RM/GS

ACC NR: AT6006242 (A) SOURCE CODE: UR/0000/65/000/000/0037/0042

AUTHOR: Dubrova, L. N.; Kachan, A. A.; Loktionova, R. A.; Chervyatsova, L. L.; Kornev, K. A. (Doctor of chemical sciences)

ORG: Institute of Chemistry of High Molecular Compounds, AN UkrSSR, Kiev (Institut khimii vysokomolekulyarnykh soyedineniy AN UkrSSR)

TITLE: Radiochemical polymerization of allyl esters of certain N-methylol derivatives of acid amides

SOURCE: AN UkrSSR. Modifikatsiya svoystv polimerov i polimernykh materialov (Modification of the properties of polymers and polymeric materials). Kiev, Naukova dumka, 1965, 37-42

TOPIC TAGS: radiation polymerization, organic amide, IR spectrum

ABSTRACT: Allyl esters of N-methylol derivatives of acetamide, chloroacetamide, and benzamide were polymerized both in the pure state and in benzene and methanol solutions by irradiation with $Co^{60}$ gamma rays. Formation of the polymer was determined visually and also by means of viscosity and IR spectral measurements. In benzene

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Card 2/2 MLP

L 25465-65 EWT(m)/EPF(c)/EPR/EWP(j)/T Pc-4/Pr-4/Ps-4 RPL WW/RM

ACCESSION NR: AP5005594 S/0190/65/007/002/0255/0258

AUTHORS: Grekov, A. P.; Sukhorukova, S. A.; Kornev, K. A.

TITLE: Polymerization of ε-caprolactam in the presence of polyoctamethylenamino-1,2,4-triazole

SOURCE: Vysokomolekulyarnyye soyedineniya, v. 7, no. 2, 1965, 255-258

TOPIC TAGS: caprolactam, polymerization

ABSTRACT: The polymerization of ε-caprolactam in the presence of different amounts of polyoctamethylenamino-1,2,4-triazole (PAT) as a function of its polymerization constant was investigated at temperatures of 235-280C. The PAT was prepared by the method described by A. P. Grekov, S. A. Malyutenko, and K. A. Kornev (Sintez i fiziko-khimiya polimerov, Izd. AN UkrSSR, 1964) and was heated with ε-caprolactam. After a time, the polymerization was interrupted and 1.5-g samples were boiled in 200 ml water for 2 hours. The insoluble portion was dried at 100C, and its characteristic viscosity was determined in $H_2SO_4$ at 25C. By performing some auxiliary reactions, it was found that only the end groups of the PAT appear as polymerization initiators. The yield was found to be 92-95%, with an induction period which decreased from about 20 to 2 hours as the PAT content

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L 35485-65

ACCESSION NR: AP5005594

was increased from 0.5 to 20% mol (at 250C). The characteristic viscosity reached a maximum after the induction period and remained about constant after that ($\eta \leq 1.5$ for PAT = 0.5%; $\approx 0.8$ for 10%). Increasing the reaction temperature from 235 to 280C reduced the induction period from $\approx 20$ to $\approx 10$ hours, but left the yield essentially the same. It was found that the yield and the characteristic viscosity of the copolymer behaved linearly as a function of PAT viscosity (at 250C), decreasing from 75-45% and increasing from 1.5 to 3 respectively as PAT viscosity was increased from 0.3 to 0.6 (2% mol. PAT). Thus the yield and characteristic viscosity of the copolymer depend on the polymerization coefficient of PAT. Orig. art. has: 6 figures.

ASSOCIATION: Institut khimii polimerov i monomerov AN UkrSSR (Institute of Polymer and Copolymer Chemistry, AN UkrSSR)

SUBMITTED: 11Apr64 ENCL: 00 SUB CODE: OC

NO REF SOV: 002 OTHER: 004

Card 2/2

KAURKOVA, G.K. [Kaurkova, H.K.]; KACHAN, O.O.; KORNEV, K.A. [Kornlev, K.A.]; CHERVYATSOVA, L.L.

Radiation-induced chemical cross-linking of polyolefins in the presence of sulfur monochloride. Dop. AN URSR no.9:1183-1186 '65. (MIRA 18:9)

1. Institut khimii vysokomolekulyarnykh soyedinenly AN UkrSSR.
2. Chlen-korrespondent AN UkrSSR (for Kornev).

L 42146-65 EPF(c)/EWP(j)/EWA(c)/EWT(m)/T Pc-4/Pr-4 RM S/0073/65/031/003/0290/0297

ACCESSION NR: AP5008859

23
21
B

AUTHORS: Yanchevskiy, V. A.; Grekov, A. P.; Kornev, K. A.

TITLE: Condensation reactions with hydrazine derivatives. 1. Kinetics of the reaction between sebacic acid dihydrazide and sebacic acid in m-cresol

SOURCE: Ukrainskiy khimicheskiy zhurnal, v. 31, no. 3, 1965, 290-297

TOPIC TAGS: condensation reaction, dihydrazide, sebacic acid

ABSTRACT: The authors have studied the semicondensation reaction of sebacic acid dihydrazide and sebacic acid in m-cresol at 140, 160, and 180C. A method for measuring the rate of the semicondensation reactions between acid hydrazides and dibasic carboxylic acids was worked out. Solutions of dihydrazide and acid are held at the specified temperature for 15 minutes and are then decanted with active shaking. The beginning of the reaction is taken as the end of the decanting process. The reaction is stopped at any particular moment by pouring the solution into boiling benzene of 10 to 15 times the volume. The reaction components precipitate quantitatively and are filtered off and washed. The filtrate is then boiled with 100-150 ml of water for 15 minutes; 15 ml of 3N HCl is then added and the mixture cooled. The polymer sediment is filtered off, washed in water, dried, and weighed. The solution retains the dihydrazide and acid that have not reacted, and also

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ACCESSION NR: AP5008859

retains the dimer. The amount of dihydrazide and dimer may be determined by potentiometric titration with sodium nitrate. It is shown that the semicondensation reaction takes place in two stages, subject to a second-order kinetic equation. The rate of polymer formation is much less than the rate of dimer formation. The difference is pronounced at low degrees of semicondensation. As the chains increase in length, the rate of formation asympotically approaches the value for polymer formation. The difference in rate of formation is apparently due to differences in reactivity of the functional groups of sebacic acid. Orig. art. has: 6 figures, 3 tables, 13 equations, and 2 formulas.

ASSOCIATION: Institut khimii vysokomolekulyarnykh soyedineniy AN UkrSSR (Institute of the Chemistry of High-Molecular Compounds AN UkrSSR)

SUB CODE: GC, OC

Card 2/2

L 22747-66 EWT(m)/EWP(j)/T RM
ACC NR: AP6010114 (A) SOURCE CODE: UR/0190/66/008/003/0490/0498

AUTHORS: Yanchevskiy, V. A.; Grekov, A. P.; Kornev, K. A.

ORG: Institute of Chemistry of High-Molecular Compounds, AN SSSR (Institut khimii vysokomolekulyarnykh soyedineniy AN SSSR)

TITLE: Investigation of ε-caprolactam polymerization in the presence of hydrazides of carboxylic acids

SOURCE: Vysokomolekularnyye soyedineniya, v. 8, no. 3, 1966, 490-498

TOPIC TAGS: carboxylic acid, caprone, hydrazide, polymerization, entropy, kinetic equation, autocatalysis, activation energy, polymerization initiator

ABSTRACT: Polymerization of ε-caprolactam in the presence of hydrazides of carboxylic acids at temperatures of 230-270C has been investigated. In all cases, the reaction was established to be of autocatalytic nature. The kinetics of ε-caprolactam polymerization in the presence of polymerization initiators is described with first-order equations for the reversible reactions. The rate constants, energies, enthropies of activation, and frequency factors were determined. The probable reaction mechanism of ε-caprolactam polymerization in the

Card 1/2 UDC: 66.095.26+678.675

ACC NR: AP6010114

presence of hydrazides of carboxylic acids was suggested. Orig. art. has: 5 figures, 15 formulas, and 1 table. [Based on author's abstract] [NT]

SUB CODE: 07,11/ SUBM DATE: 05Apr65/ ORIG REF: 013/
OTH REF: 004/

Card 2/2 UDC

L 40004-66 EWT(m)/EWP(j)/T IJP(c) RM

ACC NR: AP6016482 (A) SOURCE CODE: UR/0021/66/000/005/0627/0628

AUTHOR: Novikova, O. A.; Kuznyetsova, V. N.—Kuznetsova, V. P.; Kornyev, K. A.—Kornev, K. A. (Corresponding member AN UkrSSR)

15
B

ORG: Institute of Chemistry of Macromolecular Compounds, AN UkrSSR (Institut khimii visokomolekulyarnikh spoluk AN URSR)

TITLE: Polymerization of triethylethynylsilane in the presence of $(C_2H_5)_3Al.TiCl_4$ as catalyst

SOURCE: AN UkrRSR. Dopovidi, no. 5, 1966, 627-628

TOPIC TAGS: polymer, polymerization catalyst, conjugated polymer, triple bond system, triethylethynylsilane

ABSTRACT: The article deals with the polymerization of triethylethynylsilane in the presence of $(C_2H_5)_3Al.TiCl_4$ as catalyst. The resulting polymers have molecular weight of the order of 1000, and are orange oil-like products. The infrared spectra confirm that polymerization is effected along the triple bond system, resulting in the formation of conjugated double bonds products. [Translation of authors' abstract] [AM]

SUB CODE: 07/ SUBM DATE: 13May65/ ORIG REF: 005/ OTH REF: 003

Card 1/1 mjs

ACC NR: AP7004062 SOURCE CODE: UR/0436/66/000/004/0019/0020

AUTHOR: [illegible] Kuzhar, I. Ye.



ORG: none

TITLE: Water-repellent impregnation of Kapron [polycaprolactam]

SOURCE: Khimicheskaya promyshlennost' Ukrainy, no. 4, 1966, 19-20

TOPIC TAGS: Kapron, stearic acid, amide, polycaprolactam

ABSTRACT: In addition to new derivatives of stearic acid, the authors studied the hydrophobic properties of derivatives of $C_{16}$-$C_{20}$ fatty acids, i. e., diamides of o- and m-phenylenediamine and certain diesters of stearic acid (p-stearylaminophenylethylene glycol, p- and m-nitrophenylethylene glycol). The Kapron fabric samples were immersed in a 1% solution of these substances, wrung out, dried at room temperature, and tested for water repellency. The contact angle of wetting was measured with a penetrometer. Almost all of the tested preparations showed water-repellent properties and surpassed preparation 101 (stearylamidomethylpyridinium chloride). The best properties were observed in the o- and p-isomers. In contrast to the toxic preparations 246 and 101 used in industry, the synthesized substances do not spoil the fabrics and do not decompose on heating. Orig. art. has: 1 table.

SUB CODE: 07/ SUBM DATE: none/ ORIG REF: 004

UDC: 677.494.6:677.862.513

Card 1/1

GORYACHKIN, M.I., kand.ekon.nauk, nauchnyy sotrudnik; RUSAKOV, G.K., kand.sel'skokhoz.nauk, nauchnyy sotrudnik; MASHKEVICH, M.G., kand.sel'skokhoz.nauk, nauchnyy sotrudnik; KLADCHIKOV, S.M., kand.sel'skokhoz.nauk, nauchnyy sotrudnik; NOVOZHILOV, V.F., kand.sel'skokhoz.nauk, nauchnyy sotrudnik; ALEKSANDROV, N.P., kand.sel'skokhoz.nauk; BUTKEVICH, B.G., kand.sel'skokhoz. nauk; KORNEV, K.G., kand.sel'skokhoz.nauk; GREBTSOV, P.P., red.; PEVZNER, V.I., tekhn.red.; TRUKHINA, O.N., tekhn.red.

[Plotting technological charts] Kak sostavit' tekhnologicheskie karty. Moskva, Gos.izd-vo sel'khoz.lit-ry, 1960. 78 p. (MIRA 14:2)

1. Moscow. Vsesoyuznyy nauchno-issledovatel'skiy institut ekonomiki sel'skogo khozyaystva. 2. Vsesoyuznyy nauchno-issledovatel'skiy institut ekonomiki sel'skogo khozyaystva (for Goryachkin, Rusakov, Mashkevich, Kladchikov, Novozhilov).
(Farm management)



SOV-99-58-8-9/11

AUTHOR: Kotelevtsev, V.V.

TITLE: The Water Resources of the Chinese People's Republic and their Utilization (Vodnyye resursy Kitayskoy Narodnoy Respubliki i ikh ispol'zovaniye)

PERIODICAL: Gidrotekhnika i melioratsiya, 1958, Nr 8, pp 45-61 (USSR)

ABSTRACT: With its 1,500 rivers, the Chinese People's Republic is the world's richest country with regard to water resources. The author enumerates a large number of Chinese rivers giving particulars with regard to their water supply. The number of lakes is comparatively small, although some have large dimensions. There is a huge number of artificial water reservoirs and ponds used mainly for the irrigation of rice fields. The author emphasizes the nation's hard struggle against floods and droughts during the past, and the great importance attached by the Communist Party and Government to the utilization of water resources for it's national economy, in particular for agriculture, and the prevention of floods. A magnificent project for the utilization of water resources will be realized during the 2nd 5-year plan (1958-1962). The author gives a summary of the enormous losses sustained by the country as a result of floods and erosion of fertile soil, pointing out the

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SOV-99-58-8-9/11

The Water Resources of the Chinese People's Republic and Their Utilization

For the period Oct 1957 to July 1958, an increase of 28,300,000 ha of irrigated land was achieved. The concluding chapter of the article deals with the utilization of China's hydroelectric resources, which according to a 1955 estimate, amounts to 544,000,000 kw, of 14.5 % of the world's water power. During the 8 years since China's liberation, 10 hydroelectric power plants with a total capacity of 520,000 kw have been erected and put in operation. Another 14 plants with a capacity of 2,700,000 kw are at present under construction. The location of some of the plants is indicated in the article. The author also mentions the proposed building of several plants, including the hydroelectric power plant Sanhsia (San'sya) with a capacity of 16-20,000,000 kw.
There are 17 photos.

1. Inland waterways--China 2. Agriculture--Applications 3. Floods --Control 4. Water--Availability

Card 3/3

KORNEV, K.S.

State Committee for Water Economy of the Council of Ministers of the R.S.F.S.R. and its tasks. Gidr. i mel. 13 no.6:63-64 Je '61.

1. Predsedatel' Gosudarstvennogo komiteta Soveta Ministrov RSFSR po vodnomu khozyaystvu.
(Water resources development)

KORNEV, K.V. (Leningrad, 18, Svetlanovskaya ul., d. 5, kv. 5)

Anatomical surgical prerequisites for reproduction of an experimental pattern of tuberculous spondylitis [with summary in English]. Vest.khir. 82 no.3:117-122 Mr '59. (MIRA 12:4)

1. Iz Leningradskogo nauchno-issledovatel'skogo instituta khirurgicheskogo tuberkuleza (dir. - prof. P.G. Kornev).
(TUBERCULOSIS, SPINAL, exper.
in dogs & rabbits (Rus))

KORNEV, K.V. (Leningrad, Svetlanovskaya ul., 5, kv.5)

Experimental model of tuberculous spondylitis. Vest.khir. 83 no.11: 12-17 N '59. (MIRA 13:4)

1. Iz Leningradskogo nauchno-issledovatel'skogo instituta khirurgicheskogo tuberkuleza (dir. - prof. P.G. Kornev).
(TUBERCULOSIS SPINAL experimental)

KORNEV, K. V., Cand Med Sci — (diss) "Experimental model of spondylitis tuberculosa," Leningrad, 1960, 22 pp, 300 cop. (State Institute for the Advanced Training of Physicians im S. M. Kirov) (KL, 45-60, 128)

UMILIN, V.A.; AGAFONOV, I.L.; KORNEV, L.N.; DEVYATYKH, G.G.

Mass spectra of a selenium-sulfur mixture. Zhur. neorg. khim. 9 no.10:2492-2493 O '64.

(MIRA 17:12)

KORNEV, L.P.; KRIVETSKIY, A.A.

Measuring the effective transmission band of resonance system frequencies. Izv. vys. ucheb. zav.; prib. 8 no.5:18-21 '65. (MIRA 18:10)

1. Leningradskoye vysshoye inzhenernoye morskoye uchilishche imeni admirala S.O. Makarova. Rekomendovana kafedroy teoriticheskoy radiotekhniki.

KORNEV, M. [Korneu, M.

A girl from Staraya Belitsa. Rab. i sial. 35 no.11:4-5 N '59.
(MIRA 13:3)

(Vitebsk--Electric instruments)
(Efficiency, Industrial)

KORNEV, M.

What were the results of flights with relief crews. Grazhd.av. 12 no.9:33 S '55. (MLRA 10:7)

(Aeronautics, Commercial)

SHVARTSBERG, S., inzh.; NOVIKOV, Ye., inzh.; SKVARCHEVSKIY, I.; KORNEV, M.; CHEBOTAYEV, A., inzh.

Exchange of experience. Avt.transp. 42 no.1:48-50 Ja '64. (MIRA 17:2)

KORNEV, M., komandir podrazdeleniya

Notes on flight skill. 3. Flight discipline. Grazhd.av. 14 no.2:17-18 F '57. (MLRA 10:5)

(Airplanes--Piloting)

KOROLEV, Ye.; KORNEV, M.

Precast mesh-reinforced concrete arch or shell with a span of 75 m. Na stroi. Ros. no.2:9-11 F '61. (MIRA 14:6)

1. Upravlyayushchiy trestom Krasnoyarskpromkhimstroy (for Korolev).
2. Glavnyy tekhnolog tresta Krasnoyarskpromkhimstroy (for Kornev).
(Roofs, Shell)
(Krasnoyarsk—Precast concrete construction)

KORNEV, M.

Stand for testing pumps of hydraulic hoists of dump trucks. Avt.-transp. 40 no.10:53 O '62. (MIRA 15:11)
(Dump trucks--Maintenance and repair)

KORNEV, M.

Common cause. Pozh.delo 9 no.5:4-5 My '63. My '63.
(MIRA 16:5)

1. Nachal'nik otryada okhrany Sokol'skogo tsellyulozno-bumazhnogo kombinata, Vologodskaya oblast'.
(Sokol (Vologda Province)--Woodpulp industry--Fires and fire prevention)

KOROLEV, Ye.; KORNEV, M.

Economical wide-span elements. Na stroi. Ros. 4 no.4:4-5 Ap '63. (MIRA 16:4)

1. Upravlyayushchiy trestom Krasnoyarskpromkhimstroy (for Korolev).
2. Glavnyy tekhnolog tresta Krasnoyarskpromkhimstroy (for Kornev).

(Krasnoyarsk—Chemical plants—Design and construction)
(Precast concrete construction)

GOROKHOV, I., inzh. (Zhdanov); GRANKOV, L., inzh. (Zhdanov); RAKHMANOV, N., inzh.-mayor, izobretatel'; BASKAKOV, Yu. (Chernogorsk); PERFIL'YEV, N. (Moskva); GLINCHEVSKIY, V. (Penza); KORNEV, M., inzh. (Kiyev); MIKHAREV, P., konstruktor (Orenburg*; D'YACHKOV, M. (Irkutsk)

How interesting! Izobr.i rats. no.1:19 '63. (MIRA 16:3)

1. Nachal'nik Penzenskogo byuro po delam ratsionalizatsii i izobretatel'stva (for Glinchevskiy).
(Technological innovations)

KORNEV, M. A.

"Regulation of the Performance of Mine Axial Ventilators." Thesis for degree of Cand. Technical Sci. Sub 30 Jun 50, Mining Inst. Acad Sci USSR.

Summary 71, 4 Sep 52, Dissertations Presented for Degrees in Science and Engineering in Moscow in 1950. From Vechernyaya Moskva, Jan-Dec 1950.

S/191/62/000/004/007/017
B110/B138

N.8170

AUTHORS: Sakhiyev, A. S., Frayman, R. S., Kornev, M. A.

TITLE: Electrostatic precipitator for removing solid impurities from the gases of alkyl and aryl chlorosilane syntheses

PERIODICAL: Plasticheskiye massy, no. 4, 1962, 19-21

TEXT: The electrostatic cleaning of gaseous methyl and phenyl chlorosilanes was studied on the apparatus shown in Fig. 1. Gas supply was checked on flow meter 2. The dust content of the gas flow before and after passing through, the filter was measured by means of outlets with adapters 12. Flow meter 13 measured the gas flow through 12. The electrostatic precipitator consisted of a tube 95 mm diam, and corona-discharge electrode 11, of Nichrome wire 3750 mm long and 1.8 mm diam, attached to Teflon insulator 7. High-voltage was supplied by a step-up-cum-rectifying system for full-wave rectification consisting of a high-voltage 220v/110kv transformer, four KP-110 (KR-110) high-voltage kenotrons, and four 220/12v filament transformers to the kenotrons, and the control panel. Rectification was carried out according to the Graetz

X

Electrostatic precipitator for...

temperature of the heat carrier was 200°C, and 250°C in the synthesis of phenyl chlorosilanes. The following data are given: voltage 30 kv, amperage 2 ma, rate of gas flow < 0.1 m/sec. The synthesis of methyl chlorosilanes took place at 5 atm gauge pressure and that of phenyl chlorosilanes at 1 atm gauge pressure. There are 4 figures and 2 tables.

Fig. 1. Diagram of setup used for investigating electrostatic precipitation of gaseous methyl and phenyl chlorosilanes.

Legend: (1) Supply tank, (2,13) direct-reading flow meters, (3) heater-evaporator, (4) reaction vessel, (6) outlet of ditolyl methane heat carrier, (7) Teflon insulator, (8) sylphon bellows, (9) stand, (10) vibrator, (11) corona-discharge electrode, (12) adapter, (14) condenser, (15) collecting vessel, (16) heat carrier inlet, (18) earth.

Fig. 4. Adapter.

Legend: (1) holder for adapter, (2) packings, (3) adapter, (4) electric heater, (5) insulation, (6) spring, (7) glass wool, (8) asbestos.

Card 3/4

SAKHIYEV, A.S.; FRAYMAN, R.S.; KORNEV, M.A.

Use of electrostatic precipitators for the removal of solid impurities from gases in the synthesis of alkyl- and arylchlorosilanes. Plast.massy no.4:19-21 '62. (MIRA 15:4)
(Gases--Purification) (Silicon organic compounds)

KORNEV, M. I.

KAZAK, A.S.; KORNEV, M.I.

Method for testing piston pump buckets. Neft. khoz. 34 no.12:21-25 D '56. (MLRA 10:8)

(Oil well pumps)

KORNEV, M. I.

ALIYEV, Teymur Movsum Ogly; MIRZOYAN, Sergey Semenovich; ARENSON, R.I., retsenzent, redaktor; LAVRUSHKO, P.N., retsenzent; KORNEV, M.I., redaktor; PETROVA, Ye.A., vedushchiy redaktor; TROFIMOV, A.V., tekhnicheskiy redaktor

[Machines and mechanical devices for petroleum production] Mashiny i mekhanizmy dlia dobychi nefti. Moskva, Gos. nauchno-tekhn. izd-vo neft. i gorno-toplivnoi lit-ry, 1957. 461 p. (MLRA 10:4)
(Petroleum industry--Equipment and supplies)

AUTHORS: Mar'yanovskiy, D.L.; Stankevich, S.V., Kornev, M.I.

TITLE: A Flywheel Electrodrive for Drilling Winches (Makhovichnyy elektroprivod burovykh lebedok)

PERIODICAL: Energeticheskiy byulleten', 1958, Nr 11, pp 1 - 16 (USSR)

ABSTRACT: The authors, following the tendency to install individual drives in different mechanisms used in oil drilling, developed a new system for the individual drive of the winch drum; one-speed winch system complemented with flywheel. After having described peculiarities of the drum drive and the drive process of a one-speed winch, they proceed to discuss and illustrate the construction and operation of the flywheel drive. Then 2 possible circuit schemes of the flywheel drive are drawn: the contactor system and the contactorless circuit scheme. At the end the standard scheme of a drilling rig with flywheel drive is described and illustrated. Such a drilling rig has 3 diesel generators; 2 of them for basic drive, the third

Card 1/3

is auxiliary with a smaller capacity. Each diesel-generator consists of a diesel engine, a reductor, a synchronous generator and a pump. Summing up the authors point to the advantages of their new flywheel drive system: 1) Flywheel electrodrive enables the engineers to design one-speed winches which make the construction of a drilling rig rather simple. Flywheel electrodrive can be used without change both in the areas where electricity is available and in unelectrified regions. 2) Flywheel electrodrive winches for both prospecting drilling and operational well drilling can be directly produced by the respective plant. 3) Drilling installations equipped with flywheel electrodrive will always have the same scheme and design regardless of their lift capacity. The only difference will be in dimension. 4) The mean lift rate of a drilling tool of the maximum weight will be 3 or 5 times higher than the lift rate attained by other winch systems. 5) Flywheel electrodrive can also be applied for braking the rotation of the winch drum while the tool is being lowered. No other (hydraulic or electric) brakes are necessary. 6) Control of the winch becomes easy because it is changed into a remote-

control system. 7) Winch operations become easier and their cost lower. 8) Assembly of a drill rig also becomes easier. 9) The number of the network power pulses during the hoist-and-lower operations of the tool is several times lower than if an asynchronous motor is used. 10) The life-time of the diesel engine is considerably longer if diesel generators are used. The innovation is covered by author's certificate Nr 107825, with priority starting on 29 Nov 1956. Ye.K. Aleksandrov, S.Ya. Kagan (both from the KhEMZ) and G.V. Kudryavtsev collaborated in the development of the new system. There are 3 block diagrams, 3 circuit diagrams, 4 graphs and 1 Soviet reference.

1. Wells--Drilling 2. Drilling machines--Equipment
3. Hoists--Equipment 4. Flywheels--Applications

ATAMALYAN, E.G.; KORNEV, M.I.

Determination of dynamic pressures on the jaws of a tackle block in drilling. Neft. khoz. 39 no.5:25-28 My '61. (MIRA 14:9)
(Oil well drilling rigs—Equipment and supplies)

KORNEV, N., inzh.

Adapting vertical designs of apartment houses to local surface features. Zhil. stroi. no.2:21 F '61. (MIRA 14:1)
(Apartment houses) (Foundations)

KORNEV, N.A., kand.tekhn.nauk,red.; BOLOTINA, A.V.,red.; KASIMOV, D.Ya., tekhn. red.

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(Concrete slabs—Testing)

KORNEV, N.A.

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FRENKEL',I.M.--(continued) Card 2.

1. Akademiya stroitel'stva i arkhitektury SSSR. Institut betona i zhelezobetona, Perovo. 2. Chlen-korrespondent Akademii stroitel'stva i arkhitektury SSSR (for Kartashov). 3. Chlen-korrespondent Akademii stroitel'stva i arkhitektury SSSR (for Mironov). 4. Gosudarstvennyy institut tipovogo proyektirovaniya i tekhnicheskikh issledovaniy (for Berdichevskiy, Vasil'yev, Lyudkovskiy, Svetov, Chinenkov, Belobrovyy, Klevtsov, Dobromyslov). 4. Vsesoyuznyy gosudarstvennyy proyektno-konstruktorskiy institut (for Desov, Litver, Pishchik).

(Precast concrete)

KORNEV, N.A., kand.tekhn.nauk

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KORNEV, N.A., kand. tekhn. nauk; KUDRYAVTSEV, A.A., kand. tekhn. nauk; LITVIN, [illegible], inzh.; DEVYATISIL'NYY, G.I., inzh.

Keramzit concrete wall panels 12 m. long. Prom. stroi. 41 no.8:33-37 Ag '64. (MIRA 17:11)

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AID P - 738

Subject : USSR/Aeronautics

Card 1/1 Pub. 135 - 5/21

Authors : Yevstratov, D., Lt. Col. and Kornev, P., Major

Title : To improve the Ground-to-Air Control Service (GACS)

Periodical : Vest. vozd. flota, 10, 29-33, O 1954

Abstract : The author describes the GACS which in any weather and at any time observes the flight of aircraft, determines its course, speed, altitude, secures a high exactitude in navigation, guides the fighter to his air targets and brings the aircraft down for landing. The author gives the general outline of the organization of the GACS, and describes its action in several examples. Some names of officers are mentioned.

Institution : None

Submitted : No date

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(Pozzuolanas) (Binding materials)

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