KIRILOV, M. Cand Chem Sci — (diss) "The reaction Between Phosphorus Pentachloride and Complex Esters of Enols," Moscow, 1960, 21 pp, 300 copies (Chair of Organic Chemistry, Chemical Faculty, Moscow State U im M. V. Lomonosov) (KL, 46/60, 123)

S/020/60/132/04/30/064
B011/B003

5.3630

AUTHORS: Lutsenko, I. F., Kirilov, M.

TITLE: Phosphorylated Chlorovinylketones. Primary Products of the Reaction of Phosphorus Pentoxide With Enolacetates

PERIODICAL: Doklady Akademii nauk SSSR, 1960, Vol. 132, No. 4, pp. 842-845

TEXT: In a previous paper (Ref. 1) the authors described the production of phosphorylated β-chlorovinylketones by the reaction of phosphorus pentachloride with enolacetates. In the present paper they continued to study this reaction and ascertained conditions under which this reaction can be stopped in the primary stage, i.e., in the stage of addition of phosphorus pentachloride to the double bond of the unsaturated ester. 2 moles of PCl_5 are used for one mole of ester (I). The composition of the addition product was proven by the example of the analysis of vinylacetate. Since the products indicated are easily hydrolyzed by atmospheric moisture, and are unstable at room temperature,

Card 1/3

Phosphorylated Chlorovinylketones. Primary Products of the Reaction of Phosphorus Pentoxide With Enolacetates

S/020/60/132/04/30/064
B011/B003

they were further treated with sulfur dioxide at low temperature, thus avoiding that they be isolated. Thus, acid chlorides of β-acetoxy-β--chloroalkylphosphinic acids were formed. They were sufficiently resistant for isolation in pure state (II). The yields of acid chlorides of the β-acetoxy-β-chloroethyl- and of the β-acetoxy-β-chloropropyl-phosphinic acids were 85 and 70 per cent, respectively. At a ratio of enolacetate : PCl_5 = 1 : 1 the yield of the acid chloride does not exceed 40% in both cases. This is another indirect proof that the product added to the vinyl acetate and, apparently, also to the isopropenylacetate possesses a structure as shown in (I). The two latter reactions are to be performed at different temperatures: the former at 7-8°, the latter at -25°, since the addition products have a different stability. A similar difference in resistance is shown by the acid chlorides (III) obtained from addition products. The corresponding diethyl ester was obtained by the action of alcohol on the acid chloride of the β-acetoxy-β-chloroethylphosphinic acid in the presence of pyridine. By way of hydrolysis, this ester yields

Card 2/3

Phosphorylated Chlorovinylketones. Primary Products of the Reaction of Phosphorus Pentoxide With Enolacetates

S/020/60/132/04/30/064
B011/B003

phosphonic acetaldehyde by the action of water and by heating within several hours, or within 3 - 4 days at room temperature. The authors failed to obtain the diethylester of β-acetoxy-β-chloropropylphosphinic acid in the presence or absence of pyridine. In both cases only phosphonic acetone could be obtained. The same process takes place by the action of alcohol on the acid chloride of acetonyl-phosphinic acid in the presence of pyridine. The above reactions substantiate the indicated structure of the carbon radical of the addition products. They further prove that addition occurs in accordance with Markovnikov's law. There are 2 tables and 2 Soviet references.

ASSOCIATION: Moskovskiy gosudarstvennyy universitet im. M. V. Lomonosova (Moscow State University imeni M. V. Lomonosov)

PRESENTED: January 7, 1960, by A. N. Nesmeyanov, Academician

SUBMITTED: January 6, 1960

Card 3/3

LUTSENKO, I.F.; KIRILOV, M.; OVCHINNIKOVA, G.A.

Phosphorylated chlorovinyl ketones. Part 3: Reaction of phosphorus pentachloride with enol esters. Zhur.ob.khim. 31 no.6:2028-2033 Je '61. (MIRA 14:6)

1. Moskovskiy gosudarstvennyy universitet imeni M.V.Lomonosova.
(Phosphorus chloride) (Enols)

LUTSENKO, I.F.; KIRILOV, M.; POSTNIKOVA, G.B.

Phosphorylated chlorovinyl ketones. Part 4: Primary products of the reaction between phosphorus pentachloride and enol esters. Zhur.ob.khim. 31 no.6:2034-2036 Je '61. (MIRA 14:6)

1. Moskovskiy gosudarstvennyy universitet imeni M.V.Lomonosova.
(Phosphorus pentachloride) (Enols)

LUTSENKO, I.F.; KIRILOV, M.

Phosphorylated chlorovinyl ketones. Part 5: Products of addition of phosphorus pentochloride to enol esters and their rearrangement to phosphorylated chloro ketones. Zhur. ob. khim. 31 no. 11:3594-3601 N '61. (MIRA 14:11)

(Enols) (Phosphorus chloride) (Ketones)

LUTSENKO, I.F.; KIRILOV, M.; POSTNIKOVA, G.B.

Phosphorylated chlorovinyl ketones. Part 6: β -Acyloxyalkenylphosphinic acid esters. Zhur. ob. khim. 32 no.1:263-266 Ja '62. (MIRA 15:2)

1. Moskovskiy gosudarstvennyy universitet imeni Lomonosova.
(Phosphinic acid)

LUTSENKO, I.F., KIRILOV, M.

Reaction of phosphorus pentachloride with enolacetates.

Khimiya i Primeneniye Fosfororganicheskikh Soyedineniy (Chemistry and application of organophosphorus compounds) A. YE. ARBUZOV, Ed. Publ. by Kazan Affil. Acad. Sci. USSR, Moscow 1962, 632 pp.

Collection of complete papers presented at the 1959 Kazan Conference on Chemistry of Organophosphorus Compounds.

LUTSENKO, I.F.; KIRILOV, M.

Interaction of phospheric pentachloride with enol esters. Pt. 1 and 2. Godishnik khim 55 no.3:135-187 '60/61 (publ.'62).

1. Katedra po ornaichna khimiia pri Moskovskiia durzhaven universitet M.V. Lomonosov.

KIRILOV, M.; PETROVA, I.

Nitrile esters of phosphonoacetic acid with benzaldehyde and furfurole. Doklady BAN 17 no.1:45-48 '64

1. Predstavleno akad. D. Ivanovym, chlen Redaktsionnoy kollegii, "Doklady Bolgarskoy Akademii nauk."

L 15611-66 EWT(m)/EWP(j) WW/RM

ACC NR: AP6008207 SOURCE CODE: BU/0011/65/018/004/0331/0334

AUTHOR: Kirilov, M.; Petrov, G. 34 B

ORG: Faculty of Chemistry, Sofia University, Sofia

TITLE: Acylation of diethyl ester of the nitrile of phosphonium acetic acid

SOURCE: Bulgarska akademiya na naukite. Doklady, v. 18, no. 4, 1965, 331-334

TOPIC TAGS: chemical reaction, ester, organic nitrile compound, organic phosphorus compound, acetate

ABSTRACT: The properties and reaction capabilities of the ester of the phosphonium acetic acid and the esters of the nitile of phosphonium acetic acid are little known. Consequently, the authors present in details the process and results of the acylation of the diethyl ester of the nitrile of phosphonium acetic acid. The resulting diethyl esters are colorless liquids and, with the exception of the benzoyl derivative, they are stable in storage. The paper was submitted by B. Kurtev, Corresponding Member Bulgarian Academy of Sciences, 30 November 1964. Orig. art. has: 4 figures and 1 table. [JPRS]

SUB CODE: 07 / SUBM DATE: none / ORIG REF: 001 / OTH REF: 003 / SOV REF: 003

Card 1/1

KIRILOV, M.M.

ZOTOV, K.G.; KIRILOV, M.M.

[The organization and operation of the signal central control and block system of a railroad and of its communications] Moskva, Transzheldorizdat, 1954. 300 p. (MLRA 8:2D)

AZBUKIN, P.A., prof.; LUPAL, N.V.,prof.; KOTLYARENKO, N.F., dots.;
NEUGASOV, N.M., dots.; RYAZANTSEV, B.S.,kand. tekhn. nauk,;
KIRILLOV, M.M., kand. tekhn.nauk

Outstanding specialist in the field of railroad automatic and remote control. Avtom., telem. i sviaz' 2 no. 8:43 Ag '58.
(MIRA 11:8)

(Maishev, Petr Vladimirovich, 1888-)

KIRILOV, M.M., kand.tekhn.nauk

This will accelerate design work. Avtom., telem.i sviaz' 3 no.7:39 Jl '59. (MIRA 12:12)

1. Dekan fakul'teta signalizatsii, tsentralizatsii, blokirovki i svyazi URMIIT.
(Railroads--Signaling)
(Railroads--Safety appliances)

KIRILOV, M. M.

Kirilov, M. M. "The Protection of single-wire rail circuits from the effects of DC electric traction." Min Railways USSR. Leningrad Order of Lenin Inst of Railroad Transport Engineers imeni Academician V. N. Obraztsov. Leningrad, 1956. (Dissertations for the Degree of Candidate in Technical Science)

So: Knizhnaya Letopis', No. 27, 1956. Moscow. Pages 94-109; 111.

KOTLYARENKO, N.F., kandidat tekhnicheskikh nauk, dotsent; KIRILOV, M.M., assistent inzhener; VOLKOV, V.F., assistent inzhener.

Effect of traction current harmonics on the operation of rail track circuits. Sbor.LIIZHT no.151:261-300 '56. (MLRA 10:1)
(Electric railroads)

TYURMOREZOV, Viktor Yevgrafovich, inzh.; KIRILOV, Mikhail Mikhaylovich, kand. tekhn. nauk; KOZLOV, Lev Nikolayevich, inzh.; KRUMIN, Ye.A., kand. tekhn. nauk, retsenzent; POZDNYAKOV, L.G., inzh., retsenzent; FEL'DMAN, A.B., inzh., retsenzent; KAZAKOV, A.A., kand. tekhn. nauk, red.; MEDVEDEVA, M.A., tekhn. red.

[Electric power supply to railroad communications, apparatus and automatic control, and remote control systems] Elektropitanie ustroistv sviazi, avtomatiki i telemekhaniki na zheleznodorozhnom transporte. Moskva, Vses. izdatel'sko-poligr. ob"edinenie M-va putei soobshcheniia, 1961. 215 p. (MIRA 14:11)
(Electric power supply to apparatus)
(Railroads--Electric equipment)

ZOTOV, Konstantin Gavrilovich, inzh.; KIRILOV, Mikhail Mikhaylovich, kand. tekhn. nauk; KVITKOVSKIY, V.I., inzh., retsenzent; NOVIKAS, M.N., inzh., red.; USENKO, L.A., tekhn. red.

[Signaling and telecommunication devices and their use] Ustroistva STsB i sviazi i ikh ispol'zovanie. Izd.2., perer. i dop. Moskva, Transzheldorizdat, 1962. 283 p. (MIRA 15:9)

(Railroads--Signaling)
(Railroads--Communication systems)
(Railroads--Electric equipment)

K[illegible]OV, V.

Increased interest and mass participation. [illegible] 6 no.6:14 '64

KIRILOV, V.M. [Kyrylov, V.M.]

Use of seines equipped with mechanized sea-to-boat fishpump systems fishing. Kharkiv.prom. no.4:7-10 O-D '63. (MIRA 17:1)

GLIKMAN, L.S.; BOCHAROV, I.V.; VIKHMAN, G.L.; ABROSIMOV, B.Z.; KIRILOV, Ye.A.; MEL'NIKOV, S.M.; AGAFONOV, A.V.; SOSKIND, D.M.

Rebuilding catalytic cracking units with a combined reactor-regenerator. Khim. i tekh. topl. i masel 6 no.11:6-10 N '61. (MIRA 14:12)

1. Gosudarstvennyy nauchno-issledovatel'skiy i proyektnyy institut neftyanogo mashinostroyeniya.
(Cracking process)

L 24705-66 EWT(m)/EWP(j) IJP(c) RM

ACC NR: AP6009534 (A) SOURCE CODE: UR/0413/66/000/005/0069/0069

INVENTOR: Kirillova, E. I.; Glagoleva, Yu. A.; Larin, N. A.; Matveyeva, Ye. N.; Lebedeva, Ye. Ya.; Smirnova, V. S.

ORG: none

TITLE: Method for photostabilization of polystyrene. Class 39, No. 179467 [announced by the State Scientific Research Institute of Polymerized Plastics and Experimental Plant (Gosudarstvennyy nauchno-issledovatel'skiy institut polimerizatsionnykh plastmass i eksperimentalnyy zavod)]

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 5, 1966, 69

TOPIC TAGS: polystyrene, light stabilization, photostabilization, light stabilizer.

ABSTRACT: An Author Certificate has been issued describing a method of light stabilization of polystyrene by introducing a light stabilizer into it. To extend the variety of light stabilizers, 2-hydroxy-4-v-butoxy-4'-chlorobenzophenone is suggested for use as the light stabilizer. [NT]

SUB CODE: 11/ SUBM DATE: 10Jun64/

Card 1/1 FW UDC: 678.048.5:746.22

KIRILOVA, S.K. [Kyrylova, S.K.]

Young builders of communism. Nauka i zhyttia 8 no.10:1-4 '58. (MIRA 13:4)

1. Sekretar' TSentral'nogo komiteta Leninskogo kommunisticheskogo soyuza molodezhi Ukrainy.
(Communist Youth League)

39537
S/191/62/000/008/003/013
B124/B138

15.8120

AUTHORS: Kholodovskaya, R. S., Gosteva, O. K., Zabyrina, K. I., Spivak, N. M., Kirilovich, V. I.

TITLE: Development of electroinsulating impregnating masses containing no solvents. Impregnating masses based on 5N (5N) epoxy resin

PERIODICAL: Plastichéskiye massy, no. 8, 1962, 14-16

TEXT: 5N resin was developed at the NIIPM and synthesized experimentally according to VTU-M-206-60 from epichlorohydrin and the condensation product of phenol and formaldehyde with HCl as catalyst. It contains up to 25-30% phenyl glycidine ether and chemically, it consists mainly of bis-glycidine ether of 4,4'-dioxy diphenyl methane with a small content of ethers of trinuclear compounds. The resins were intended for impregnating coils of electric motors working at 130-155°C. Experiments with polyalumophenyl siloxane as solidifier in amounts of 5% by weight showed that the resin set at 150°C in 10-15 min with a weight loss of less than 1%. Commercial polyester acrylates МГФ-9 (MGF-9) and the pilot plant

Card 1/6

sample 7-1 developed by I. G. Sumin could be set with the same solidifier and possibly also without. Tests showed high resistance to heat and good dielectric properties (Table 2), low losses of weight (Table 3), and good binding strength (Table 4) of the impregnating masses developed. There are 2 figures and 4 tables. The English-language reference is: SPE Journal, No. 1, 38 (1959).

Table 2. Physicochemical and electrical properties of the copolymers*. Legend: (A) mass, (B) viscosity according to VZ-4, sec, (C) drying time on copper or telephone paper at 150°C, min, (D) setting time in 1 mm thick layers at 150°C, min, (E) weight loss during setting (after 2 hrs at 150°C), %, (F) electric strength, kv/mm**, (G) at 20°C, (H) at 155°C, (J) after 24 hrs in water at 20°C, (K) volume resistivity, ohm·cm, (L) tanδ at 50 cps, (M) 5N + 5% solidifier, (N) 7-1 + 5N + 5% solidifier, (P) MGF-9 + 5N + 5% solidifier, (R) * I. N. Prozorova assisted in tests, (S) ** the dielectric properties were determined on disks 1 mm thick, hardened for 4 hrs at 150-160°C in aluminum molds.

Card 2/6

Development of electroinsulating ...

Table 3. Loss of weight in aging at 180°C (in %).
Legend: (A) mass, (B) aging time, hrs, (C) 5N + 5% solidifier, (D) 7-1 + 5N + 5% solidifier, (E) MGF-9 + 5N + 5% solidifier, (F) note: the loss of weight was determined on disks 0.8-1 mm thick.

Table 4. Change in binding strength of impregnating masses during aging at 180°C.
Legend: (A) mass, (B) test temperature, °C, (C) binding strength* of the mass, kg, (D) in the initial state, (E) after aging, days, (F) 5N + 5% hardener, (G) 7-1 + 5N + 5% solidifier, (H) * the binding strength is characterized by the force required to tear out the central part of a wire from a bundle of six copper wires impregnated with the compound investigated.

Card 3/6

Development of electroinsulating ...

S/191/62/000/008/003/013
B124/B138

Table 3

(A) Состав	(B) Продолжительность старения, часы					
	24	48	120	240	480	720
(C) 5Н + 5% отвердителя	6,7	8,4	10,2	12,4	14	15
(D) 7-1 + 5Н + 5% отвердителя	4,5	6,5	7	7,6	8,6	9,2
(E) МГФ-9 + 5Н + 5% отвердителя	5,4	9	13,5	17,5	22	24

(F) Примечание. Потери веса определяли на образцах в виде дисков толщиной 0,8—1 мм.

Card 5/6

Table 4

(A) Состав	(B) Температура испытаний, °С	(C) Цементирующая способность* состава, кг				
		в исходном состоянии (D)	(E) после старения, сутки			
			10	20	40	50
(F) 5Н+5% отвердителя	20	36	36	34	17,5	10,4
	155	8	15	13,5	10,5	9,7
(G) 7—1+5Н+5% отвердителя	20	33	19,6	9	12	7,8
	155	18,9	11	8	11	9,3

(H) * Цементирующая способность характеризуется усилием вырывания центрального отрезка проволоки из пучка в шесть медных проволок, пропитанного испытуемым составом.

Card 6/6

EPR/EWP(j)/EPF(c)/EPF(n)-2/EWT(m)/FCS/T-2/BDS/ES(a)-2/ES(v)--AEDC/AFFTC/ASD/SSD--
Pz-4/Pr-4/Pr-4/Pu-4/Pt-4/Pe-4--EM/WW
L 10771-63

ACCESSION NR: AP3003304 S/0191/63/000/007/0020/0021

92
91

AUTHOR: Kirilovich, V. I.; Rubtsova, I. K.; Gefter, Ye. L.

TITLE: Preparation of phosphorus-containing polyesters by the transesterification of dialkyl phosphonates by hydroxy compounds

SOURCE: Plasticheskiye massy, no. 7, 1963, 20-21

TOPIC TAGS: polyesters, phosphorus-containing polyesters, thermosetting polyesters, polytransesterification, transesterification, dimethyl phosphonate, diethyl phosphonate, diols, polyols, hexanediol, pentaerythritol, hydroquinone, sodium, catalyst, fire retardant, fire-retardant additives

ABSTRACT: With a view toward the development of thermosetting phosphorus-containing polyesters, a study has been made of polytransesterification between a dialkyl phosphonate and a di- or polyol to form a polyester which can subsequently be cross-linked. Dimethyl or diethyl phosphonate and hexanediol,

Card 1/3

L 10774-63
ACCESSION NR: AP3003304

pentaerythritol, 2,2-bis(chloromethyl)-1,3-propanediol, hydroquinone, or 4,4'-isopropylidenediphenol were used as starting materials. Transesterification was conducted by heating a mixture of the phosphonate, di- or polyol, and sodium metal catalyst (1/1/0.017 molar ratio) under an inert gas, with simultaneous stripping of the liberated alcohol. Transesterification rate and polyester yield were to a great extent determined by the structure of the di- or polyol. For example, the rate was higher and initial reaction temperature lower with hexanediol and pentaerythritol than with the diphenols. The polyester yield varied from 64.6% for hydroquinone and diethyl phosphonate to 97.1% for pentaerythritol and dimethyl phosphonate. Study of the effect of such catalysts as sodium metal and potassium acetate on transesterification between dimethyl phosphonate and hexanediol transesterification showed that the initial reaction temperature was 30C lower with sodium than it was with no catalyst; the yield was 92.4% with the catalyst, as against 88.4% without it. The polyesters are resins ranging from viscous to solid, with Ubbelhohde drop points of 40 to 140C and molecular weight up to 18,000. The polyesters are suitable as fire-retardant additives to various polymers. They can be chlorinated to form polyesters

Card 2/3

L 10774-63
ACCESSION NR: AP3003304

containing acid chloride groups, which can be converted by ethylene oxide treatment to β-chloroethyl groups. Orig. art. has: 4 formulas and 3 tables.

ASSOCIATION: none

SUBMITTED: 00 DATE ACQ: 30Jul63 ENCL: 00

SUB CODE: 00 NO REF SOV: 007 OTHER: 003

Card 3/3

RUBTSOVA, I.K.; KIRILOVICH, V.I.

Synthesis of the ethers of β-hydroxy α-furyl[illegible]ic [illegible]d.
Plast. massy no.4:59-60 '60. (MIRA 13:6)

L 20376-66 EWT(m)/EWP(j)/T/ETC(m)-6 WW/RM

ACC NR: AP6006542 (A) SOURCE CODE: UR/0191/65/000/011/0027/0028

AUTHORS: Kirilovich, V. I.; Rubtsova, I. K.

ORG: none

TITLE: Synthesis of unsaturated esters of polypentamethylenephosphoric acid

SOURCE: Plasticheskiye massy, no. 11, 1965, 27-28

TOPIC TAGS: organophosphorus compound, polyester, polymer, fire resistant material

ABSTRACT: It was the object of the present investigation to extend earlier investigations carried out in the area of synthesis of fireproof plastics by V. I. Kirilovich, I. K. Rubtsova, and Ye. L. Gefter (Plast. massy No. 7, 20, 1963). A number of unsaturated esters of polypentamethylenephosphoric acid were synthesized by the interaction of polypentamethylenechlorophosphate with allyl and furfuryl alcohol, 5-methyl-2-isopropylhexene-3-ol-1 and 2-ol-1, and 2-ethylhexene-3-ol-1 and 2-ethylhexene-2-ol-monoethyleneglycol methylmethacrylate. The extent of reaction, relative viscosity, and dimethylformamide and the phosphorus content of the synthesized esters was determined. The experimental results

Card 1/2 UDC: 678.744.4:661.634

L 20376-66

ACC NR: AP6006542

are tabulated. It is concluded that all the synthesized esters are capable of copolymerization and may be recommended as fireproofing additives to different polymers. The authors thank V. I. Lyubomilov for the gift of several alkylhexenols. Orig. art. has: 1 table.

SUB CODE: 11/ SUBM DATE: none/ ORIG REF: 005

Card 2/2 vmb

L 20806-66 EWP(j)/EWT(m)/ETC(m)-6/T IJP(c) RM/WW

ACC NR: AP6005945 (A) SOURCE CODE: UR/0191/66/000/002/0010/0011

AUTHORS: Kirilovich, V. I.; Rubtsova, I. K.; Pokrovskiy, L. I.; Khinich, R. V.; Fedorov, A. A.

ORG: none

TITLE: Synthesis of phosphor-containing polyesters and their application in preparation of fireproof polyurethane foams

SOURCE: Plasticheskiye massy, no. 2, 1966, 10-11

TOPIC TAGS: polyester plastic, polyurethane, foam plastic, fire resistant material, phosphorous acid, esterification

ABSTRACT: Polytransesterification of dimethylphosphorous acid (I) with polyols (pentaerythritol, trimethylolpropane, trimethylolethane) or of mixed polyols and diols in various ratios, has been investigated. This work is a continuation of a study of polyphosphite synthesis by V. I. Kirilovich, I. K. Rubtsova, and Ye. L. Gefter (Plast. massy, No. 7, 20, 1963), and was undertaken to test the suitability of polyesters in imparting fire-resistant properties to polyurethane foams. Reaction of the mixture of diols and polyols with I yields polyesters

Card 1/2 UDC: 678.664-496:678.029.65

L 20806-66

ACC NR: AP6005945 O

having viscosities similar to those of the polyurethane foams, i.e., $\eta^{25C} \leq 1000$ poise. The optimal ratio of viscosity and free hydroxyl groups in polyphosphites occurs with pentaerythritol:hexane-diol = 0.3:0.7 and pentaerythritol:diethylene glycol = 0.2:0.8. Of all polyphosphites obtained with individual polyols, polytrimethylolpropane phosphite had the most acceptable viscosity. The use of metallic sodium as a catalyst permitted lowering of the initial reaction temperature, thus preventing excessive rise of the viscosity of the product. The resulting phosphor-containing polyurethane foams were self-extinguishing and thermally stable. Orig. art. has: 3 tables.

SUB CODE: 11/ SUBM DATE: none/ ORIG REF: 008

Card 2/2

L 22740-66 EWP(j)/EWT(m)/T RM
ACC NR: AP6006359 (A) SOURCE CODE: UR/0413/66/000/002/0094/0094

AUTHOR: Rubtsova, I. K.; Kirilovich, V. I.; Andrianova, N. V.; Klapovskaya, O. A.; Zhigadlo, G. I.

37
B

ORG: none

TITLE: Stabilization of polyethylene terephthalate. Class 39, No. 178103 [announced by the Scientific Research Institute of Plastics (Nauchno-issledovatel'skiy institut plasticheskikh mass)]

SOURCE: Izobreteniya, promyshlennyye obraztsy; tovarnyye znaki, no. 2, 1966, 94

TOPIC TAGS: polyethylene terephthalate, polymer, chemical stability

ABSTRACT: The Author Certificate describes a method for stabilizing polyethylene terephthalate with polyphosphites. To increase the number of types of phorphorus containing polymer stabilizers, a middle polyphosphite, such as polydiphenylolpropanophosphite, is proposed for use as a decyanoethylated diamine. [LD]

UDC: 678.674'524'420
678.021.122

SUB CODE: 11, 07/ SUBM DATE: 30Jul64

Card 1/1

L 41335-66 EWT(m)/T/EWP(j) IJP(c) WW/RM

ACC NR: AP6025620 SOURCE CODE: UR/0413/66/000/013/0076/0076

AUTHORS: Kirilovich, V. I.; Shner, S. M.; Rubtsova, I. K.; Rabkina, A. E.; Tikhonova, M. A.

ORG: none

TITLE: A method for hardening epoxy resins. Class 39, No. 183379 announced by Scientific Research Institute of Plastics (Nauchno-issledovatel'skiy institut plasticheskikh mass)

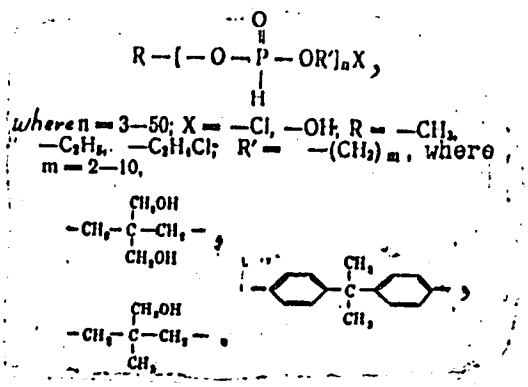
SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 13, 1966, 76

TOPIC TAGS: epoxy plastic, ~~curing agent~~, polyester plastic, fire resistant material, organic phosphorus compound, resin, hardening

ABSTRACT: This Author Certificate presents a method for hardening epoxy resins by phosphorus-containing hardeners. To increase the fire resistance of the polymers, phosphorus-containing polyesters with a reactive hydrogen atom at the phosphorus atom are used as hardeners. These polyesters have the general formula,

Card 1/2 UDC: 678.643.028.294:678.85

L 41355-66
ACC NR: AP6025620



where n = 3—50; X = —Cl, —OH; R = —CH_3, —C_2H_5, —C_3H_4Cl; R' = —$(CH_2)_m$, where m = 2—10,

A formula for determining the amount of hardener needed is given. Orig art. has: 2 formulas. [04]

SUB CODE: 11/ SUBM DATE: 08Apr65/ ATD PRESS: 5058

Card 2/2 11b

L 08401-67 EWT(m)/EWP(j) IJP(c) RM

ACC NR: AP6031747 (N) SOURCE CODE: UR/0191/66/000/007/0019/0021

AUTHOR: Kirilovich, V. I.; Rubtsova, I. K.

36
B

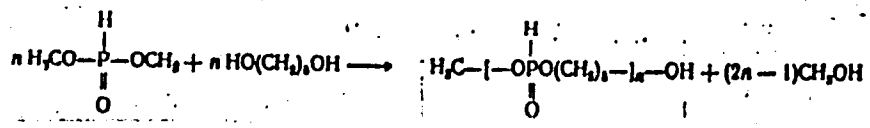
ORG: none

TITLE: Study of the polytransesterification of dimethyl phosphite with 1,5-pentanediol

SOURCE: Plasticheskiye massy, no. 7, 1966, 19-21

TOPIC TAGS: polyester plastic, phosphite, sodium, catalytic polymerization

ABSTRACT: Various factors affecting the polytransesterification of dimethyl phosphite (DMP) with 1,5-pentanediol at 135°C



and the kinetics of this reaction were studied. The reaction goes to 80% completion in the presence of 0.35% (of DMP) sodium metal. Prolonged heating at 185°C/1 mm Hg causes the specific viscosity of the polyester to increase. The average molecular weight of the polypentamethylene phosphite obtained was 6500. Independently of the catalyst employed, the reaction is second order. With rising temperature, the rate

Card 1/2 UDC: 678.85.01

L 08401-67
ACC NR: AP6031747 O

constant increases in the presence of metallic sodium catalyst, the temperature coefficient remaining unaffected. This increase obeys the Arrhenius equation, from which the activation energy was determined. Sodium metal is the best catalyst: the reaction can be carried out at lower temperatures than with other catalysts (magnesium chloride, potassium acetate, zinc acetate, phosphoric acid), so that DMP is not entrained by methanol, and the yield is 15-20% higher. Orig. art. has: 5 figures, 3 tables and 1 formula.

SUB CODE: 07/ SUBM DATE: none/ ORIG REF: 002/ OTH REF: 003

Card 2/2

4 (3)

AUTHORS: Nazarov, I. N., Prostakov, N. S., SOV/79-29-8-11/81
Mikheyeva, N. N., Kirilovich, V. I.

TITLE: Synthesis of 1-Oxyalkyl-2,5-dimethyl Piperidines

PERIODICAL: Zhurnal obshchey khimii, 1959, Vol 29, Nr 8, pp 2508 - 2512 (USSR)

ABSTRACT: For the synthesis of the amino alcohols which serve as intermediates in the syntheses of the analgesic-, local anaesthetic-, and spasmolytic pharmaceuticals (which contain a ring-substituted piperidyl radical as an amine residue), the authors used 2,5-dimethyl-4-piperidone (I), which results, according to I. N. Nazarov, from propenyl isopropenyl ketone and ammonia (Refs 1,2). By reduction of hydrazone (II), according to Kizhner, compound (III) was obtained with a yield of 75% (Scheme 1). The introduction of the alkoxy substituent into the nitrogen of the piperidine ring was carried out in various ways: as in the direct reaction of piperidine (III) with ethylene chlorohydrin, compound (V) also resulted by reduction of the ethyl ester of acid (IV) obtained from (III) and ethyl bromoacetate with lithium aluminum hydride. The reduction of hydrazone (VI) of the 1-β-hydroxyethyl-2,5-dimethyl-4-piperidone likewise led to amino

Card 1/2

alcohol (V) (35% yield). The ethyl esters α-(VII) and β-(VIII) of 2,5-dimethyl-piperidyl-1 propionic acids were obtained by condensation of the esters of the corresponding bromine-substituted propionic acids with (III). The methyl esters (IX) and (X) were synthesized in the same way (Scheme). The amino ketone (X) was also reduced by sodium to the amino alcohols (XI) and (XII). The condensation of 2,5-dimethyl piperidine with propylene oxide in an alcoholic dioxane solution at 60-70° leads to a mixture of amino alcohols (XI) and (XII). There are 2 Soviet references.

ASSOCIATION: Moskovskiy institut tonkoy khimicheskoy tekhnologii im. M. V. Lomonosova (Moscow Institute of Fine Chemical Technology imeni M. V. Lomonosov)

SUBMITTED: July 10, 1958

KIRILOVICH, YA I.

USSR / Human and Animal Morphology (Normal and Pathological). The Peripheral Nervous System. S-2

Abs Jour: Ref Zhur-Biol., No 10, 1958, 45523

Author : Kirilovich, Ya. I.
Inst : Not given
Title : Correlation Between the Stellate Ganglion and the Azygos Vein.

Orig Pub: V. sb.: Zdravookhr. Sov. Latvii. II. Riga, 1954, 119-121.

Abstract: Fifteen embryonic and miscarriage cadavers and two adult cadavers were investigated during preparations under a binocular loupe. The branches of the stellate ganglion were able to approach the azygos vein (AV) independently or to unite first with the branches of the second thoracic ganglion. Branches to AV from the plexus, located on the trachea, also were traced. --A.B Kuz'mina-Prigradova

Card 1/1

KIRILOVSKIY, G.S. [Kyrylovs'kyi, H.S.]; IVANOV, O.F.; KATS, S.A.

Standard shoes with leather sole and rubber half heel. Leh.prom. no.4:28-29 O-D '62. (MIRA 16:5)

1. Kiyevskaya obuvnaya fabrika No.6.
(Shoe manufacture) (Rubber goods)

YERMAKOV, N.A.; KIRIL'TSEV, B.I.; MITROFANOV, V.A.

Effectiveness of composts in grain and row crop cultivation.
Zemledelie 24 no.5:25-27 My '62. (MIRA 15:7)

1. Oporno-pokazatel'nyy plemennoy sovkhoz "Pron'", Kimovskogo rayona, Tul'skoy oblasti. 2. Direktor oporno-pokazatel'nogo plemennogo sovkhoza "Pron'", Kimovskogo rayona, Tul'skoy oblasti (for Yermakov). 3. Glavnyy agronom Oporno-pokazatel'nogo plemennogo sovkhoza "Pron'", Kimovskogo rayona, Tul'skoy oblasti (for Kiril'tsev).
(Field crops--Fertilizers and manures)
(Compost)

KIRIL'TSEV, M.

Electric Railroad - Cars

How we attained high-productivity. Zhil.-kom.khoz. 2 no. 3 '52

9. Monthly List of Russian Accessions, Library of Congress, July 1952, Uncl.

KIRILYCHEV, A., mayor; DEGONSKIY, P., podpolkovnik

We are preparing a training base. Voen.vest. 43 no.11:120-122 N '63. (MIRA 16:12)

VLASOV, M.F.; VERTEBNYY, V.P.; KIRILYUK, A.L.

Resonance levels of erbium isotopes. Atom. energ. 15 no.3:247-249 S '63. (MIRA 16:10)

(Erbium isotopes)

VLASOV, M.F.; KIRILYUK, A.L. [Kyryliuk, A.L.]

Identification and determination of the parameters of resonance levels in erbium. Ukr. fiz. zhur. 8 no.9:947-953 S '63. (MIRA 17:8)

1. Institut fiziki AN UkrSSR, Kiyev.

L 28365-66 EPF(n)-2/EWT(m)/EIC(f)/EWG(m) JT

ACC NR: AP6001700 (N) SOURCE CODE: UR/0089/65/019/005/0467/0468

AUTHOR: Vertebnyy, V. P.; Vlasov, M. F.; Kirilyuk, A. L. 34 33 B

ORG: Institute of Physics of AN UkrSSR (Institut fiziki AN UkrSSR)

TITLE: Effect of core arrangement upon neutron spectra obtained from horizontal channels of VVR-M reactor 19

SOURCE: Atomnaya energiya, v. 19, no. 5, 1965, 467-468

TOPIC TAGS: nuclear research reactor, neutron spectrum, nuclear reactor component/VVR-M nuclear reactor

ABSTRACT: Experiments were conducted at the Institute of Physics of the Ukrainian Academy of Sciences in order to determine the best arrangement of core elements and thus to get a maximum yield of slow neutrons in a reactor measuring channel. The VVR-M nuclear research reactor was used in connection with a mechanical chopper. The neutron spectra were investigated for three arrangements in the channel proximity. In the first case, only heat-releasing elements were used as neutron sources. The second arrangement was composed of elements and a 5.5-cm water layer. The water was substituted by a beryllium layer of the same thickness in the third version. These three arrangements were schematically illustrated by the reactor core cross-section and their effects on spectra

Card 1/2 UDC: 621.039.519

L 28365-66
ACC NR: AP6001700

were graphically demonstrated. It was concluded that the best arrangement was the version with beryllium moderator. A gratitude was expressed to D. T. Pilipts, Chief Engineer of the Institute of Physics, and to other Institute assistants for their help in conducting experiments. Orig. art. has: 3 figures.

SUB CODE: 18 / SUBM DATE: 30Nov64 / ORIG REF: 001 / OTH REF: 002

Card 2/2 CU

L 2226-66 EWT(m)/EPF(c)/ETC/EPF(n)-2/EWG(m)/EWA(h) WW/DM

ACCESSION NR: AP5023764 UR/0089/65/019/003/0250/0252

539.172.4:539.170.2

AUTHOR: Vertebnyy, V. P.; Vlasov, M. F.; Kirilyuk, A. L.; Kolotyy, V. V.; Pisanko, Zh. I.; Trofimova, N. A.

TITLE: Total neutron cross sections of Re super 185 and Re super 187

SOURCE: Atomnaya energiya, v. 19, no. 3, 1965, 250-252

TOPIC TAGS: neutron cross section, rhenium, nuclear energy level, thermal neutron

ABSTRACT: The total neutron cross sections of the separated isotopes Re^{185} and Re^{187} were determined in the resonance, thermal, and cold energy range. The measurements were carried out on the VVR-M nuclear reactor of the Institut fiziki AN USSR (Institute of Physics, AN SSSR) by using the time-of-flight technique. The cross section of Re^{187} obeys the 1/v law in the range below 0.5 - 2 e.v., and that of Re^{185}, below 0.08 e.v. The contribution of positive levels to the thermal cross sections of Re^{185} amounts to about 56%, and that of Re^{187} to about 3% of the total cross section. Analysis of the thermal cross sections show that for Re^{187} the energy of the negative level closest to zero is

Card 1/2

L 2226-66

ACCESSION NR: AP5023764

10 e.v. $\geq|E_0|\geq$ 5 e.v., and for Re^{185}, $|E_0|\geq$ 10 e.v. The neutron widths given for these levels are at least 15 times greater than the average widths of the positive levels. The total cross section of Re^{185} at 2200 m/sec is 118 ± 2 barn, and that of Re^{187} it is 90 ± 2 barn. Orig. art. has: 3 figures, 2 tables, and 1 formula.

ASSOCIATION: None

SUBMITTED: 15Dec64 ENCL: 00 SUB CODE: NP

NO REF SOV: 005 OTHER: 003

Card 2/2

KIRILYUK, A.P. [Kiryliuk, A.P.]

Interoceptive influences from the small intestine on gastric mobility in experimental neurosis. Vestsi AN BSSR.Ser.biial. nav. no.2:94-107 '59. (MIRA 12:9)
(INTESTINES--INNERVATION) (STOMACH) (NEUROSES)

KIRILYUK, A. P.

Cand Med Sci - (diss) "Interoceptor effects in the intestines on the motor functions of the stomach in neuroses. (Experimental-clinical study)." Minsk, 1960. 16 pp; (Minsk State Medical Inst); 200 copies; price not given; (KL, 5-61sup, 203)

TRUSEVICH, B.I., akademik; KIRILYUK, A.P.

Vascular reactions in coronary insufficiency. Zdrav. Bel. 7 no.8: 8-11 Ag '61. (MIRA 15:2)

1. Institut fiziologii AN BSSR (dir. - akademik AN BSSR I.A.Bulygin) i kafedra fakul'tetskoy terapevticheskoy kliniki (zav. - akademik AN BSSR B.I. Trusevich) Minskogo meditsinskogo instituta.
2. Akademiya nauk Belorusskoy SSR (for Trusevich).
(BLOOD VESSELS--DISEASES) (CORONARY HEART DISEASE)

KIRILYUK, A.V.

On Lenin's labor-watch -- brigade of communistic labor. Elek.i tepl.tiaga 4 no.4:9 '60. (MIRA 13:6)

1. Pomoshchnik mastera tsekha periodicheskogo remonta depo Kuybyshev.
(Kuybyshev--Electric locomotives--Maintenance and repair)

KIRILYUK, E.P.

Three weeks in Czechoslovakia. Visnyk AN URSR 27 no.11: 38-40 N '56. (MLRA 9:12)

(Czechoslovakia--Description and travel)

1.2300

24782
S/125/61/000/008/010/014
D040/D113

AUTHORS: Yuzvenko, Yu.A., and Kirilyuk, G.A.

TITLE: Mechanized open arc surfacing

PERIODICAL: Avtomaticheskaya svarka, no. 8, 1961, 83

TEXT: When surfacing in shielding gases, difficulties are encountered in protecting the gas nozzle from drops of the liquid electrode metal. In this connection, a delay in the surfacing process for the cleaning of the nozzle is highly undesirable. Consequently, investigations were conducted at the Institut elektrosvarki im. Ye.O. Patona (Electric Welding Institute im. Ye.O. Paton) on the composition of a powder wire for the open arc surfacing of alloyed metal without a flux or shielding gas. The chemical composition of the metal deposited by the powder wire was as follows: 0.50-0.55%C, 4.0-5.5% Cr, 3.0-4.5% W, 0.3-0.6% V, 0.5-1.0% Mn, 0.15% Ti, 0.5% Si, and 0.4% S. Surfacing is conducted using d.c. with reversed polarity. Good formation and sound coating metal is obtained using the following system: 200-500 amp, 23-26 v welding current and 15-50 m/hr wire feed. The wire composition includes alloys, slag and gas-shielding components, and elements

Card 1/2

X

24782
S/125/61/000/008/010/014
D040/D113

Mechanized open arc surfacing

which combine nitrogen with stable nitrides. [Abstracter's note: The elements are not specified]. This powder wire may be used for surfacing machine parts which operate at increased temperatures (rolling mill steel rolls with complex and deep grooves, pressure bearings for hydraulic presses, etc.). A method has been developed for calculating the powder wire composition for surfacing 3Kh2V8 (3Kh2V8) steel, sormite No. 2, high-speed steel and other alloys containing up to 30% alloy elements. [Abstracter's note: Essentially complete translation].

Card 2/2

GALATCHENKO, N.P., kand. tekhn. nauk (Khar'kov); KIRILYUK, G.G., inzh. (Khar'kov)

Intensification of the utilization of the rolling stock and operative planning of the transportation operations. Zhel. dor. transp. 46 no. 10:18-22 O '64. (MIRA 17:11)

1. Zamestitel' nachal'nika sluzhby dvizheniya Yuzhnoy dorogi (for Kirilyuk).

KIRSHENBAUN, Ya.S., inzh.; KIRILYUK, G.M., inzh.

Modernization of A-7 Shukhov-Berlin boilers. Energetik 8 no. 10:19-21 O '60. (MIRA 14:1)

(Boilers)

KIRSHENBAUM, Ya.S., inzh.; KIRILYUK, G.M., inzh.; KOSHEVOY, K.Z., inzh.

Modernization of the A-5 and A-7-type Shukhov-Berlin boilers.
Energetik 9 no.12:5-12 D '61. (MIRA 15:1)
(Boilers)

KIRILYUK, I.

AUTHOR: Kirilyuk, I., Sportsman First Class 85-10-6/35

TITLE: The Most Pleasing (Samoye otradnoye)

PERIODICAL: Kryl'ya Rodiny, 1957, Nr 10, p. 4 (USSR)

ABSTRACT: The author of this item describes his flight in the Po-2 airplane for the the establishment of a new record. He flew twice on a triangular course: Tushino - Tikhonova Pustyn' - Vyaz'ma, and flew a distance of 1,006 km. By this flight he established a new record: a closed curve 1,006 km long was flown by a land plane of the 2nd weight category in 7 hours 53 minutes. A photo showing the author in front of his airplane illustrates this item.

AVAILABLE: Library of Congress

Card 1/1

KIRILYUK, K.Kh., kandidat tekhnicheskikh nauk.

How to prevent weakening of gearing spring packets in electric locomotives. Elek.i tepl.tiaga no.8:19-20 Ag '57. (MLRA 10:8)
(Electric locomotives)

KULISHENKO, A.Z., inzh.; RYBALKO, A.M., inzh.; KISHTEV, V.P., inzh.; KIRILYUK, L.V.

Automatic supply of molding sand with the use of radioisotopes. Mashinostroenie no.6:58-59 N-D '64 (MIRA 18:2)

SHENDRIK, M.N.; BORESKOV, G.K.; KIRILYUK, L.V.

Variation in the activity of a chromia-alumina catalyst in the process of butane dehydrogenation. Kin. i kat. 6 no.2:313-319 Mr-Ap '65. (MIRA 18:7)

1. Institut kataliza Sibirskogo otdeleniya AN SSSR.

LIVSHITS, Leonid Yakovlevich, inzh.; KIRILYUK, Leonid Vasil'yevich, inzh.; GERCHIKOV, David Solomonovich, kand. tekhn. nauk; STETSENKO, V.I., kand. tekhn. nauk, retsenzent

[Manual on the installation of radio-isotope relay devices in industry] Posobie po ustanovke radioizotopnykh releinykh priborov v promyshlennosti. Kiev, Tekhnika, 1965. 95 p. (MIRA 18:12)

ACC NR: AP7003010 SOURCE CODE: UR/0413/66/000/024/0157/0157

INVENTORS: Raykhman, Ya. A.; Gol'dberg, V. K.; Kirilyuk, N. I.; Lopato, G. P.; Buznikov, Yu. N.; Shilik, K. K.

ORG: none

TITLE: Electronic logic unit - Logikon. Class 42, No. 150302

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 24, 1966, 157

TOPIC TAGS: logic element, electron beam, electron accelerator

ABSTRACT: This Author Certificate presents an electronic logic unit - logikon, which utilizes the switching properties of the trochoidal electron beam of a ring trochotron. To increase the response rate and to widen the logic possibilities, an electrode for switching the beam according to the input signal is placed in each chamber of the ring trochotron. To decrease the weight and dimensions, the container is made of magnetized ferroceramic.

SUB CODE: 09/ SUBM DATE: 23Nov59

Card 1/1

L 01942-67 EWT(d)/T/EWP(1) IJP(c) GG/BB

ACC NR: AR6031709 SOURCE CODE: UR/0372/66/000/006/V047/V047

AUTHOR: Kirilyuk, N. I.; Bulka, S. N.; Kalinin, V. S.; Galuzinskiy, M. S.

TITLE: Modernization of the "Dnepr" Control Computer 16 40 B

SOURCE: Ref. zh. Kibernetika, Abs. 6V317

REF SOURCE: Sb. Upravlyayushchiye mashiny i sistemy, Vyp. 2, Kiyev, 1965, 35-50

TOPIC TAGS: control computer, computer/Dnepr computer, Dnepr control computer

ABSTRACT: A report is made on the results of modernization of the "Dnepr" Control Computer in 1961-63 by teams of the design offices of a Computer Manufacturing Plant in cooperation with the Institute of Cybernetics, AN UkrSSR. The output of modernized computers started in April, 1964. In the modernized machine, welded structure with standard rolled carbon angle steel was used in all cabinets; for the external design--stamped components of one specific type were used. This made it possible to standardize cabinets of UAU, USO, OZY, and PZU equipment and fabricate them in one shop. Particular attention was given to the

Card 1/2 UDC: 681.142.001.3:51

L 01942-67

ACC NR: AR6031709

0

cooling system of the machine. In order to develop its operational and technical properties, the memory capacity was increased, and the possibilities of connecting the machine to the controlled object were enlarged, for which several new USO units were developed. The possibility of connecting the machine to outside devices was expanded and the development of both standard and nonstandard components was completed. The basic modifications of the machine in the various stages of modernization are described. Orig. art. has: 5 figures. B. Golovitsyn. [Translation of abstract]

[FM]

SUB CODE: 09/

hs

Card 2/2

ACC NR: AP6035737 SOURCE CODE: UR/0413/66/000/019/0101/0101

INVENTORS: Chernyak, R. Ya.; Kirilyuk, N. I.; Pushenko, A. I.; Oreshkin, Ye. S.; Strel'chenko, A. M.; Sal'kov, Yu. G.

ORG: none

TITLE: An information storage using magnetic cards. Class 42, No. 186762 [announced by Institute of Cybernetics, AN UkrSSR (Institut kibernetiki AN USSR)]

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 19, 1966, 101

TOPIC TAGS: information storage and retrieval, magnetic recording, storage device

ABSTRACT: This Author Certificate presents an information storage using magnetic cards. The storage unit includes an input keyboard, a vacuum drum for transferring the cards, and a buffer storage device (see Fig. 1). The design increases the

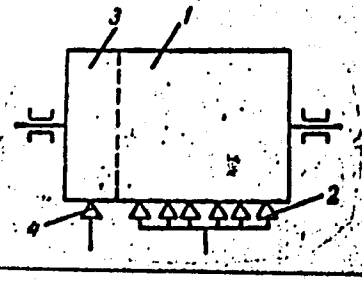


Fig. 1. 1 - vacuum drum; 2 - magnetic heads for recording the readout from the magnetic cards; 3 - surface of the vacuum drum, free from magnetic cards; 4 - magnetic heads of the buffer storage device

Card 1/2 UDC: 681.142.07

ACC NR: AP6035737

reliability and reduces the equipment requirement. The buffer storage device is made on the part of the vacuum drum surface free from magnetic cards. This part of the surface is coated with a nickel-cobalt film. Orig. art. has: 1 figure.

SUB CODE: 09/ SUBM DATE: 07Oct65

Card 2/2

KOSHELEV, V.; SHCHEGOLEV, M.; SAAN, Kh.; KIRILYUK, P.; IVANOV, A.; SAVELENKO, I.; KRUPETS, A.; KONYAYEV, A.; BARMAKOV, V.; NIKOLAYENKO, A.; LUKASHOV, A.

Our strength resides in collective labor. Mast. ugl. 8 no.8:14-15 Ag '59. (MIRA 12:12)

1.Pyatyy uchastok shakhty "Novodruzheskaya" tresta Lisichanskugol'. (Lisichansk--Coal miners)

GOROBCHUK, G.P.; KIRILYUK, P.G.; KORMILITSYN, N.S.; SVOBODIN, Ye.N.; SKVROTSOV, N.G., STERELYUKHIN, V.A.

Model of a system for automating scientific experiments in carrying out technological research. Vych. sist. no.8:27-31 '63.
(MIRA 17:12)

L 10780-67 EWT(1) IJP(c) AT

ACC NR: AP7003501 SOURCE CODE: UR/0076/66/040/006/1262/1264

AUTHOR: Gromakov, S. D.; Latypov, Z. M.; Kirilyuk, P. S. 17

ORG: Kazan' State University im. V. I. Ul'yanov-Lenin (Kazanskiy gosudarstvennyy universitet); Penza Pedagogic Institute im. V. G. Belinskiy (Penzenskiy pedagogicheskiy institut)

"Treatment and Systematization on the Basis of D. I. Mendeleyev's Periodic System of Elements of Properties of Semiconductor Compounds of the Type A (III)-B(V)" 21

Moscow, Zhurnal Fizicheskoy Khimii, Vol 40, No 6, Jun 66, pp 1262-1264

ABSTRACT: A three dimensional plot of values of the width of the forbidden zone was made for semiconductor compounds A(III)-B(V) by using a network arrangement of the compounds according to positions of elements A and B in the periodic system. Experimental values of the width of the forbidden zone a smooth curved surface. The width of the forbidden zone of several semiconductor compounds on which no experimental data were available was determined by inter- and extrapolation (AlBi, 0.7 ev; GaBi, 0.25 ev; TlAs ~0.15 ev). The method described, which is convenient for the determination of unknown characteristics and for the checking of experimental data, can be applied to semiconductor compounds of other types and also presumably to other properties of semiconductors. Orig. art. has: 1 figure and 1 table. [JPRS: 38,967]

TOPIC TAGS: semiconducting material, forbidden zone width

SUB CODE: 20 / SUBM DATE: 11Mar65 / ORIG REF: 004

Card 1/1 UDC: 541.20 + 621.315.592

0926 0034

Kirilyuk S.S.

USSR/Thermodynamics - Thermochemistry. Equilibria. Physical-Chemical Analysis. Phase Transitions. B-8

Abs Jour : Referat Zhur - Khimiya, No 6, 1957, 18525

Author : S.P. Miskidzhyan, S.S. Kirilyuk.
Title : Study of Viscosity, Density and Electrical Conductivity of Quinoline - Acetic Acid System.

Orig Pub : Zh. obshch. khimii, 1956, 26, No 5, 1350-1355

Abstract : The viscosity and density of the system quinoline (I) - acetic acid (II) at 0 and 20° was measured, and the value of the temperature factor of viscosity was computed. The specific electrical conductivity of the system I - II - inert solvent (CH_3OH free of water) was measured at 20± 0.1° at isoconcentrates 2.0, 1.0, 0.1 and 0.01 M of I and II in methanol. It was found that the isoterms of viscosity and density have maxima corresponding to 33 mol. % of I; temperature drop makes the maxima sharper, but does not shift them. The isoterms of the specific

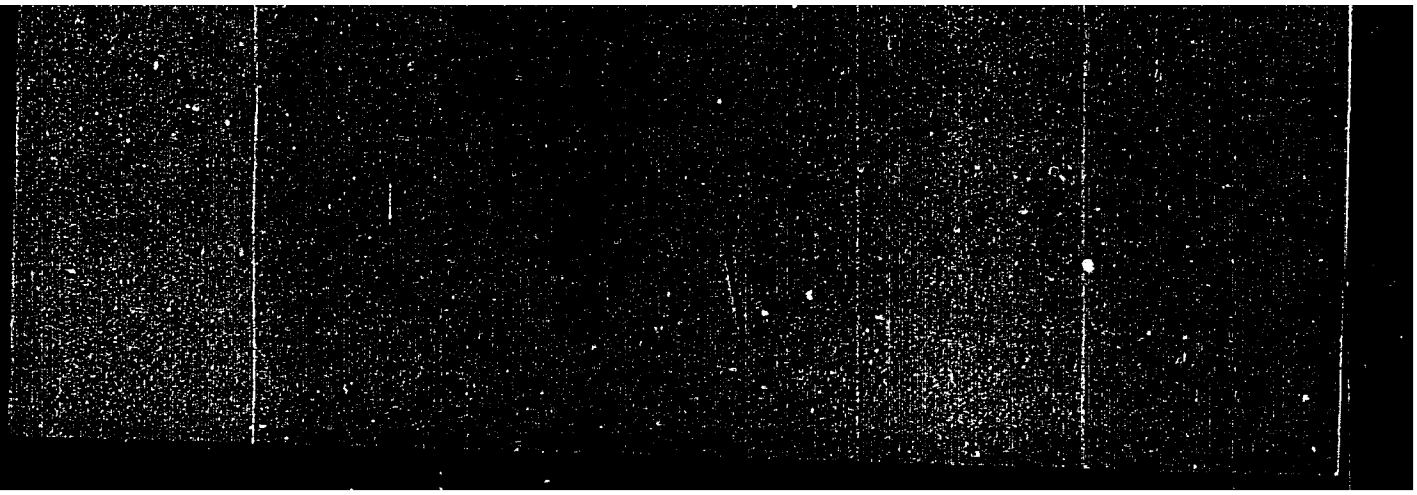
Card 1/2

USSR/Thermodynamics - Thermochemistry. Equilibria. Physical-Chemical Analysis. Phase Transitions. B-8

Abs Jour : Referat Zhur - Khimiya, No 6, 1957, 18525

electrical conductivity at 2.0 and 1.0 M show a maximum that also corresponds to the relation I : II = 1 : 2; a second maximum corresponding to the relation 1 : 1 appears on the isoterms of the specific electrical conductivity at the transition to isoconcentrates 0.1 and 0.01 M. The existence of compounds of the compositions $C_9H_5N.CH_3COOH$ and $C_9H_3N.2CH_3COOH$ in the system I - II was deducted.

Card 2/2



APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000722710008-4"

5(4)
AUTHORS: Kirilyuk, S. S., Miskidzh'yan, S. P.

SOV/76-33-9-4/37

TITLE: Physico-chemical Analysis of Current Conducting Non-aqueous Systems and Investigation Into the Electrolytic Dissociation Mechanism of the Compounds Formed Therein. II. The System Allyl-isothiocyanate - Quinoline

PERIODICAL: Zhurnal fizicheskoy khimii, 1959, Vol 33, Nr 9, pp 1918-1921 (USSR)

ABSTRACT: It could be assumed in connection with experimental results of previous papers (Refs 2-4) that allyl-chinolrodanide will form during the mixing of allyl-isothiocyanate (I) with quinoline (II), which was proved by the present experiments. To investigate the character of the reaction between (I) and (II), the density, viscosity, electroconductivity (EC) and the concentration of the SCN^--ions were measured at $20\pm0.1^\circ$ before and after heating of the mixtures to $100\pm5^\circ$ for 24 hours. The density was measured in a pycnometer and the viscosity in the closed viscosimeter. The isothermal lines of the density as well as of the viscosity of the reaction mixture after heating, clearly indicate a reaction of the components. It is assumed that thereby a compound of the composition $C_3H_5NCS.C_9H_7N$ (III)

Card 1/2

Physico-chemical Analysis of Current Conducting Non-aqueous Systems and Investigation Into the Electrolytic Dissociation Mechanism of the Compounds Formed Therein. II. The System Allyl-isothiocyanate - Quinoline

forms. According to the common method, the (EC) was measured in a closed container with non-platinized electrodes, and the presence of (III) which is an electrolyte, was determined by the considerable (EC) of the solution. (III) was extracted and the electrolytic dissociation was investigated. An electrolytic dissociation mechanism of (III) is mentioned on the basis of the results obtained. A paper by N. K. Voskresenskaya (Ref 1) is mentioned in the text. There are 3 figures and 6 Soviet references.

ASSOCIATION: L'vovskiy meditsinskiy institut (L'vov Medical Institute)

SUBMITTED: January 24, 1958

Card 2/2

KIRILYUK, S.S.; MISKIDZH'YAN, S.P.

Physicochemical analysis of nonaqueous systems conducting the electric current, and study of the mechanism underlying the electrolytic dissociation of compounds formed in them. Part 4: Kinetics of the reaction between allyl mustard oil and tertiary amines. Ukr.khim. zhur. 27 no.2:180-184 '61. (MIRA 14:3)

1. L'vovskiy meditsinskiy institut.
(Isothiycyanic acid) (Amines)

KIRILYUK, S.S.; MISKIDZH'YAN, S.P.

Electrolytic dissociation constants of some thiocyanate salts of substituted ammonium in various solvents. Zhur. fiz. khim. 37 no.6:1311-1316 Je '63. (MIRA 16:7)

1. L'vovskiy meditsinskiy institut.
(Ammonium compounds) (Thiocyanates)
(Ionization)

KARZHAVIN, Yu.A.; CHUVILO, I.V.; KIRILOV, S.S.; INKIN, V.D.; GOLUTVIN, I.A.; NEUSTROYEV, V.D.; STEPANOV, V.D.; TULAYEV, B.P.; KOLESOV, I.V.; ALMAZOV, V.Ya.; P[illegible]OKOF'YEV, Yu.P.; SHINAGL, I.

Device for automatic measurement of the coordinates of charged particle tracks recorded on bubble chamber photographs. Prib. i tekh. eksp. 8 no.5:54-60 S-O '63. (MIRA 16:12)

1. Ob"yedinennyy institut yadernykh issledovaniy.

[illegible]SHILYUK, [illegible]; [illegible], I.M.

Physicochemical study of the interaction of anisil isothiocyanate with allyl and benzylamines. Zhur. fiz. khim. 39 no.9:2293-2296 S '65. (MIRA 18:10)

1. L'vovskiy gosudarstvennyy meditsinskiy institut.

KIRILYUK, V. D.

KIRILYUK, V. D. -- "Investigating the Structure, Kinematics, and Dynamics of Flying Shears in the Metallurgical Industry." Min Higher Education USSR, Dnepropetrovsk Order of Labor Red Banner Metallurgical Institute, Dnepropetrovsk, 1956. (Dissertation for the Degree of Candidate of Technical Sciences)

SO: Knizhnaya Letopis' No 42, October 1956, Moscow

KIRILYUK, V. D.

KIRILYUK, V. D. -- "Investigating the Structure, Kinematics, and Dynamics of Flying Shears in the Metallurgical Industry." Min Higher Education USSR, Dnepropetrovsk Order of Labor Red Banner Metallurgical Inst, Dnepropetrovsk, 1956. (Dissertation for the Degree of Candidate in TECHNICAL SCIENCES).

SO: KNIZHNAYA LETOPIS' (Book Register), No. 42, October 1956, Moscow.

KOZHEVNIKOV, S.N., prof.; KIRILYUK, V.D., inzh.; SILICH, A.N., inzh.

Investigation of rotary flying shears. Izv.vys.ucheb.zav.; chern.met. 2 no.8:149-155 Ag '59. (MIRA 13:4)

1. Dnepropetrovskiy metallurgicheskiy institut. Rekomendovano kafedroy avtomatizatsii metallurgicheskogo oborudovaniya Dnepropetrovskogo metallurgicheskogo instituta. 2. Chlen-korrespondent AN USSR (for Kozhevnikov).
(Rolling mills--Equipment and supplies)
(Shears (Machine tools))

25(7)

SOV/148-59-2-22/24

AUTHORS: Kozhevnikov, S.N., Professor, Corresponding Member of AS UkrSSR and Kirilyuk, V.D., Engineer

TITLE: Structural Analysis of Moving Shear Mechanisms (Strukturnyy analiz mekhanizmov letuchikh nozhnits)

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy, Chernaya metallurgiya, 1959, Nr 2, pp 161-170 (USSR)

ABSTRACT: The classification of moving shear mechanisms and their structural investigation is a basis for selecting their most efficient kinematic system. The author undertook the classification of three basic mechanisms of moving shears, i.e. the mechanism of cutting, balancing and of the cutting gap. This classification was based on structural characteristics as they helped to determine common computation methods for each type of mechanism. The kinematic systems of each mechanism are shown in diagrams. There are 6 diagrams and 14 references, 9 of which are Soviet, 2 German and 3 English.

Card 1/2

Structural Analysis of Moving Shear Mechanisms SOV/148-59-2-22/24

ASSOCIATION: Dnepropetrovskiy metallurgicheskiy institut (Dnepropetrovsk Metallurgical Institute), Kafedry avtomatizatsii metallurgicheskogo oborudovaniya i teorii mekhanizmov i mashin, mekhanicheskogo oborudovaniya metallurgicheskikh zavodov, detaley i podyemno transportnykh mashin (Chairs of Automation of Metallurgical Equipment and of the Theory of Mechanisms and Machines, Mechanical Equipment of Metallurgical Plants, Machine Parts and Lifting and Transporting Machines)

SUBMITTED: January 6, 1959

Card 2/2

ESKIN, V.S., inzh.; KIRILYUK, V.D., inzh.

Efficient operating layout for a continuous haulage and spoil disposal machine unit. Izv. vys. ucheb. zav.; gor. zhur. 6 no.6:35-38 '63. (MIRA 16:8)

1. Dnepropetrovskiy ordena Trudovogo Krasnogo Znameni gornyy institut imeni Artema. Rekomendovana kafedroy otkrytykh gornykh rabot.

(Transporter bridges)

NOVOZHILOV, M.G., prof., doktor tekhn. nauk; TARTAKOVSKIY, B.N., kand. tekhn. nauk; KIRILYUK, V.D., inzh.; SHAPAR', A.G., inzh.

Ways of creating a new technology for open-pit mining operations with the use of the principle of controlled caving of the benches. Gor. zhur. no.4:18-20 Ap '65. (MIRA 18:5)

1. Filial Instituta mekhaniki AN UkrSSR, Dnepropetrovsk.

KIRILYUK, V.P.

On one of the deep structures in the Shilka-Urium interfluve (Aldan-Vitim shield). Geol.sbor. [Lvov] no.9:108-113 '65. (MIRA 18:12)

VORONILOV, Yu.V.; KIRILYUK, V.F.

Role of accessory minerals in finding the genesis of [illegible] gneisses in the upper reaches of the Amazar Valley (upper Amazar Valley). Zap.Vses.min.ob-va 94 no.2:232-236 '65.

(MIRA 18:5)

1. Geologicheskiy fakul'tet Irkutskogo universiteta.

KIRILYUK, V.P.; LAYFMAN, Ye.M.; SIVORONOV, A.A.; CHEDZHEMOV, G.Kh.; MAMCHUR, G.P.; TS'GN', O.V.

New data on the absolute age determination of some geological formations in the Amazar-Shilka interfluve (east Transbaikalia). Geokhimiia no.12:1244-1255 D '64.

(MIRA 18:8)

1. Gosudarstvennyy ordena Lenina universitet imeni Iv. Franko, L'vov.

KIRILYUK, V.P.

Precambrian formations in the southwestern margin of the Aldan-Vitim Shield. Vest. L'vov. un. Ser. geol. no.2: 63-69 '64. (MIRA 19:1)

KIRILYUK, V. V.

"The Sowing Period for Fodder Melon Crops Under the Conditions Which Exist in the Steppe Zone of the Ukrainian SSR." Cand Agr Sci, Kishinev Agricultural Inst imeni M. V. Frunze, Kishinev, 1954. (KL, No 3, Jan 55)

Survey of Scientific and Technical Dissertations Defended at USSR Higher Educational Institutions (13)
SO: Sum. No. 598, 29 Jul 55

KIRILYUK, V.V., kand.sel'skokhozyaystvennykh nauk

Seed production of meadow forage grasses in Yaroslavl Province.
Zhivotnovodstvo 22 no.7:45 '60. (MIRA 16:5)
(Yaroslavl Province--Grasses) (Seed production)