"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001445

BEKHTLE, G.A.; DAVYDOVSKAYA, R.M.; RODIONOVA, R.A.

Stannous chloride as a catalyst in the hydrochlorination of certain metals. Trudy AN Tadzh. SSR 84:73-77 '59. (MIRA 13:3)
(Tin chloride) (Hydrochloric acid) (Metals)

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0014450

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001445

BEKHTLE, G.A.; DAVYDOVSKAYA, R.M.; RODIONOVA, R.A.

Chlorination of cassiterite in the presence of oxygen-removing agents, (reductive chlorination). Trudy AN Tadzh. SSR 84:57-63 '59. (MIRA 13:3)

(Cassiterite) (Chlorination)

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0014450

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001445

BEKHTLE, G.A.; DAVYDOVSKAYA, R.M.; RODIONOVA, R.A.

Hydrochlorination of cassiterite in the presence of iron. Trudy AN Tadzh. SSR 84:65-72 '59. (MIRA 13:3)
(Cassiterite) (Hydrochloric acid)

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0014450

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001445

BEKHTLE, G.A.; DAVYDOVSKAYA, R.M.; RODIONOVA, R.A.

Hydrochlorination of cassiterite in the presence of iron, cast iron, and copper. Trudy AN Tadzh. SSR 84:79-104 '59. (MIRA 13:3)
(Cassiterite) (Hydrochloric acid)

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0014450

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001445

VERVEYKINA, A.K., inzh.; KOLCHINSKIY, Yu.L., inzh.; NIKOLAYEVSKIY, Ye.Ye., inzh.; RODIONOVA, R.G., inzh.; RYAPOLOV, A.F., inzh.; SOKOL, I.A., inzh.; STERLIN, S.L., inzh.; EVDEL'MANT, L.B., inzh.; ORLOV, V.M., kand. tekhn. nauk, retsenzent; YURGEL', B.I., inzh., retsenzent; FOKIN, V.Ya., inzh., nauchn. red.; VOLNYANSKIY, A.K., glav. red.; SUDAKOV, G.G., zam. glav. red.; IOSELOVSKIY, I.V., red.; MARKOV, I.I., red.; MEL'NIK, V.I., red.; ONKIN, A.K., red.; STAROVEROV, I.G., red.; TUSHMYAKOV, M.D., red.; CHERNOV, A.V., red.

[Engineering pipelines for industrial enterprises] Tekhnologicheskie truboprovody promyshlennykh predpriiatii. Moskva, Stroiizdat, 1964. 2 v. (MIRA 17:12)

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0014450

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001445

VERVEYKINA, A.K., inzh.; KOLCHINSKIY, Yu.L., inzh.; NIKOLAYEVSKIY, Ye.Ya., inzh.; RODIONOVA, R.G., inzh.; RYAPOLOV, A.F., inzh.; SOKOL, I.A., inzh.; STERLIN, S.L., inzh.; EYDEL'NANT, L.B., inzh.; ORLOV, V.M., kand. tekhn. nauk retsenzent; YURGEL', B.I., inzh., retsenzent; FOKIN, V.Ya., inzh., nauchn. red.; VOLNYANSKIY, A.K. red.; MARKOV, I.I., red.; MEL'NIK, V.I., red.; ONKIN, A.K., red.; STAROVEROV, I.G., red.; TUSHNYAKOV, M.D., red.; CHERNOV, A.V., red.; SUDAKOV, G.G., red.; IOSELOVSKIY, I.V., red.

[Technological pipings in industrial enterprises] Tekhnologicheskie truboprovody promyshlennykh predpriiatii. Moskva, Stroiizdat. Pt.1. 1964. 784 p. (MIRA 18:9)

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0014450

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001445

ALEKSEYEV, Ye.K., inzh.; IZGUR, R.M., inzh.; LYUKE, Ye.P., inzh.; NIKOLAYEVSKIY, Ye.Ya., inzh.; PIROGOV, A.N., inzh.; RODIONOVA, R.G., inzh.; TOYBIN, V.A., inzh.; FREYDLIN, G.M., inzh.; KHLYUPINA, A.K., inzh.; CHERNOV, D.L., inzh.; EYDEL'NANT, L.B., inzh.; ZHMUR, N.S., inzh., retsenzent; MOLYUKOV, G.A., inzh., red.; TIKHANOV, A.Ya., tekhn.red.

[Production and installation of pipe systems; reference manual] Izgotovlenie i montazh tekhnologicheskikh truboprovodov; spravochnoe posobie. Moskva, Gos.nauchno-tekhn.izd-vo mashinostroit. lit-ry, 1960. 574 p. (MIRA 13:7)
(Pipe fitting)

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0014450

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001445

RODIONOVA, S.K. (Leningrad)

"Nonlinear deformations of an elastic cylindrical shell carrying concentraded masses and submerged in a liquid under dynamical loading"

Report presented at the 2nd All-Union Congress on Theoretical and Applied Mechanics, Moscow 29 Jan - 5 Feb 64.

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0014450

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001445

RODIONOVA, S. M.

S. M. Rodionova, "Infection of Clover Seeds and Results of Testing Disinfectants," Zashchita Rastenii, no. 16, 1938, pp. 114-118. 421 P942

SO: Sira Si 90-53, 15 Dec 1953

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0014450

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001445

1ST AND 2ND ORDERS

PROCESSES AND PROPERTIES INDEX

The infection of, and disinfectants fo , clover seed S. M. Rodionova. *Plant Protection* (U. S. S. R.) 1938, No. 16, 114-18. The most serious clover-seed diseases are bacteriosis and fusariose. The most effective disinfectant is mercurated aniline or Meranin (either in the dry state or in soln.). Next most effective is Granosan (2 kg./ton). Nivarsin, Talcarsin and Ca hypochlorite are more weakly fungicidal, but they decrease the degree of infection by 33-69% and do not affect sprouting. The prepn. "PD" is a weak disinfectant and "AB" gives neg. results.

W. R. Henn

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0014450

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001445

A-M

Romokova (Mme S. M.). Зараженность семян Клевера и результаты испытания протравителей. [Infection of Clover seeds and results of testing disinfectants.]—*Pl. Prot., Leningr.*, *1938*, 16, pp. 114–118, 1938.

A laboratory analysis of 24 samples of seeds of red, white, and Swedish clover [*Trifolium pratense*, *T. repens*, and *T. hybridum*] from several communal farms in northern U.S.S.R. showed that an average of 62·4 to 99 per cent. of the seeds were infected, from 0·6 to 52 per cent. by bacteria [unspecified], from 0 to 32·6 per cent. by species of *Fusarium* [unspecified], and from 25·5 to 98 per cent. by moulds (chiefly *Mucor* and *Alternaria*). Disinfection with potassium permanganate considerably reduced but did not eliminate infection, indicating that some of the organisms are carried internally. The infected seeds showed poor germination (30 per cent.) and their dry weight was only 71·2 per cent. of that of healthy seeds. Of the fungicides tested in the laboratory the best results were obtained with mercurized aniline (meranin) [*R.A.M.*, xvii, p. 440], dry (2 kg. per ton) or wet (1 in 500 for one hour), which reduced the infection in red clover from 98 per cent. in the control to 0·3 and 9·8 per cent., respectively, and raised the rate of germination from 39 per cent. in the control to 75·8 and 86·3 per cent., respectively; similar good results were obtained with white and Swedish clovers. The next best results were given by granosan, while nivarsin, talcarsin, and calcium hypochlorite reduced the incidence of infection by 33 to 69 per cent. and did not impede germination.

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0014450

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001445

RUTENBURG, D.M., prof. [deceased]; RODIONOVA, T.N.

Stenosed obturating laryngotracheobronchitis. Vest. otorin. 25 no.2:45-50 Mr-Ap '63. (MIRA 17:1)

1. Iz kafedry bolezney ukha, nosa i gorla Leningradskogo pediatricheskogo meditsinskogo instituta.

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0014450

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001445

DOLGOROZHEVA, N.A., kand.med.nauk; RODIONOVA, T.N.

Peculiarities of suppurative otitis media in infants immunized with BCG vaccine. Vest.otorin. 20 no.2:47-49 Mr-Ap '58. (MIRA 12:11)

1. Iz kliniki bolezney ukha, gorla i nosa (zav. - prof.D.M. Rutenburg) Leningradskogo pediatricheskogo meditsinskogo instituta.

(OTITIS MEDIA, in inf. & child
suppurative, clin. features in BCG vaccinated inf. (Rus))
(BCG VACCINATION, compl.
suppurative otitis media in inf., clin. features (Rus))

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0014450

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001445

GUTKINA, A.V.; RODIONOVA, T.V.

Clinical and immunophagocytic parallels in acute and chronic tonsillitis. Trudy gos.nauch.-issl.inst.ukha, gorla i nosa. 6:85-89 '55. (MIRA 12:10)

1. Iz klinicheskogo otdeleniya (zav.-prof. A.A.Atkarskaya) i otdela ostrykg infektsiy (zav. - prof. P.P.Sakharov) Gosudarstvennogo nauchno-issledovatel'skogo instituta ukha, gorla i nosa.

(TONSILS--DISEASES)

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0014450

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001445

ALIMARIN, I.P.; GALLAY, Z.A.; SHEINA, N.M.; RODIONOVA, T.V.

Current-voltage characteristics of N-benzoylphenylhydroxylamine solutions. Izv.AN SSSR.Otd.khim.nauk no.3:567-569 Mr '63. (MIRA 16:4)

1. Moskovskiy gosudarstvennyy universitet im. M.V.Lomonosova.
(Benzohydroxamic acid) (Reduction, Electrolytic)

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0014450

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001445

RABUKHIN, A.Ye.; KLYUCHAREVA, Ye.A.; LAMBINA, A.G.; MEDVEDEVA, A.S.; NEFEDOV, A.F.; RODIONOVA, T.V.; SEMICHA, A.M.; YAKOVLEVA, T.A. (Moskva)

Tuberculosis of the lungs in old age. Klin. med. 40 no.12: 18-23 D '62. (MIRA 17:2)

1. Iz TSentral'nogo instituta usovershenstvovaniya vrachey.

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0014450

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001445

RABUKHIN, A.Ye.; KLYUCHAREVA, Ye.A.; KULAKOVA, A.A.; LAMBINA, A.G.; MEDVEDEVA, A.S.; NEFEDOV, A.F.; RODIONOVA, T.V.; SAFAROV, R.S.; SEMINA, A.M.; YAKOVLEVA, T.A.

Clinical and epidemiological characteristics of tuberculosis in elderly persons. Trudy TSIU 63:14-19 '63. (MIRA 17:9)

1. Kafedra tuberkuleza TSentral'nogo instituta usovershenstvovaniya vrachey.

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0014450

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001445

RODIONOVA, T. V.

Results of the treatment of hearing disorders following meningitis with implantation of preserved tissue (spleen). Vest. otorinolar., Moskva 13 no.5:86 Sept-Oct 1951. (CLML 21:1)

1. Of the Central Scientific-Research Institute of Otorhinolaryngology of the Ministry of Public Health RSFSR (Director Honored Worker in Science Prof. V. K. Trutnev).

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0014450

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001445

RODIONOVA, V.

Ways to reduce the cost of construction on state farms. Fin. SSSR 37 no.6:41-47 Je '63. (MIRA 16:9)
(Construction industry--Costs) (State farms)

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0014450

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001445

RODIONOVA, V., pomoshchnik sanitarnogo vracha (Moskva)

My work in a reclamation area. Fel'd. i akush. 22 no.10:60-61 O '57.
(PUBLIC HEALTH, RURAL) (MIRA 11:1)

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0014450

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001445

RODIONOVA, V., KAN, I.

Moscow Province - Botany, Medical

Results of a study of medicinal plants of Moscow Province. Apt. delo no. 3, 1952.

Monthly List of Russian Accessions, Library of Congress. November, 1952.
Unclassified.

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0014450

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001445

RODIONOVA, V.A.

Unsteady heat conductivity of a thin shell. Issl. po uprug. i plast. no.3:139-145 '64. (MIRA 17:6)

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0014450

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001445

[illegible], [illegible].

Analogy of equations in the theory of elasticity and in electrodynamics. Izv. AN Uz. SSR. Ser. tekh. nauk 9 no.3:91-92 '65. (MIRA 18:8)

1. Leningradskiy gosudarstvennyy universitet.

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0014450

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001445

RODIONOVA, V.A.

Nonstationary heat conductivity of a thin shell. Issl. po uprug. i plast. no.3:138-145 '64. (MIRA 18:4)

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0014450

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001445

RODIONOVA, V.A., uchitel'nitsa.

A school Communist Youth League brigade. Biol. v shkole no.3:55-57 My-Je '57. (MIRA 10:6)

1. Baturinskaya srednyaya shkola No.21 Bryukhovetskogo rayona Krasnodarskogo kraya.
(Bryukhovetskaya District--Agriculture--Study and teaching)
(Communist youth league)

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0014450

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001445

PROSTAKOV, N.S.; GRIDUNOV, I.T.; MARSHAVINA, N.L.; RODIONOVA, V.G.

Synthesis of dithio[2,5-dimethyl-4-oxo(hydroxy)-1-piperidyl]carbamic acid and 1,2,5-trimethylthio-4-piperidone. Zhur.ob.khim. 34 no.2:467-469 F '64. (MIRA 17:3)

1. Universitet druzhby narodov imeni P.Lumumby i Moskovskiy institut tonkoy khimicheskoy tekhnologii imeni M.V.Lomonosova.

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0014450

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001445

L 06344-67 EWP(j)/EWT(m) IJP(c) RM

ACC NR: AP6030326 (A,N) SOURCE CODE: UR/0153/66/009/003/0491/0493

AUTHOR: Gridunov, I. T.; Prostakov, N. S.; Rodionova, V. G.; Marshavina, N. L.; Fomina, V. A. 26 B

ORG: Department of Rubber Technology, Moscow Institute of Fine Chemical Technology im. M. V. Lomonosov (Kafedra tekhnologii reziny, Moskovskiy institut tonkoy khimicheskoy tekhnologii); Peoples' Friendship University im. Patrice Lumumba (Universitet druzhby narodov)

TITLE: Effect of 1,2,5-trimethyl-4-phenyl-Δ^4-didehydropiperidine on the plasticity of Nairit and the physicomechanical properties of its vulcanizates 15

SOURCE: IVUZ. Khimiya i khimicheskaya tekhnologiya, v. 9, no. 3, 1966, 491-493

TOPIC TAGS: polychloroprene, plasticizer, vulcanization, RUBBER

ABSTRACT: The effect of 1,2,5-trimethyl-4-phenyl-Δ^4-didehydropiperidine (PD) admixtures on the plasticity of Nairit rubbers subjected to identical milling at room temperature and the influence of heating time on the plastic properties of the rubbers (with and without PD) were studied. In addition, the effect of PD on vulcanizates of composition A (Nairit 100.0, zinc oxide 5.0, MgO 10.0, rosin 5.0, stearic acid 1.0 pt. by wt.) was also studied. It was found that as the PD content rises, the plasticity of Nairit increases; this shows that during the mechanical treatment, degradation of the rubber takes place in the presence of PD. The rate of reaction of PD with poly-

Card 1/2

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"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001445

L 06344-67

ACC NR: AP6030326

chloroprene is much higher than the rate of oxidative-destructive processes. PD has an appreciable effect on the physicomechanical properties of the vulcanizates. As its content increases, the moduli, tensile strength and tearing strength decrease somewhat. It is apparent that during the vulcanization of Nairit in the presence of PD, not only -C-C- and -C-O-C- bonds, which strengthen the vulcanizates, are formed, but in addition, bonds like those of quaternary ammonium salts (which do not strengthen the vulcanizate) may be formed, causing the observed decrease in strength characteristic. Other things being equal, this process is much slower in the presence of ZnO than in the presence of MgO. Orig. art. has: 2 figures and 1 table.

SUB CODE: 11/ SUBM DATE: 06Jul64/ ORIG REF: 001

Card 2/2 MAE

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0014450

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001445

GRIDUNOV, I.T.; PROSTAKOV, N.S.; RODIONOVA, V.G.

Effect of 1,2,5-trimethyl-4-phenyl-DELTA 4-didehydropiperidine on the plasticization of natural rubber. Izv. vys. ucheb. zav., khim. i khim. tekh. 7 no.5:867-868 '64 (MIRA 18:1)

1. Moskovskiy institut tonkoy khimicheskoy tekhnologii imeni M.V. Lomonosova i Universitet Druzhby Narodov imeni Patrisa Lumumby.

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0014450

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001445

GUS'KOV, Yu.K.; [illegible], S.Ya.; RODIONOVA, V.G.

Electric breakdown through a slit in glass in a cesium vapor atmosphere. Zhur. tekh. fiz. 35 no.1:156-157 Ja '65. (MIRA 18:3)

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0014450

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001445

L 26969-65 EWT(1)/EWT(m)/EPA(s)-2/EPF(n)-2/EWP(t)/EEC(t)/EPA(w)-2/EPA(bb)-2/EWA(m)-2/EWP(b) Pab-10/Pt-10/Pu-4 IJP(c) JD/WW/JG

ACCESSION NR: AP5003253 S/0057/65/035/001/0156/0157

AUTHOR: Gus'kov, Yu.K./ Lebedev, S.Ya./ Rodionova, V.G.

TITLE: Electric breakdown through a slot in glass in a cesium vapor atmosphere

SOURCE: Zhurnal tekhnicheskoy fiziki, v.35, no.1, 1965, 156-157

TOPIC TAGS: cesium, dielectric breakdown, dielectric strength

ABSTRACT: The breakdown potential between a 1.1 cm diameter hot cylindrical cathode and a 1.8 cm diameter coaxial cylindrical anode was measured in cesium vapor at pressures from 0.001 to 3 mm Hg and at cathode temperatures from 430 to 650°C. In the interelectrode space was located a glass cylinder [diameter and wall thickness not given] coaxial with the electrodes and containing a circular slot of adjustable width; the plane of the slot was perpendicular to the axis of the system. The width of this slot was varied from 0.03 to 0.3 mm. The results are tabulated. The breakdown potential decreased somewhat with increasing slot width, and as a function of pressure it was minimum at about 0.1 mm Hg. "In conclusion, the authors thank Yu.Ya.Stavisskiy for valuable discussions and Ye.S.Afon'kin for assistance with the work." Orig.art.has: 3 figures and 1 table.

Card 1/2

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0014450

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001445

L 26969-65

ACCESSION NR: AP5003253

0

ASSOCIATION: none

SUBMITTED: 30Jun64 ENCL: 00 SUB CODE: EM

NR REF SOV: 000 OTHER: 000

Card 2/2

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0014450

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001445

RODIONOVA, V. I.

RODIONOVA, V. I. -- "On the Dissolving of Zinc in Alkalis." Moscow State Pedagogical Inst imeni V. I. Lenin, Moscow, 1955. (Dissertations for the Degree of Candidate in Chemical Science)

SO: Knizhnaya Letopis: No. 39, 24 Sept 55

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0014450

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001445

SOV/137-59-3-7112

Translation from: Referativnyy zhurnal. Metallurgiya, 1959, Nr 3, p 311 (USSR)

AUTHOR: Rodionova, V. I.

TITLE: Effect of Temperature on the Corrosion Rate of Zinc in Various Alkalies (Vliyaniye temperatury na skorost' korrozii tsinka v razlichnykh shchelochakh)

PERIODICAL: Sb. Kom-t po korrozii i zashchite metallov Vses. sov. nauchno-tekhn. o-v, 1957, Nr 2, pp 109-123

ABSTRACT: The author investigated the kinetics of dissolution of Zn at elevated temperatures and clarified the effect of the temperature factor on the character of the relationship between the rate of corrosion of Zn and the concentration of the alkali. It was established that temperature has an appreciable effect on the corrosion of the Zn in alkalies. An increase in temperature produces an increase in the rate of corrosion of Zn in solutions of all concentrations of the alkalies tested. The greatest increase in the corrosion rate of Zn is observed in the 60-80°C temperature range. In solutions of NaOH, KOH, and $Ba(OH)_2$ an increase in temperature from 40 to 80° causes the greatest increase in the corrosion rate in medium and high alkali

Card 1/2

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"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001445

SOV/137-59-3-7112

Effect of Temperature on the Corrosion Rate of Zinc in Various Alkalies

concentrations. At 80° the corrosion in NaOH and $Ba(OH)_2$ solutions is irregular.

N. L.

Card 2/2

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0014450

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001445

SOV/137-58-10-21309

Translation from: Referativnyy zhurnal, Metallurgiya, 1958, Nr 10, p 124 (USSR)

AUTHOR: Rodionova, ~~V. I.~~

TITLE: On the Dissolution of Zinc in Alkalies (O rastvorenii tsinka v shchelochakh)

PERIODICAL: Uch. zap. Mosk. gos. ped. in-ta, 1957, Vol 99, pp 221-226

ABSTRACT: A study of the corrosion of Ts-0 grade Zn in solutions of NaOH, KOH, LiOH, $Ba(OH)_2$, and NH_4OH of various concentrations (from 0.1N up to saturation). It is established that the rate of corrosion of Zn is related to the nature of the alkali cation, whereas the relationship of the rate of corrosion to the concentration is similar for all the media selected. In dilute alkali solutions the rate of corrosion increases with an increase in the concentration, attaining a maximum with a concentration specific for each alkali (1N for KOH and LiOH; 3N for NaOH); with moderate concentrations of the alkalies the rate of corrosion of Zn remains constant and has no relation to the concentration of the ions of the aggressive agent; in concentrated solutions the rate of corrosion decreases somewhat. The established

Card 1/2

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"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001445

SOV/137-58-10-21309

On the Dissolution of Zinc in Alkalies

relationship of the rate of corrosion of Zn to the concentration of the alkali is explained by the character of the surface compounds forming in its reaction with the alkali. Experiments with stirring of the electrolyte verify the presence of passivating properties in the film. The corrosion of Zn in the abovementioned alkalies at 20°C exhibits a uniform character.

1. Zinc--Decomposition 2. Alkali solutions--Performance L. A.

Card 2/2

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0014450

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001445

S/081/61/000/010/017/029
B117/B206

AUTHORS: Balezin, S. A., Rodionova, V. I.

TITLE: Effect of admixtures on the rate of corrosion of zinc in lyes

PERIODICAL: Referativnyy zhurnal. Khimiya, no. 10, 1961, 289, abstract 10И235 (10I235). ("[Uch. zap.] Mosk. gos. ped. in-ta im. V. I. Lenina", no.146, 1960, 297-303)

TEXT: It was established that Na_2S (0.3% solution) retards the corrosion of zinc in lyes, especially at high temperatures. β-hydroxy-ethyl ammonium nitrite which causes heavy destruction of zinc in lyes may be used for etching galvanized workpieces. [Abstracter's note: Complete translation.]

Card 1/1

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"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001445

VLADYCHENSKIY, S.A.; Prinimali uchastiye: Korenevskaya, V. Ye.; YAKOVLEVA, L.V.; LAVRENT'YEV, Yu. L.; RODIONOVA, V.I.; KACHINSKIY, N.A., prof.

Moisture conditions of soils in the Volga-Akhtuba Flood Plain and Delta. Vest.Mosk. un. Ser.6: Biol., pochv. 16 no.3:73-80 My-Je '61. (MIRA 14:6)

1. Kafedra fiziki i melioratsii pochv Moskovskogo gosudarstvennogo universiteta.
(Volga-Akhtuba Flood Plain--Soil moisture)
(Volga Delta--Soil moisture)

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0014450

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001445

RODIONOVA, V. K.

USSR /Chemical Technology. Chemical Products and Their Application I-26

Lacquers. Paints. Drying oils. Siccatives.

Abs Jour: Referat Zhur - Khimiya, No 9, 1957, 32591

Author : Buglay B.M., Zhukov Ye. V., Gudovich V.A., Rodionova V.K.

Title : Carbamide Primer TsNIIMOD-54 for Transparent Wood Finishes

Orig Pub: Derevoobrabat. prom-st', 1956, No 5, 3-6

Abstract: The base of the composition is synthetic cold-polymerization carbamide-formaldehyde MF-17 resin of thermoreactive type. The nitrolacquers have shown a good adhesion to the wood surface impregnated with this resin. To increase the

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"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001445

USSR /Chemical Technology. Chemical Products and Their Application I-26

Lacquers. Paints. Drying oils. Siccatives.

Abs Jour: Referat Zhur - Khimiya, No 9, 1957, 32591

plasticity and enhance a number of properties the MF-17 resin is plasticized with hydroxyterpene resin (VTU 628-55), or with rosin and drying oil. A graphic method has been developed for the determination of the amount hardening agent necessary to impart to the primer the required useful life, using as a basis the useful life of MF-17 resin. The primer dries on the wood surface within 1.5-2 hours at 18-20°, within 20-30 minutes at 45-50°. The composition of the primer can include 8-10% mineral filler, and it can be colored with water-soluble acid dyes. The coverage is of 60-80 g/m^2 when applied by

Card 2/3

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USSR /Chemical Technology. Chemical Products and Their Application I-26

Lacquers. Paints. Drying oils. Siccatives.

Abs Jour: Referat Zhur - Khimiya, No 9, 1957, 32591

hand and of 80-100 g/m^2 when applied by spraying. Use of the primer in transparent finishing of wood reduces the expenditure of lacquers and varnishes and improves the quality of the finish.

Card 3/3

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0014450

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001445

BUGLAY, B.M.; ZHUKOV, Ye.V.; GUDOVICH, V.A.; RODIONOVA, V.K.

TSNIIMOD-54 carbomide prime coating for transparent wood finishes. Der.prom. 5 no.5:3-6 My '56. (MLRA 9:8)

1. TSentral'nyy nauchno-issledovatel'skiy institut mekhanicheskoy obrabotki drevesiny.
(Wood finishing) (Urea)

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0014450

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001445

AZARKH, M.R., dots.; VINOKUR, R.D., dots.; GUSAKOVA, V.A., assist.; RODIONOVA, V.M., st. prepod.; BUGROVA, L., red.izd-va; LEBEDEV, A., tekhn. red.

[Collection of problems on the state budget] Sbornik zadach po gosudarstvennomu biudzhetu. Moskva, Gosfinizdat, 1963. 190 p. (MIRA 16:12)

1. Prepodavateli Moskovskogo finansovogo instituta (for all except Bugrova, Lebedev). (Budget)

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0014450

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001445

VOLKOVA, P.A.; DOLGOVA, A.A.; IVANOVA, S.D.; LYUKSHENKOVA, Ye.Ya.; L'VOV, N.A.[deceased]; RAZDORSKAYA, L.A.[deceased]; RODIONOVA, V.M.; FEDOSEYEV, A.N., red.; MATVEYEVA, M.M., tekhn. red.

[Wild medicinal plants of the R.S.F.S.R.; Moscow Province] Dikorastushchie lekarstvennye rasteniia RSFSR; Moskovskaia oblast'. Moskva, Medgiz, 1963. 144p. (MIRA 16:8)

1. Kafedra farmakognozii I Moskovskogo meditsinskogo instituta im.I.M.Sechenova (for **Volkova, Lyukshenkova**).
2. Botanicheskiy sad I Moskovskogo meditsinskogo instituta im.I.M.Sechenova (for Rodionova).
(MOSCOW PROVINCE--BOTANY, MEDICAL)

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0014450

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001445

DZHAMALOV, O.B., doktor ekon. nauk, GUSEV, Yuriy L'vovich, dots., kand. tekhn. nauk; KOP'YEV, Sergey Fedotovich, prof., doktor tekhn. nauk; ALEKSANDROVICH, Yu.B., retsenzent; FEDOROV, M.N., starshiy inzh., retsenzent; OSENKO, L.M., red. izd-va; RODIONOVA, V.M., tekhn. red.

[Boiler systems and thermal networks]Kotel'nye ustanovki i teplovye seti. Moskva, Gosstroiizdat, 1962. 310 p. (MIRA 16:1)

1. Gosudarstvennyy komitet Soveta Ministrov SSSR po delam stroitel'stva (for Aleksandrovich). 2. Nauchno-issledovatel'skiy institut sanitarnoy tekhniki Akademii stroitel'stva i arkhitektury SSSR (for Fedorov).
(Boilers) (Heating from central stations)

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0014450

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001445

RODIONOVA, V.S., dots. (Chernovitsy)

Surgical nephroomentopexy in chronic nephritis. Klin.med. 38 no.11:85-88 N '60. (MIRA 13:12)

1. Iz kafedry gospital'noy khirurgii (zav. - prof. V.L. Khenkin) Chernovitskogo meditsinskogo instituta (dir. - dotsent M.M. Kovalev).

(KIDNEYS--SURGERY)

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0014450

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001445

BOZHENOV, P.I.; RODIONOVA, V.V.

The binding properties of $2CaO \cdot SiO_2$. TSement 28 no.3:10-12 My-Je '62. (MIRA 15:7)

1. Leningradskiy inzhenerno-stroitel'nyy institut.
(Binding materials)

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0014450

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001445

RODIONOVA, V.V.

KAL'SHTEYN, L.I., RODIONOVA, V.V.

Professor IAkov L'vovich Kots; on his 60th birthday. Vest.oto.-rin. 20 no.3:119 My-Je '58 (MIRA 11:6)
(KOTS, IAKOV L'VOVICH, 1898-)

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0014450

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001445

Experimental study of spoilage in onions. L. M. Horovitz-Vlasova and E. A. Rodionova. *Schriften zentral. biochem. Forschungsinst. Nahr.- Genussmittelind.* (Moscow) 2, 135-42(1932).—Of all the bacterial flora of decayed onions, the one which appears to be chiefly responsible for spoilage is *B. viscosus sacchari*. This organism is seldom mentioned in the literature, but seems to be quite widely distributed. It does not thrive on dry onions, but resists cold; hence onions should be kept dry and cold, below 1°, to be thoroughly immune. Julian F. Smith

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0014450

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001445

CA

12

Preparation of fruit and berry juices. L. M. Horovitz Vlasova and E. A. Rodionova. *Proc. Inst. Sci. Research Food Ind.* (Leningrad) 3, No. 3, 80-94 (in English 94-5) (1935).—The usual practice of combining pectin removal with fermentation in the prepn. of fruit juices is unnecessary because pectin can be destroyed without any visible fermentation by using a pectase-producing acido-yeast such as *Saccharomyces oryzae* (from cranberries). The flax-retting organisms produce pectase but are not sufficiently acidophilic. Some strains of *S. oryzae* also ferment sugars in acid medium; by proper selection and use of the yeasts the pectin and sugar fermentations can be carried on separately or together, as desired. Thus fruit or berry juices can be freed from pectin either with or without loss of sugar. In some processes, e. g., in prepg. expressed cranberry juice, conserving the sugar has a considerable com. advantage. The greater selectivity offered by proper use of the yeasts is also helpful in utilizing by-products, e. g., in producing pectin, fruit acids and other products from the solid residue after expressing juice of cranberries or the like. J. F. S.

ASM SLA METALLURGICAL LITERATURE CLASSIFICATION

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0014450

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001445

PROCESSES AND PROPERTIES INDEX

12

Ca

Plant- and semiplant-scale trials in biochemical preparation of cranberry juice for beverage use. E. A. Rodionova. *Proc. Inst. Sci. Research Food Ind.* (Leningrad) 3, No. 3, 96-102(1935).—Since the principal problem in making a nonalcoholic beverage from cranberry juice is to free the juice from pectin without fermenting the sugar, an improved process has been developed and tried on a com. scale with an acidophilic pectase-producing yeast. The expressed juice is inoculated with a 5% culture of *Saccharomyces oxycocci*, and fermented at 30° until a qual. test for pectin (Ca pectate method) is negative. The juice is then filtered and evapd. to a sirup (beverage concentrate). Julian F. Smith

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0014450

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001445

1ST AND 2ND ORDERS

3RD AND 4TH ORDERS

PROCESSES AND PROPERTIES INDEX

Ca

12

Action of microorganisms on fruit and vegetable pectins. E. A. Rodionova and R. I. Barkovskaya. *Proc. Inst. Sci. Research Food Ind.* (Leningrad) 3, No. 3, 117–36 (1935).—Tests were made with a number of organisms (*Sterigmatocystis*, *Penicillium*, *Saccharomyces*, *Clostridium*, and *B. viscosus sacchari*) to ascertain their effects on pectins from various sources, especially from cranberries, black currants, apples and pears. *Penicillium* and *Sterigmatocystis* produce pectase and pectozymase and are the most active pectin-destroying organisms; the decompn. products include pectic acid, reducing sugars, compds. contg. OCH_3 groups, and CO_2. Some of the organisms destroy vegetable pectins (e. g., from sugar beets) but not those from fruit and berry juices. Julian F. Smith

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0014450

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001445

1ST AND 2ND ORDERS

PROCESSES AND PROPERTIES INDEX

3RD AND 4TH ORDERS

CA

13

The effect of dolomite flour on some of the physical properties of some weakly podzolic soils in relation to the degree of humus formation. E. Rodionova. *Uchenye Zapiski Kazan. Gosudarst. Univ.* 98, No. 7, 105-12(1938); *Chem. Zentr.* 1940, I, 117.—Increasing the dose of dolomite flour increased the cohesion and the plasticity of the soil and reduced the swelling capacity and the degree of dispersion. These effects were especially pronounced in dark-gray podzolic soils with the highest humus content; they were least pronounced in light-gray podzolic soils with the lowest humus content. Two types of gray podzols with the same humus content showed the same behavior toward dolomite fertilizing. M. G. Moore

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

MATERIALS INDEX

AUTHOR INDEX

1ST AND 2ND LETTER

2ND LETTER

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0014450

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001445

RODIONOVA, Ye.A.

Methodology for studying the degeneration of habits in mental patients. Trudy Gos. nauch.-issl. inst. psikh. 43:207-212 '65. (MIRA 18:9)

1. Laboratoriya eksperimental'noy patopsikhologii (zaveduyushchaya laboratoriyey - prof. B.V.Zeygarnik) Moskovskogo gosudarstvennogo nauchno-issledovatel'skogo institut psikhiatrii i Kafedra psikhologii Moskovskogo gosudarstvennogo universiteta imeni M.V.Lomonosova (zav. kafedroy - deystvitel'nyy chlen Akademii pedagogicheskikh nauk RSFSR prof. A.N. Leont'yev).

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0014450

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001445

KRISHTUL, F.B.; MALCHENKO, A.L.; GROMOVICH, V.F.; RODIONOVA, Ye.A.; GOLODOVSKAYA, A.I.; BANDURINA, Ye.Ya.

Production of yeast feeds from the vinasse of distilleries processing sugar beet molasses. Trudy TSNIISP no.12:51-63 '62. (MIRA 17:3)

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0014450

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001445

RODIONOVA, Ye.D.

Excursion based on the subject "water on the earth." Geog.v shkole 18 no.4:56-60 Jl-Ag 55. (MIRA 8:10)
(Water--Study and teaching)

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0014450

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001445

03483

S/190/60/002/009/018/019
B004/B060

5.3630 also 2109,2209

AUTHORS: Kolesnikov, G. S., Rodionova, Ye. F., Fedorova, L. S., Gavrikova, L. A.

TITLE: Carbochain Polymers and Copolymers. XXVII. Polymerization and Copolymerization of Di-n-butyl Ester of Vinyl Phosphinic Acid

PERIODICAL: Vysokomolekulyarnyye soyedineniya, 1960, Vol. 2, No. 9, pp. 1432-1437

TEXT: The authors wanted to produce a polymer of di-n-butyl-vinyl phosphinate (DBVP) with a higher molecular weight than had been obtained in previous experiments (Ref. 2). DBVP was produced by a procedure described by M. I. Kabachnik and T. Ya. Medved' (Ref. 3). The authors first applied the polymerization by the method of "molecular clusters" (molekulyarnykh puchkov) (Ref. 4): condensation of the monomer on the cooled surface of the catalyst, and subsequent thawing. An apparatus supplied by the Kafedra vysokomolekulyarnykh soyedineniy Moskovskogo gosudarstvennogo universiteta (Chair of High-molecular Compounds of Moscow State University)

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"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001445

83483

Carbochain Polymers and Copolymers. XXVII. Polymerization and Copolymerization of Di-n-butyl Ester of Vinyl Phosphinic Acid

S/190/60/002/009/018/019
B004/B060

was used for the purpose. A rubber-like polymerizate with a 60% yield was obtained in the presence of metallic magnesium. The specific viscosity of a 1% solution in ethanol amounted to 0.217; the molecular weight was 9500. A viscous polymerizate was obtained in the presence of $ZnCl_2$. Fig. 1 compares the thermomechanical properties of the polymerizate obtained by means of Mg with those of a polymerizate obtained by the radical mechanism (molecular weight 1300). The molecular weight was without effect on the softening temperature; while at high temperatures the deformation of the polymer with higher molecular weight was smaller. Furthermore, it was attempted to polymerize DBVP at 6000 atm both with the addition of azoisobutyric acid (at 80°, 10 h) and without initiator (at 100°C, 12 h). The polymerization was possible in the presence of the initiator. Irradiation with fast electrons in glass ampuls (0.1 $\mu a/cm^2$, $2 \cdot 10^{12}$ $ev/cm^3 \cdot sec$) likewise gave rise to polymerization (Table 1). The specific viscosity of the 1% solution was 0.047. Irradiation of this

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"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001445

83483

Carbochain Polymers and Copolymers. XXVII. Polymerization and Copolymerization of Di-n-butyl Ester of Vinyl Phosphinic Acid

S/190/60/002/009/018/019
B004/B060

polymer led to the formation of tridimensional, insoluble products. DBVP in n-heptane at 50°C and in the presence of disperse KNa alloy yielded 43% of a polymerizate with a specific viscosity of 0.039. No high molecular weights could, thus, be obtained by any of the methods mentioned. Copolymerization of DBVP in emulsion was carried out: 1) with styrene at 60°C (Table 2); the copolymer had a molecular weight of 20,000, the 0.5% solution in benzene had a specific viscosity of 0.17; Fig. 2 shows the thermomechanical properties of the DBVP-styrene copolymer; a high phosphorus content lowers the softening temperature; 2) with vinyl chloride, DBVP at 60°C yielded copolymers of low viscosity (Table 3). With vinyl acetate, the copolymers obtained had a phosphorus content of 4.16%, the specific viscosity of their 2% ethanol solution was 0.31. The authors thank V. V. Korshak and A. M. Polyakova for having made high-pressure polymerization possible, B. L. Tsetlin for having carried out the irradiation, and G. L. Slonimskiy et al. for their determination of thermomechanical properties. There are 2 figures, 3 tables, and 7 references: 6 Soviet and 1 British.

Card 3/4

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0014450

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001445

83483

Carbochain Polymers and Copolymers. XXVII. Polymerization and Copolymerization of Di-n-butyl Ester of Vinyl Phosphinic Acid

S/190/60/002/009/018/019
B004/B060

ASSOCIATION: Institut elementoorganicheskikh soyedineniy AN SSSR (Institute of Elemental-organic Compounds of the AS USSR)

SUBMITTED: May 12, 1960

Card 4/4

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0014450

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001445

[illegible]; DA[illegible] [illegible]. K.; and BER[illegible] A. A.

On Polymerization of Dimethecrylic Esters of Glycols, Page 1554, Sbornik statey po obshchey khimii (Collection of Papers on General Chemistry), Vol II, Moscow-Leningrad, 1953, pages 1680-1686.

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0014450

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001445

[illegible] YE. F.; BERLIN A. A.; and DABAGOVA A. K.

Three-Dimensional Polymerization of Allylic and Mixed Allyl Methacrylic Ethers of Glycols, Page 1560, Sbornik statey po obshchey khimii (Collection of Papers on General Chemistry), Vol II, Moscow-Leningrad, 1953, pages 1680-1686.

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0014450

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001445

KOLESNIKOV, G.S.; RODIONOVA, Ye.F.; FEDOROVA, L.S.

Carbon chain polymer and copolymers. Part 11: Synthesis, polymerization, and copolymerization of esters of vinylphosphinic acid. Vysokom. soed. 1 no.3:367-372 Mr '59. (MIRA 12:10)

1. Institut elementoorganicheskikh soyedineniy AN SSSR.
(Phosphinic acid)

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0014450

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001445

KOLESNIKOV, G.S.; RODIONOVA, Ye.F.

Carbon chain polymers and copolymers. Part 15: Synthesis and polymerization of esters of vinylphosphinic acid. Vysokom.soed. 1 no.4:641-646 Ap '59. (MIRA 12:9)

1. Institut elementoorganicheskikh soyedineniy AN SSSR.
(Phosphinic acid)

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0014450

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001445

L 43096-65 EWT(m)/EPF(c)/EPR/EWP(j)/T Pc-4/Pr-4/Ps-4 RPL WW/RM
ACCESSION NR: AP5006358 S/0190/65/007/003/0377/0379

AUTHORS: Rodionova, Ye. F.; Kolesnikov, G. S.; Gavrikova, L. A.

TITLE: Oxidoreduction-initiated copolymerization of diphenyl vinylphosphinate with styrene

SOURCE: Vysokomolekulyarnyye soyedineniya, v. 7, no. 3, 1965, 377-379

TOPIC TAGS: polymer, copolymer, initiator, molecular weight, carbon, phosphorus, oxidoreduction, styrine, diphenyl, vinylphosphinate, sodium compound

ABSTRACT: In this 55th work from the series: "Carbon-chain polymers and copolymers," copolymerization in emulsion, initiated with an oxido-reducing system, was investigated in an effort to produce a high-molecular weight, high-phosphorus content copolymer of diphenyl vinylphosphinate (DPVP) with styrine. The method described by E. J. Vandenberg and G. E. Hulse (Industr. and Engng. Chem., 40, 932, 1948) was followed, and sodium mersolate was used as emulsifier. Experimental conditions, proportions of materials used, and the results obtained are tabulated. Molecular weights of the copolymers ranged up to 476 000, and the phosphorus content up to 3-4%. The yield of copolymer was found to increase at higher reaction temperatures. The authors thank S. A. Pavlova and her co-workers for determining

Card 1/2

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"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001445

L 43096-65
ACCESSION NR: AP5008358

the molecular weights. Orig. art. has: 2 tables.

ASSOCIATION: Institut elementoorganicheskikh soyedineniy, AN SSSR (Institute of Elementoorganic Compounds, AN SSSR)

SUBMITTED: 02Apr62 ENCL: 00 SUB CODE: GC, OC

NO REF SOV: 001 OTHER: 002

Card 2/2

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0014450

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001445

L 32764-66 EWT(m)/EWP(j)/T IJP(c) RM

ACC NR: AP6009877 (A) SOURCE CODE: UR/0413/66/000/004/0069/0069

37
B

INVENTOR: Andrianov, K. A.; Levin, B. B.; Rodionova, Ye. F.; Fetin, I. N.

ORG: none

TITLE: Preparation of phosphorus-containing polymers. Class 39, No. 178985 15

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 4, 1966, 69

TOPIC TAGS: polymer, phosphorus containing polymer, copolymerization

ABSTRACT: An Author Certificate has been issued describing a method of preparing phosphorus-containing polymers by initiated copolymerization of vinyl monomers and phosphorus compounds. To broaden the variety of phosphorus polymers, the monoester of alpha-phenylvinylphosphinic acid is suggested as the phosphorus compound. [LD]

SUB CODE: 11/ SUBM DATE: 11Nov64

Card 1/1 BLG UDC: 678.746.87-13.002.2

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0014450

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001445

(A) L 11138-66 EWT(m)/EWP(j)/T/ETC(m) RPL WW/RM

ACC NR: AP6002550 SOURCE CODE: UR/0286/65/000/023/0047/0047

44 55 44 55 44 55 44 55

INVENTOR: Levin, B. B.; Kolesnikov, G. S.; Rodionova, Ye. F.; Fetin, I. N.

ORG: none

TITLE: Preparation of acrylic or methacrylic acid copolymers. Class 39, No. 176682

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 23, 1965, 47

TOPIC TAGS: copolymer, acrylic acid, methacrylic acid, heat resistant material, fire resistant material

ABSTRACT: An Author Certificate has been issued for a preparative method for copolymers of acrylic or methacrylic acid with vinyl monomers. The method involves bulk or solution copolymerization at 50—100C in the presence of azobisisobutyronitrile. To improve the heat- and fire-resistance of the polymer, (α-phenylvinyl)phosphonic acid is used as the vinyl monomer. [BO]

SUB CODE: 07, 11/ SUBM DATE: 17Jul63/ ATD PRESS: 4173

Card 1/1 UDC: 678.744.322.13

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0014450

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001445

L 3554-66 EWT(m)/EPF(c)/EWP(j)/T/ETC(m) RPL WW/RM UR/0286/65/000/015/0081/0081

ACCESSION NR: AP5024400

AUTHORS: Levin, B. B.; Kolesnikov, G. S.; Rodionova, Ye. F.; Fetin, I. N.

TITLE: A method for obtaining copolymers of vinylpyrrolidone (vinylpyridine). Class 39, No. 173408

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 15, 1965, 81

TOPIC TAGS: copolymer, vinylpyridine, monomer, copolymerization

ABSTRACT: This Author Certificate presents a method for obtaining copolymers of vinylpyrroldone (vinylpyridine) with a vinyl monomer by copolymerizing appropriate monomers in a block or in a solution at the temperature of 50-100C in the presence of azoisooleic dinitrile initiator. To increase the heat and fire resistance of the polymer, α-phenylvinylphosphinic acid is used as vinyl monomer.

ASSOCIATION: none

SUBMITTED: 11Nov63 ENCL: 00 SUB CODE: OC, GC

NO REF SOV: 000 OTHER: 000

Card 1/1

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0014450

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001445

RODIONOVA, Yu.F.; KOLESNIKOV, G.S.; GAVRILOVA, L.A.

Copolymerization of diphenyl ester of vinylphosphinic acid with styrene in the presence of the initiating redox system. Vysokom. soed. 7 no.3:377-379 Mr '65. (MIRA 18:7)

1. Institut elementoorganicheskikh soyedineniy AN SSSR.

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0014450

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001445

ANDRIANOV, K.A., Akademik; KOLESNIKOV, G.S.; RODIONOVA, Ye.P.; LUKYANOVA, G.M.; [illegible]EVA, N.V.

Thermal degradation of the polymers of vinylphosphinic acid esters. Dokl. AN SSSR 163 no.1:97-99 Jl '65. (MIRA 18:7)

1. Institut elementoorganicheskikh soyedineniy AN SSSR i Moskovskiy khimiko-tekhnologicheskiy institut im. D.I.Mendeleyeva.

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0014450

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001445

KOLESNIKOV, G.S.; SAFARALIYEVA, I.G.; RODIONOVA, Ye.F.

Carbochain polymers and copolymers. Part 53: Polymerization kinetics of dimethyl ester of vinylphosphinic acid. Vysokom. soed. 6 no.4:615-619 Ap '64. (MIRA 17:6)

1. Institut elementoorganicheskikh soyedineniy AN SSSR.

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0014450

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001445

ACCESSION NR: AP4025010 S/0062/64/000/003/0538/0543

AUTHOR: Kolesnikov, G. S.; Rodionova, Ye. F.; Luk'yanova, G. M.

TITLE: carbon chain polymers and copolymers
Communication 50. Phosphorus containing derivatives of methacrylic acid.

SOURCE: AN SSSR. Izv. Seriya khimicheskaya, no. 3, 1964, 538-543

TOPIC TAGS: phosphorus methacrylic acid derivative, methacryloxyethyldialkylphosphate, polymer, copolymer, self extinguishing resin, monomer activity, styrene, methylmethacrylate, acrylonitrile, linear polymer, three dimensional polymer, cross linking, phosphorus containing monomer, synthesis, polymerization, copolymerization, organo phosphate polymer, property

ABSTRACT: Beta-methacryloxyethyldialkyphosphates were synthesized, polymerized and copolymerized and the properties of the polymers and copolymers were investigated. The monomers were synthesized according to the following reactions:

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ACCESSION NR: AP4025010

$$PCl_3 + ROH \xrightarrow[H_2]{-5^\circ} (RO)_2POH + 2HCl$$

$$(RO)_2POH + Cl_2 \xrightarrow[CCl_4]{-5^\circ} (RO)_2P(O)Cl + HCl$$

$$CH_2=C(CH_3)COOH + ClCH_2CH_2OH + Na_2CO_3 \xrightarrow[C_6Cl_6]{130^\circ}$$

$$\rightarrow CH_2=C(CH_3)COOCH_2CH_2OH + NaCl + CO_2 + H_2O$$

$$CH_2=C(CH_3)COOCH_2CH_2OH + (RO)_2P(O)Cl \xrightarrow[N(C_2H_5)_3]{10^\circ}$$

$$\rightarrow CH_2=C(CH_3)COOCH_2CH_2OP(O)(OR)_2$$

R = isopropyl, isobutyl, n-butyl and isoamyl. On polymerizing, increasing the size of the alkyl group reduced the yield. All the polymers are colorless, elastic, self-extinguishing materials. The glass temperature of beta-methacryloxyethyldiisobutylphosphate polymer is 30 C and of the β-dibutylphosphate polymer, about -30 C. Copolymerization of the phosphorus-containing monomers was fairly difficult; the least difficulty was encountered with methylmethacrylate, more difficulty with styrene, and considerable difficulty with acrylonitrile. The copolymers are rubbery materials insoluble in organic solvents, with a glass temperature of 30-60 C. The phosphorus-containing monomers are less active than styrene, methylmethacrylate or acrylonitrile. It is suggested that the

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ACCESSION NR: AP4025010

insolubility of the beta-methacryloxyethyldialkylphosphate polymers and copolymers may be attributed to a three dimensional structure in which a chain with a portion of the phosphate alkyl radical is transferred and/or disproportionation occurs and small amounts of dimethacrylic derivatives act as cross-linking agents. Orig. art. has: 3 tables and 1 set of equations.

ASSOCIATION: Institut elementoorganicheskikh soyedineniy Akademii nauk SSSR (Institute of Organometallic Compounds, Academy of Sciences, SSSR)

SUBMITTED: 12Sep62 DATE ACQ: 17Apr64 ENCL: 00

SUB CODE: GC,OC NO REF SOV: 005 OTHER: 004

Card 3/3

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0014450

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001445

KOLESNIKOV, G.S.; RODIONOVA, Ye.F.; SAFARALIYEVA, I.G.

Carbochain polymers and copolymers. Report No.52: Relative activity of vinylphosphinic acid esters in copolymerization with styrene. Izv. AN SSSR. Ser. khim. no.11:2028-2031 N '63. (MIRA 17:1)

1. Institut elementoorganicheskikh soyedineniy AN SSSR.

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0014450

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001445

ACCESSION NR: AP4032562 S/0190/64/006/004/0615/0619

AUTHORS: Kolesnikov, G. S.; Safaraliyeva, I. O.; Rodionova, Ye. F.

TITLE: Carbochain polymers and copolymers. 53. Polymerization kinetics of dimethyl vinylphosphinate

SOURCE: Vysokomolek. soyedin., v. 6, no. 4, 1964, 615-619

TOPIC TAGS: polymer, copolymer, polymerization, polymerization kinetics, ester, dimethyl vinylphosphinate, azobutyronitrile, activation energy, polymerization coefficient

ABSTRACT: The polymerization of dimethyl vinylphosphinate was conducted in dilatometers in the presence of 1 mol/% azo-bis-isobutyronitrile at 40, 50, 60, and 70C. Upon the completion of polymerization the dilatometers were cooled in dry ice, the contents were dissolved in methanol and were distilled in vacuum at 56C to remove the methanol and residual monomer. The molecular weights of the polymers obtained within the 40-70C range were 5900-8970. The reaction proceeded at 0.56-11.9 %/sec·10^3; the activation energy was 22 kcal/mole. It was found that

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ACCESSION NR: AP4032562

the molecular weights of the polymers were far lower than could be expected by theoretical calculations. This discrepancy is interpreted by the authors as being due to the termination of the polymeric chain growth, resulting from the chain transfer via the monomer. Thanks are expressed to S. A. Pavlova and her collaborators for the determination of molecular weights. Orig. art. has: 2 tables and 3 charts.

ASSOCIATION: Institut elementoorganicheskikh soyedineniy AN SSSR (Institute of Organoelemental Compounds AN SSSR)

SUBMITTED: 08Apr63 DATE ACQ: 11May64 ENCL: 00

SUB CODE: GC NO REF SOV: 007 OTHER: 004

Card 2/2

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0014450

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001445

KOLESNIKOV, G.S.; RODIONOVA, Ye.F.; FEDOROVA, L.S.; MEDVED', T.Ya.; KABACHNIK, M.I.

Carbochain polymers and copolymers. Part 43: Synthesis, polymerization, and copolymerization of aromatic esters of vinylphosphinic and α-chlorovinylphosphinic acids. Vysokom. soed. 5 no.1:32-38 Ja '63. (MIRA 16:1)

1. Institut elementoorganicheskikh soyedineniy AN SSSR.
(Phosphinic acid) (Polymerization)

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0014450

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001445

KOLESNIKOV, G.S.; RODIONOVA, Ye.F.; FEDOROVA, L.S.; MEDVED', T.Ya.; KABACHNIK, M.I.

Carbochain polymers and copolymers. Part 41: Synthesis, polymerization, and copolymerization of vinylphosphinic amides. Vysokom.soed. 4 no.9:1385-1389 S '62. (MIRA 15:11)

1. Institut elementoorganicheskikh soyedineniy AN SSSR.
(Phosphinic amide)
(Polymerization)

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0014450

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001445

KOLESNIKOV, G.S., RODIONOVA, YE.F., FEDOROVA, L.S.

The synthesis polymerization and copolymerization of esters of vinylphosphinic acid.

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.

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"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001445

S/081/62/000/023/118/120
B117/B186

AUTHORS: Kolesnikov, G. S., Rodionova, Ye. F., Fedorova, L. S.

TITLE: Synthesis, polymerization, and copolymerization of vinyl phosphinic esters

PERIODICAL: Referativnyy zhurnal. Khimiya, no. 23, 1962, 816, abstract 23R57 (In collection: Khimiya i primeneniye fosfororganich. soyedineniy. M., AN SSSR, 1962, 255 - 262)

TEXT: Vinyl phosphinic esters (VPE) were synthesized by dehydrochlorination of the corresponding β-chloroethyl phosphinic esters. Catalysts of the ion type ($AlCl_3$, $TiCl_4$, Na) proved ineffective for polymerizing VPE. VPE were block-polymerized at 50°C in N_2 atmosphere and in the presence of radical initiators. The polymerization is accelerated by enlarging the alkyl radical of VPE (methyl ester being an exception). VPE that contain radicals with equal numbers of C atoms in the principal chain polymerize at the same rate. VPE polymers are soluble in dichloro ethane, insoluble in C_6H_6 and CCl_4. Copolymers of VPE with acrylonitrile, vinyl acetate, and vinyl chloride were

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Synthesis, polymerization, and... S/081/62/000/023/118/120
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obtained. In copolymerization, VPE are less reactive than the comonomers mentioned. Polymerization and copolymerization of vinyl phosphinic chloride was also investigated. [Abstracter's note: Complete translation.]

Card 2/2

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0014450

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001445

KORSHAK, V.V.; SLADKOV, A.M.; KRONGAUZ, Ye.S.; ROGOZHIN, S.V.; RODIONOVA, Ye.F.; CHELNOKOVA, G.N.; MAKAROVA, T.A.; SOSIN, S.L.; LOSKUTOVA, I.P., red.izd-ve; POLYAKOVA, T.V., tekhn.red.

[Chemistry and technology of synthetic macromolecular compounds. Carbocyclic compounds] [illegible] sinteticheskikh vys.komolekul'iarnykh soedinenii. Karbotsepnye soedineniia. Moskva, Izd-vo Akad. nauk SSSR, 1961. [illegible] (Itogi nauki: Khimicheskie nauki, no.6) (MIRA 14:11)

1. Chlen-korrespondent AN SSSR (for Korshak).
(Macromolecular compounds)
(Cyclic compounds)

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"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001445

RODIONOVA, YE. F.

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PHASE I BOOK EXPLOITATION SOV/6034

Konferentsiya po khimii i primeneniyu fosfororganicheskikh soyedineniy. 2d, Kazan', 1959.

Khimiya i primeneniye fosfororganicheskikh soyedineniy; trudy (Chemistry and Use of Organophosphorus Compounds; Conference Transactions) Moscow, Izd-vo AN SSSR, 1962. 630 p. Errata slip inserted. 2800 copies printed.

Sponsoring Agency: Akademiya nauk SSSR. Kazanskiy filial.

Resp. Ed.: A. Ye. Arbuzov, Academician; Ed. of Publishing House: L. S. Povarov; Tech. Ed.: S. G. Tikhomirova.

PURPOSE: This collection of conference transactions is intended for chemists, process engineers, physiologists, pharmacists, physicians, veterinarians, and agricultural scientists.

COVERAGE: The transactions include the full texts of most of the scientific papers presented at the Second Conference on the Chemistry and Use of

Card 1/4

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Organophosphorus Compounds held at Kazan' from 2 Nov through 1 Dec 1959. The material is divided into three sections: Chemistry, containing 67 articles; Physiological Activity of Organophosphorus Compounds, containing 26 articles; and Plant Protection, containing 12 articles. The reports reflect the strong interest of Soviet scientists in the chemistry and application of organophosphorus compounds. References accompany individual reports. Short summaries of some of the listed reports have been made and are given below.

TABLE OF CONTENTS:[Abridged]:

Introduction (Academician A. Ye. Arbuzov) 3

TRANSACTIONS OF THE CHEMISTRY SECTION

Gefter, Ye. L. [NII plastmass (Scientific Research Institute of Plastics, Moscow]. Some Prospects for the Industrial Use of Organophosphorus Compounds 46

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0014450

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2

Korshak, V. V., T. M. Frunze, V. V. Kurashev, and L. V. Kozlov [Institute of Organoelemental Compounds]. Synthesis of Some Phosphorus-Containing Dicarboxylic Acids and Derivation of Polyamides Based on Such Acids 247

Phosphorus-containing dicarboxylic acids have been obtained by synthesis and used for the preparation of polyamides. The effect of the phosphorus and the structure of the acids on the properties of the polyamides has been studied.

Kolesnikov, G. S., Ye. F. Rodionova, and L. S. Fedorova [Institute of Organoelemental Compounds]. Synthesis, Polymerization, and Copolymerization of Esters of Vinylphosphonic Acid 255

The authors obtained esters of vinylphosphonic acid and demonstrated that these esters are capable of entering the polymerization and copolymerization reaction with other monomers. Polymers and copolymers of the dichloride and esters of vinylphosphonic acid have been synthesized and their properties determined.

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0014450

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001445

Chemistry and the Use of Organophosphorus (Cont.) SOV/6034

Andreyeva, M. A., I. A. Gribova, M. I. Kabachnik, G. S. Kolesnikov, ~~V. V. Korshak~~, T. Ya. Medved', Yu. M. Polikarpov, Ye. F. Rodionova, and L. S. Fedorova [Institute of Organoelemental Compounds]. Some Methods of Synthesis of New Organophosphorus Monomers and Polymers 263

This study attempts to develop new methods of synthesis of organophosphorus monomers and polymers for obtaining high-molecular fireproof materials. The authors synthesized vinyl compounds of pentavalent phosphorus and studied their properties, as well as those of the polymers obtained.

Moshkin, P. A., Ye. L. Gefter, and I. K. Rubtsova [Scientific Research Institute of Plastics]. Study of the Synthesis and Uses of Some Organophosphorus Compounds in the Plastics Industry 279

industrial methods for the preparation of esters of phosphoric acid and for testing qualities of these acids as plasticizers have been developed, along with methods for obtaining phosphorus-containing monomers for use in polymerization, copolymerization, and polycondensation reactions. Polyesters based on dichlorides of

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APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0014450

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001445

RODIONOVA, Ye.F.; KOLESNIKOV, G.S.; FEDOROVA, L.S.; GAVRIKOVA, L.A.

Carbochain polymers and copolymers. Part 37: Polymerization and copolymerization of diphenyl vinylphosphinate. Vysokom. soed. 4 no.3:448-451 Mr '62. (MIRA 15:3)

1. Institut elementoorganicheskikh soyedineniy AN SSSR.
(Phosphinic acid) (Polymerization)

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0014450

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001445

34500
S/190/62/004/003/020/023
B124/B101

15.8150
11.2210

AUTHORS: Rodionova, Ye. F., Kolesnikov, G. S., Fedorova, L. S., Gavrikova, L. A.

TITLE: Carbon chain polymers and copolymers. XXXVII. Polymerization and copolymerization of diphenyl vinylphosphinate

PERIODICAL: Vysokomolekulyarnyye soyedineniya, v. 4, no. 3, 1962, 448-451

TEXT: The results of a study performed on the polymerization of diphenyl vinylphosphinate (DVP) and its copolymerization with styrene and acrylonitrile are presented. DVP was mass-polymerized in nitrogen at 60°C in sealed tubes in the presence of one of the following initiators: benzoyl peroxide, tert-butyl hydroperoxide, and azoisobutyrodinitrile. DVP was further copolymerized with styrene in mass and in emulsion. With increasing DVP content in the starting monomer mixture, the yield and the intrinsic viscosity of the resulting copolymer decrease. When a molar ratio of DVP and styrene equal to 25:75 is used, 2 molar % of the initiator are added, and the mixture is copolymerized at 72.5°C, a yield of 75% of the copolymer is attained after 7 - 8 hours which remains practically unchanged

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in the further course of copolymerization. When temperature is lowered from 72.5 to 60°C, the intrinsic viscosity is raised to its double value; lowering of the concentration of the initiator has an analogous effect. When the mentioned two monomers were copolymerized in emulsion at 50°C in nitrogen and in the presence of ammonium persulfate for 36 hours, a copolymer containing about 2% of phosphorus, with an intrinsic viscosity of 1,87 and a molecular weight of 113,000 was obtained. When DVP is copolymerized with o-methylstyrene under conditions similar to those used with styrene, the yield of the copolymer is about the same as with styrene with the phosphorus content being somewhat higher. The vitrification point of the copolymer with o-methylstyrene is somewhat higher than that of the copolymer with styrene. The intrinsic viscosity of a 0.5% solution of the DVP-acrylonitrile copolymer in dimethyl formamide decreases with increasing content of the phosphorus-containing component; the yield of the copolymer after 8 hours of copolymerization varies but little with the composition of the starting mixture in the range of DVP concentrations studied. In all cases, the copolymer contains less of the phosphorus-containing component than the starting mixture. Thanks are due to S. A. Pavlova for the determination of the molecular weight. There are 2 figures, 6 tables, and 4 Soviet

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Carbon chain polymers ... S/190/62/004/003/020/023
B124/B101

references.

ASSOCIATION: Institut elementoorganicheskikh soyedineniy AN SSSR (Institute of Elemental Organic Compounds of the AS USSR)

SUBMITTED: March 14, 1961

Card 3/3

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0014450

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001445

RODIONOVA, Ye.F.; KOLESNIKOV, G.S.; SOBOROVSKIY, L.Z.; GLADSHTEYN, B.M.

Carbochain polymers and copolymers. Part 30: Copolymerization of vinylsulfofluoride. Vysokom.soed. 3 no.3:456-458 Mr '61. (MIRA 14:6)

1. Institut elementoorganicheskikh soyedineniy AN SSSR.
(Vinylsulfofluoride)

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0014450

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001445

RODIONOVA, Ye.F.; KOLESNIKOV, G.S.

Carbochain polymers and copolymers. Part 31: Polymerization and copolimerization of vinylphosphinyl chloride. Vysokom.soed. 3 no.3:459-463 Mr '61. (MIRA 14:6)

1. Institut elementoorganicheskikh soyedineniy AN SSSR.
(Polymerization) (Phosphinic acid)

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0014450

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001445

69993

15.8114

11.2214

S/190/61/003/003/009/014
B101/B204

AUTHORS: Rodionova, Ye. F., Kolesnikov, G. S., Soborovskiy, L. Z., Gladshteyn, B. M.

TITLE: Carbon-chain polymers and copolymers. XXX. The copolymerization of vinylsulfofluoride

PERIODICAL: Vysokomolekulyarnyye soyedineniya, v. 3, no. 3, 1961, 456-458

TEXT: It was the purpose of the present work to obtain copolymers from vinylsulfofluoride (M_1), produced from β-chloroethylsulfofluoride, with (M_2): styrene, vinylacetate, methylmethacrylate and acrylonitrile. The copolymerization was carried out at 50°C without solvent, in a nitrogen atmosphere with 0.5 mole% azoisobutyric acid dinitrile. It lasted 25 hr. The copolymers were dissolved and precipitated with methanol. Their fluorine content and the softening temperature were determined. Table 1 gives the results. The good styrene copolymer yield and its softening temperature which was higher than that of polystyrene gave rise to further

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"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001445

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Carbon-chain polymers and...

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B101/B204

experiments under the same conditions, but with a varied ratio between vinylsulfofluoride and styrene. The copolymerization took 49 hr. Table 2 gives the results. With a content of about 32 mole% styrene, an azeotropic copolymer is obtained. The figure shows the results of the thermomechanical investigation of these copolymers, carried out according to B. L. Tsetlin (Ref. 3: Zavodsk. labor., 32, 352, 1956). Equimolar mixtures of vinylsulfofluoride and styrene copolymerized in emulsion, after 7 hr resulted in a copolymer (in the presence of ammonium persulfate) with 6.85% F, yield 69%. Mention is made of the fact that polymerization of vinylsulfofluoride by means of benzoyl peroxide, azoisobutyric acid dinitrile or $TiCl_4$ was not successful. The authors thank G. L. Slonimskiy and his collaborators for determining the thermomechanical properties, and S. A. Pavlova for determining the molecular weights. There are 1 figure, 2 tables, and 3 references: 2 Soviet-bloc and 1 non-Soviet-bloc. The reference to English-language publication reads as follows: USA Patent 2,653,973 (1953); Chem. Abstrs., 48, 8813, (1954)

ASSOCIATION: Institut elementoorganicheskikh soyedineniy AN SSSR (Institute of Elemental Organic Compounds, AS USSR)

Card 2/4

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"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001445

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Carbon-chain polymers and...

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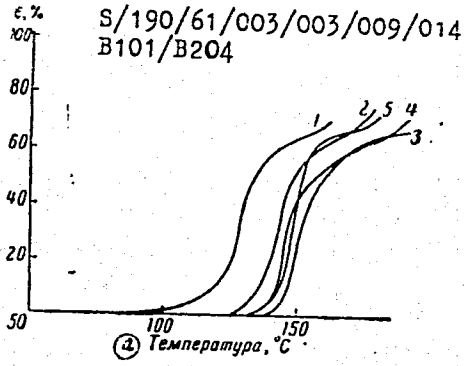
B101/B204

SUBMITTED: September 2, 1960



Legend to the figure:
Molar ratio $M_1 : M_2$ in styrene-copolymer:
1) 1:6; 2) 3:8; 3) 5:11; 4) 3:5; 5) 2:3; a) temperature.

M_1	Выход переосажденного сополимера, вес. % (4)	Удельная вязкость 1 %-ного раствора при 20° (растворитель) (3)	Содержание фтора в сополимере (средн.), % (1)	Молярное соотношение $M_1 : M_2$ в сополимере (2)	Температура размягчения, °C (5)
Стирол (6)	72	1,83 (этилацетат) (10)	7,10	2 : 3	135
Винилацетат (7)	60	0,4 (ацетон) (12)	8,67	4 : 5	110
Акрилонитрил (8)	44	1,03 (диметилформамид) (11)	4,51	1 : 6	110
Метилметакрилат (9)	56	0,25 (ацетон) (11)	3,72	1 : 4	115

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APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0014450

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001445

89993

Carbon-chain polymers and...

S/190/61/003/003/009/014
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Legend to Table 1:
1) Yield in reprecipitated copolymer, weight%. 2) Specific viscosity of the 1% solution at 20°C in (solvent). 3) Mean fluoride content of the copolymer. 4) Molar ratio $M_1:M_2$. 5) Softening temperature. 6) Styrene. 7) Vinylacetate. 8) Acrylonitrile. 9) Methylmethacrylate. 10) Ethylacetate. 11) Acetone. 12) Dimethylformamide.

Legend to Table 2:
1) Initial ratio of monomers, mole%. 2) Copolymer yield. 3) Specific viscosity of the 1% solution in ethylacetate at 20°C. 4) Osmometrically determined molecular weight. 5) F content in the copolymer. 6) Molar ratio $M_1:M_2$ in the copolymer. 7) Softening temperature

Состав исходной смеси мономеров, мол. % (4)		Выход сополимера, % (2)	Удельная вязкость 1 %-ного раствора в этилацетате при 20° (3)	Мол. вес сополимера (осмометрический метод) (4)	Содержание фтора в сополимере, % (5)	Молярное соотношение $M_1:M_2$ в сополимере (6)	Температура размягчения, °C (7)
M_1	M_2						
10	90	90	0,80	—	2,71 2,50	1:6	121
20	80	92	0,88	698 000	4,74 5,00	3:8	135
30	70	89	0,93	—	5,62 5,50	5:11	145
40	60	87	0,90	—	6,83 6,48	3:5	140
50	50	83	0,92	1 160 000	7,28 6,81	2:3	142

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AUTHORS: Rodionova, Ye. F., Kolesnikov, G. S.

TITLE: Carbon-chain polymers and copolymers. XXXI. The polymerization and copolymerization of vinyl phosphinic acid chlorides

PERIODICAL: Vysokomolekulyarnyye soyedineniya, v. 3, no. 3, 1961, 459-463

TEXT: This is a continuation of the investigation of the polymerization of derivatives of vinylphosphinic acid carried out by the authors (G. S. Kolesnikov et al., Ref. 1: Vysokomolek. soyed., 1, 367, 1959; Ref. 2: ibid., 1, 641, 1959; Ref. 3: ibid., 2, 1432, 1960). The chloride of vinylphosphinic acid (VPC) was polymerized in ampoules, in nitrogen atmosphere at 50°C with an addition of 2% benzoyl peroxide or azoisobutyric acid dinitrile. The latter turned out to be the active initiator. Saponification of the polymer of VPC with water yielded polyvinylphosphinic acid, yield 88%, intrinsic viscosity 0.15. Reaction of the PVC polymer with benzyl alcohol (I), ω-hydroxy-enanthyllic acid (II) and ω-hydroxypelargonic acid (III) in dichloroethane gave derivatives of polyvinyl-

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