"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001343

RACHINSKAS, V.S. [Racinskas,V.]; MATULIS, Yu.Yu. [Matulis,J.]

Some conditions of formation of colloids in a cathode layer during the electrolytic separation of zinc from sulfate solutions. Liet ak darbai B no.2:125-138 '60. (EEAI 10:1)

1. Institut khimii i khimicheskoy tekhnologii Akademii nauk Litovskoy SSR

(Colloids) (Zinc) (Electrolysis) (Sulfates)

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0013438

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L 02333-67 EWT(m)/EWP(t)/ETI IJP(c) JD/HW/JG

ACC NR: AP6030630 SOURCE CODE: UR/0413/66/000/016/0127/0127

47
B

INVENTOR: Rachinskas, V. S.

ORG: none

TITLE: Method of electrodeposition of a hard magnetic cobalt-tungsten alloy. Class 48, No. 185171 [announced by Design and Planning Bureau, Administration of Instrument Building of the Lithuanian Council of National Economy (Proyektno-konstruktorskoye byuro upravleniya pribostroyeniya Litovskogo sovnarkhoza)]

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 16, 1966, 127

TOPIC TAGS: electrodeposition, magnetic alloy, cobalt alloy, tungsten alloy, magnetic coercive force

ABSTRACT: An Author Certificate has been issued for a method of electrodeposition of a hard magnetic cobalt-tungsten alloy from a sulfate electrolyte. To improve the magnetic properties of the deposited coating, the process is carried out at temperature of 30—40C, a current density of 0.6—1.0 a/dm^2, and pH 4.5—5.5 in an electrolyte of the following composition (grams per liter): 125 cobalt

Card 1/2 UDC: 621.357.77:669.255.27

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L 02333-67

ACC NR: AP6030630

sulfate, 10 potassium tungstate, 100 magnesium sulfate, and 30 boric acid. To increase the coercive force of the coating, the process of electrodeposition of the alloy is carried out at pH 6.3. [Translation] [NT]

SUB CODE: 11/ SUBM DATE: 26Apr65/

Card 2/2

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0013438

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001343

KHAYKINA, A.S.; DUBRAVINA, G.I.; RACHINSKAYA, A.Z.; PETRENKO, M.D.; MITEL'MAN, P.M.; KHODOROVA, Z.N.; KATS, F.M.; KISELEV, R.I.; GAYDAMAKA, M.G.; VOLOVICH, B.I.; BEKKER, M.L.; GORDIYENKO, Ye.G.; VYSOCHINENKO, Ye.K.; TELESHEVSKAYA, M.A.; NAYDEROVA, Yu.T.

Production of the active fraction of hyperimmune horse sera by means of the alcohol precipitation method under a low temperature. Nauch. osn. proizv. bakt. prep. 10:159-167 '61. (MIRA 18:7)

1. Khar'kovskiy institut vaktsin i syvorotok im. Mechnikova.

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0013438

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001343

LASHKEVICH, A.M.; TERENT'YEVA, A.A.; IVANOVA, L.S.; BORODULINA, M.A.; VELICHENKO, I.N.; NIKULENKO, V.S.; KONSHINA, T.I.; SHAKHOVA, T.P.; NYASHINA, A.A.; YASINSKAYA, Z.A.; AGAL'TSEVA, N.B.; SEL'MENSKAYA, Ye.G.; KRETSMER, V.L.; KONONOVICH, L.K.; FEDORAYEVA, A.M.; TKACHUK, L.Ya.; VYATKINA, G.A.; SLOUSHCH, V.S.; RACHINSKAYA, L.N.; PORTNAYA, R.Yu.; KARAKOVSKAYA, E.M.; POKROVSKAYA, M.A.; KORNEVA, A.I.; YERSHOVA, K.F., otv. red.; Prinimal uchastiye KAMANOV, M.I., red.; LAGAREVA, A.P., otv. za vypusk; NIKITINA, I.P., tekhn. red.

[Economy of Novosibirsk Province; collection of statistics] Narodnoe khoziaistvo Novosibirskoi oblasti; statisticheskii sbornik. Novosibirsk, Gosstatizdat TsSU SSSR, 1961. 331 p. (MIRA 15:6)

1. Novosibirsk. Oblastnoye statisticheskoye upravleniye. 2. Nachal'nik Statisticheskogo Upravleniya Novosibirskoy oblasti (for Yershov). 3. Zamestitel' nachal'nika Statisticheskogo Upravleniya Novosibirskoy oblasti (for Kamanov).

(Novosibirsk Province—Economic conditions)

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0013438

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001343

RACHINSKAYA, N.A. (Moskva)

Cuprosulfate method of determining the hemoblobin in donors.
Probl.gemat.i perel.krovi no.5:54-55 '62. (MIRA 15:8)
(BLOOD DONORS) (HEMOGLOBIN) (COPPER SULFATE)

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0013438

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001343

RACHINSKAYA, N.A.

Restoring the working capacity in patients following a mitral commissurotomy. Sov. med. 28 no.8:98-102 Ag '65. (MIRA 18:9)

1. Institut serdechno-sosudistoy khirurgii (dir. - prof. S.A. Kolesnikov, nauchnyy rukovoditel' - akademik A.N.Bakulev) AMN SSSR, Moskva.

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0013438

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001343

RACHINSKAYA, N.N.

Vegetation of the margins of sandy massifs and its indicational significance. Biul. MOIP. Otd.geol. 39 no.5:155-156 S-O '64. (MIRA 18:2)

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0013438

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001343

VOSTOKOVA, Ye.A.; TAGUNOVA, L.N.; VEREYSKIY, N.G.; PREOBRAZHENSKAYA, N.N.; MOSKALENKO, N.G.; RACHINSKAYA, N.N.; TURMANINA, V.I.; SHITOV, V.D.; ORLOVA, V.P., red.; PEVZNER, V.I., tekhn.red.; OKOLELOVA, Z.P., tekhn.red.

[Handbook and guide to the lithological composition of surfical sediments and the depth of occurrence of underground waters] Spravochnik-opredelitel' litologicheskogo sostava poverkhnostnykh otlozhenii i glubiny zaleganiia podzemnykh vod. Pod red. N.G.Vereiskogo i E.A.Vostokovoi. Moskva, Sel'khozizdat, 1963. 259 p. (MIRA 17:3)

1. Moscow. Vsesoyuznyy nauchno-issledovatel'skiy institut gidrogeologii i inzhenernoy geologii. 2. Vsesoyuznyy nauchno-issledovatel'skiy institut gidrogeologii i inzhenernoy geologii (for all except Orlova, Pevzner, Okolelova).

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0013438

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001343

PALANT, B.L.; MITEL'MAN, P.M.; KHAYKINA, A.S.; RACHINSKAYA, R.Z.; KHODOROVA, Z.N.; FINTIKTIKOVA, R.P.

Production of antipertussis sera, their purification and testing of the effectiveness of pertussis gamma globulin under clinical conditions. Nauch. osn. proizv. bakt. prep. 10:262-271 '61. (MIRA 18:7)

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0013438

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001343

LONDARENKO, O.M.; GOLOVINSKAYA, S.M. [Holovins'ka, S.M.]; SAVCHENKO, N.M.; LIKHTIK, O.G. [Likhtyk, O.H.]; BARANSKAYA, S.F. [Barans'ka, S.F.]; RACHINSKAYA, T.V. [Rachyns'ka, T.V.]

Proposals of efficiency promoters of the "Children's Clothing" Factory No.4 in Kiev. Leh. prom. no.3:74-76 Jl-S '65. (MIRA 18:9)

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0013438

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001343

RACHINSKAYA, V.V.; RACHINSKIY, V.V.

Investigating hydrodynamic properties of ion exchange resins. (MIRA 13:12)
Izv. TSKhA no.6:188-197 '60.
(Resins, Synthetic) (Ion exchange)

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0013438

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001343

BONDARCHUK, V.G., akademik, otv. red.; KOROLEVA, M.A., glav. red.; KOCHUBEY, A.D., red.; RADUL, M.M., kand. geogr. nauk, red.; BILYK, G.I., kand.biol. nauk, red.; GEYDEMAN, T.S., kand. biol. nauk, red.; ZAMORIY, P.K., doktor geol.-min. nauk, prof., red.; KUGUKALO, I.A., kand. ekon. nauk, starshiy nauchnyy stor., red.; MARINICH, A.M., dotsent, red.; MUKOMEL', I.F., kand. geogr. nauk, starshiy nauchnyy sotr., red.; PRIKHOT'KO, G.F., kand. geogr. nauk, red.; ROMANENKO, I.N., akademik, red.; TAL'NOVA, N.N., red.; BYUSHGENS, L.M., kand. geogr. nauk, retsenzent; DIDKOVSKIY, I.Ya., kand. geol.-miner. nauk, retsenzent; KEL'NER, Yu.G., kand. geogr. nauk, retsenzent; NADEZHIN, P.F., retsenzent; NIKISHOV, M.I., doktor tekhn. nauk, retsenzent: PIDOPLICHKO, I.G., retsenzent; KURDINA, G.P., red.-kartograf; RACHINSKAYA, Z.P., red.-kartograf; SLEPTSOVA, L.M., redaktor-kartograf.

[Atlas of the Ukrainian S.S.R. and the Moldavian S.S.R.] Atlas Ukrainskoi SSR i Moldavskoi SSR. Moskva, 1962. vi p. 90 p. of col.maps. (MIRA 15:5)

(Continued on next card)

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"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001343

BONDARCHUK, V.G.--- (continued) Card 2.

1. Russia (1923- U.S.S.R.)Glavnoye upravleniye geodezii i kartografii. 2. Akademiya nauk USSR, direktor Instituta geologicheskikh nauk Akademii nauk USSR (for Bondarchuk). 3. Nachal'nik kartosostavitel'skogo tsekha fabriki No.1 (for Koroleva). 4. Zamestitel' predsedatelya Gosudarstvennogo planovogo komiteta Soveta Ministrov USSR (for Kochubey). 5. Direktor Instituta ekonomiki Akademii nauk Moldavskoy SSR (for Radul). 6. Zamestitel' direktora po nauchnoy rabote Instituta botaniki Akademii nauk USSR (for Bilyk). 7. Direktor Botanicheskogo sada Akademii nauk Moldavskoy SSR (for Geydeman). 8. Zaveduyushchiy kafedroy geomorfologii Kiyevskogo gosudarstvennogo universiteta (for Zamoriy). 9. Institut ekonomiki Akademii nauk USSR (for Kugukalo). 10. Zaveduyushchiy kafedroy fizicheskoy geografii Kievskogo gosudarstvennogo universiteta (for Marinich). 11. Ukrainskiy nauchno-issledovatel'skiy institut ekonomiki i organizatsii sel'skogo khozyaystva (for Mukomel'). 12. Direktor Ukrainskogo nauchno-issledovatel'skogo gidrometeorologicheskogo instituta (for Prikhot'ko).

(Continued on next card)

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"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001343

BONDARCHUK, V.G.---(continued) Card 3.

13. Direktor Ukrainskogo nauchno-issledovatel'skogo instituta ekonomiki i organizatsii sel'skogo khozyaystva, Chlen-korrespondent Vsesoyuznoy akademii sel'skokhozyaystvennykh nauk im. V.I.Lenina (for Romanenko). 14. Direktor fabriki No.1 (for Tal'nova). 15. Chlen-korrespondent Akademii nauk USSR (for Pidoplichko).

(Ukraine--Maps) (Moldavia--Maps)

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0013438

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001343

SEVAST'YANOVA, Ye.K., mladshiy nauchnyy sotrudnik; RACHINSKIY, A.A., kandidat sel'skokhozyaystvennykh nauk; GAVRILENKO, D.M., mladshiy nauchnyy sotrudnik; TOGOYEV, I.N., otvetstvennyy redaktor; MALENIN, V.N., redaktor; TEODOROVICH, L.D., redaktor; PAZDZERSKIY, A.N., redaktor; DONSKOY, P.V., redaktor; LYUBECHANSKAYA, N.I., redaktor izdatel'stva; GOR'KOVAYA, Z.P., tekhnicheskiy redaktor

[Prospective plan for the development of a collective cotton farm; the Stalin collective farm of the Buvaidy District, Fergana Province] Perspektivnyi plan razvitiia khlopkosiushchego kolkhoza; kolkhoz imeni Stalina Buvaidinskogo raiona Ferganskoi oblasti. Tashkent, 1956. 125 p. (MLRA 9:12)

1. Akademiya nauk Uzbekskoy SSR, Tashkent. Institut ekonomiki.
2. Institut ekonomiki Akademii nauk Uzbekskoy SSR (for Sevast'yanova)
3. Institut sooruzheniy Akademii nauk Uzbekskoy SSR (for Rachinskiy)
4. Institut sel'skogo khozyaystva Akademii nauk Uzbekskoy SSR (for Gavrilenko)

(Uzbekistan--Cotton growing)

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0013438

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001343

USSR / Soil Science. Cultivation. Improvement. Erosion. J-5

Abs Jour : Ref. Zhur - Biologiya, No 17, 1958, No. 77460

Author : ~~Rachinskiy, A. A.~~
Inst : Not given
Title : Practical and Most-Effective Measures for Control of Water Losses from an Irrigation Network

Orig Pub : Materialy po proizvodit. silam Uzbekistana, 1956, vyp. 5, 53-64

Abstract : No abstract given

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APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0013438

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001343

RACHINSKIY, A.A., kand.tekhn.nauk, dotsent

Work results of the study on water losses in irrigation systems and on the increase of their efficiency. Trudy TIIIMSKH no.1:7-36 '55. (MIRA 15:4)

1. Kafedra sel'skokhozyaystvennyy melioratsiy Tashkentskogo instituta inzhenerov irrigatsii i mekhanizatsii sel'skogo khozyaystva. (Irrigation research)

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0013438

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001343

RAGHINSKIY, A.A., kand.tekhn.nauk (Tashkent)

Land improving effect of the collector drainage network in southern Khorezm Province. Gidr. i mel. 16 no.1:18-22 Ja '64. (MIRA 17:2)

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0013438

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001343

MASHETKINA, N.K., doktor geol.-mineral. nauk; LACHINSKIY, [illegible], kand. tekhn. nauk

Problems and principles related to the reclamation of virgin lands. Gidr. i mel. 16 no.8:3-9 Ag '64. (MIRA 17:10)

1. SredazIVRIG.

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0013438

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001343

RACHINSKIY, A.V., kandidat tekhnicheskikh nauk.

Some characteristics of the injection into the carburetor type engines. Trudy Lab.dvig. no.3:108-115 '57. (MLRA 10:7)
(Gas and oil engines)

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0013438

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001343

ACCESSION NR: AR4020484 S/0081/64/000/001/I002/I002

SOURCE: RZh. Khimiya, Abs. 1I14

AUTHOR: Rachinskiy, A. V.

TITLE: Energy and flow rate of a gas during motion of particles suspended in it

CITED SOURCE: Tr. Vses. zaochn. energ. in-ta, vy*p. 20, 1962, 44-54

TOPIC TAGS: gaseous flow, gaseous flow rate, kinetic flow energy, suspended particle motion, gaseous flow energy, flow energy parameter

TRANSLATION: The author notes that motion of particles suspended in a gas stream takes place especially when solid or liquid fuel is vaporized in a stream of air. In this process, kinetic energy is imparted to the suspended particles at the expense of the kinetic energy of the gas stream and this is accompanied by changes in the rate of flow. The article cites the results of a mathematical analysis carried out to establish a relationship between the parameters of motion of the suspended particles, the energy of the gas stream and its rate of flow. It was established that the extent of variation in the flow rate of a gas stream, when the particles suspended in it are in motion,

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ACCESSION NR: AR4020484

depends on the velocity of the moving particles and the relative weights of the particles and the gas in the stream. An equation is presented for evaluating the effect of the separate parameters on the kinetic energy of the stream.
G. Lemeshko

DATE ACQ: 18Feb64 SUB CODE: AI,PH ENCL: 00

Card 2/2

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"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001343

ZAKHAROVA, M.L.; RACHINSKIY, A.V.; TYCHEOV, I.N.

Gas contact-surface FNKV water heaters. Gaz. prom. 9 no.10: 18-25 '64. (MIRA 17:12)

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0013438

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001343

RACHINSKIY, B. N. Cand Tech Sci -- (diss) "Turning of T-beams composed of two different materials welded together along the touching edges." Mos, 1956. 15 pp 21 cm. (Min of Railways USSR. Mos Order of Lenin and Order of Labor Red Banner Inst of Engineers of Railroad Transport im I. V. Stalin MIIT), 150 copies (KL. 7-57, 107)

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APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0013438

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001343

SOV/124-57-4-4595

Translation from: Referativnyy zhurnal. Mekhanika, 1957, Nr 4, p 104 (USSR)

AUTHOR: Rachinskiy, B. N.

TITLE: The Torsion of a T-beam Composed of Two Different Materials Brazed Along Their Junction Edge (Krucheniye brusa tavrovogo secheniya iz dvukh razlichnykh materialov, spayannykh po grani soprikosnoveniya)

PERIODICAL: Tr. Tashkentsk. in-ta zh.-d. transp., 1956, Nr 5, pp 221-233

ABSTRACT: The author breaks up the cross-sectional area of the beam into three rectangles and sets up the harmonic torsion function ϕ in the form of the series

$$\phi_s = -xy + \sum_{n=1}^{\infty} \{A_n^{(s)} \sinh m_s x + B_n^{(s)} \cosh m_s x\} \sin m_s y, \quad m_s = \frac{(2n-1)\pi}{2b_s}$$

where the coefficients $A_n^{(s)}$ and $B_n^{(s)}$ are different for each rectangle ($s = 1, 2, 3$), $2b_s$ being the width of the respective rectangle. When $s = 3$, a constant E is added to the expression of the function ϕ. The conditions of consistency imposed on the function ϕ and its normal derivative at the boundary lead to an infinite system of equations for the coefficients $A_n^{(s)}$, $B_n^{(s)}$, and the constant E. A formula for the

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"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001343

SOV/124-57-4-4595

The Torsion of a T-beam Composed of Two Different Materials (cont.)

torsional stiffness is presented together with curves of equal tangential stresses τ_{zx} and τ_{yz} plotted for a numerical example.

V. K. Prokopov

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APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0013438

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001343

RACHINSKIY, D. V.

"Application of the Radiochromatographic Method in the Investigation of Sorption Phenomena," an article included in the book "The Theory and Practice of the Application of Ion-Exchange Agents," edited by K. V. Chmukov and published by AS USSR, 1955, 164 pp.

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1ST AND 2ND ORDERS

PROCESSES AND PROPERTIES INDEX

3RD AND 4TH ORDERS

CA

26

Synthetic lacquer from waste products of the production of synthetic rubber. F. Yu. Rachinskii. *Byull. Lakokrasochnoi Prom.* 1938, No. 9/10, 46/50; *Khim. Referat. Zhur.* 2, No. 5, 110(1939). The lacquer "dienol," obtained from waste products of the production of synthetic rubber, is a light liquid contg. 12-46% of white spirit, acidity 0.7-0.75. It forms an elastic, acid-resistant film suitable as an elec. insulating lacquer. Mixts. of lithopone, TiO_2 and mixed titanium white pigments with "dienol" can be used as acid-resistant enamels.

W. R. Henn

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

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"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001343

RACHINSKIY, F. YU.

PROCESSES AND PROPERTIES INDEX

Adsorption of water vapor from air current by inorganic gels. E. V. Alekseevskii and F. Yu. Rachinskii. *J. Gen. Chem.* (U. S. S. R.) 9, 209-30(1935).—A. and R. undertook to det. the comparative efficiencies of inorg. gels when used in a drying train composed of 4 Patrick tubes in series through which air contg. 2-10 mg. H_2O per l. was passed. The gain in wt. of each tube was detd. at intervals, and Shilov's equation (Dubinin, *Physicochem. Principles of Sorption Technic*) applied to the data. Willstaetter's alumogels had higher dynamic activity than SiO_2 gels, while Fe_2O_3 gel proved inferior to either of the above. Since adsorption by inorg. gels is probably followed by diffusion of H_2O into the granules and chem. interaction, the findings were checked by a method that did not require interruptions for weighing. Moist air contg. 1% CO was passed through a tube contg. the gel, then through another one charged with hopcalite (cf. C. A. 30, 4056). Alumogels protected hopcalite from moisture longer than did the SiO_2 gels. The static adsorption activity (measured over H_2SO_4 in a desiccator) also proved greater for alumogels than for SiO_2 gels when H_2O vapor pressure was below 10 mm. SiO_2 gels were more active than alumogels at 12.8 mm. The activity of the gels varied with the method of prepn., hence depended on their structure. B. S.

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0013438

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CA 26

Oil of Galeopsis ladanum as a film-forming material. F. Yu. Rachinskii and A. A. Populina. *Org. Chem. Ind.* (U.S.S.R.) 6, 180-1 (1939).—Seeds of the weed, growing in cultivated grain fields, contain 48-50% oil. Its consts. are: d_4^{20} 0.9277, n_D^{20} 1.4804, color 170 (Gardner scale), viscosity 4 sec. at 20°, acid no. 19.4, sapon. no. 194, Ac no. 22, I no. 162.3, sol. in white spirit and insol. in air. Preliminary tests showed that the boiled and polymerized oil compares favorably with linseed oil as a paint vehicle, giving coatings of equal chem., phys. and mech. properties. The results of comparative tests are tabulated and discussed. C. B.

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

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1ST AND 2ND ORDERS

3RD AND 4TH ORDERS

PROCESSES AND PROPERTIES INDEX

CA

12

Analysing food products for contamination with poisons. F. Yu. Rachjuskii. *Voprosy Pitaniya* 9, No. 3, 41-9 (1940).—Drop test reagents, test papers and methods for aspirating volatile poisons and extg. sol. poisons are discussed. Principal emphasis is on actual or potential military poisons such as Cl_2, $COCl_2$, HCN and cyanides, chloropicrin, mustard gas, $N(C_2H_4Cl)_3$ and lewisite. 20 references. Julian F. Smith

ASB-SLA METALLURGICAL LITERATURE CLASSIFICATION

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0013438

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001343

B. Ho

C-3 - Physiology, etc.
Foods, etc.

1645. **Colorimetric determination of nicotinic acid.** F. Y. Rachinsky, Y. M. Slobodin, and I. N. Shokhor (*J. Appl. Chem. U.S.S.R.*, 1946, 19, 176—179).—To 5 ml. of the test solution, 1·8 ml. of 20% Na benzenesulphonate or Na *p*-toluenesulphonchloramide (chloramine B or T) and 0·6 ml. of 5% KCN are added and the yellow colour is estimated photometrically 5—6 min. after mixing. The colour intensity reaches a max. in 6—9 min. at 10°, and more rapidly at higher temp. 1 μg. in 1 ml. may be estimated; the rapidity and simplicity of the method make it suitable for works' control.

E. B. Uvarov.

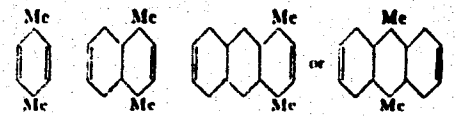
APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0013438

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001343

CA

10

Polymerization-depolymerization. II. Catalytic thermopolymerization of divinyl. Ya. M. Slobodin and F. Yu. Rachinskii (S. M. Kirov Military Med. Acad., Leningrad). *J. Gen. Chem.* (U.S.S.R.) 17, 374-7(1947) (in Russian); cf. *C.A.* 41, 7804a.—Polymerization of $CH_2:CHCH:CH_2$ in a quartz tube of 20 mm. diam. over an activated phloridin catalyst in a layer 22 cm. high, at a rate of flow of 1 l./hr., at 300°, 350°, and 400°, reached 54, 77, and 85%, resp. The gas contained some H_2. In the condensate, the dimer fractions b. 128-32° and 132-5° contained up to 50% of an aromatic hydrocarbon, possibly formed from the dimer ($2\ C_8H_{12} \rightarrow C_8H_{10} + C_8H_{14}$); hydrogenation over Pt black revealed the presence of 1 double bond. The dimer obtained forms no cryst. tetrabromide; its Br addn. product is unstable and resinifies on standing; with $C(NO_2)_4$, the dimer gives a red color; its surface tension σ = 24.2 dynes/cm., the parachor P = 310. The aromatic hydrocarbon was identified as *p*-xylene by its oxidation with $KMnO_4$ to terephthalic acid. The trimer fraction, b_{10} 75-120°, contains no aromatic compds.; it has 2 double bonds; σ 20.8, P 416.3. The tetramer fraction, b_{10} 120-44°, is a highly viscous yellow liquid with marked fluorescence; the presence of 3 double bonds was established. In the fraction b_{10} > 140°, the presence of a pentamer and of a hexamer can be inferred from the av. mol. wt. The data permit assigning the following tentative structures:



dimer trimer tetramers

N. Thon

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0013438

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001343

CA

1ST AND 2ND ORDERS

PROPERTIES AND PROPERTIES INDEX

3RD AND 4TH ORDERS

10

Reversibility of the esteric condensation of aldehydes. Ya. M. Slobodin, F. Yu. Rachinskii, and O. D. Avtokratova. *J. Gen. Chem.* (U.S.S.R.) 17, 584-90(1947) (in Russian).—The reversibility of the Cannizzaro reaction of AcH was established by catalytic conversions. (1) From AcH reacting in a 15-mm. quartz tube at 250 and 300° over alumina gel (I), Cu-MgO (II) (prepd. by reducing CuO 30 + MgO 70 with alc. vapor), and phloridine (III), the yields of EtOAc (based on AcH which had reacted) were I 20.0 and 8.85, II 13.2 and 38.0, and III 7.1 and 10.3%; yields of AcOH, I 0.92 and 1.5, II 0.4 and 4.0, and III 1.1 and 2.4% of MeCHO reacted; unreacted AcH, I 52.8 and 36.8, II 49.6 and 38.0, and III 33.9 and 20.0%. Practically no gaseous products were obtained. (2) The reversibility of the reaction EtOAc ⇌ 2AcH was confirmed by allowing EtOAc to react at 300-400° over I, II, III, CuO 50 + MgO 50, reduced in alc. vapor (IV), and Lebedev's catalyst (V). At 400° the yields of AcH were: I, 1.4; II, 20.2; III, 7.8; IV, 23.7; and V, 0.5% of the EtOAc reacted; yields of AcOH and EtOH: I, 20.4 and 20.0; II, 1.1 and undetd.; III, 33.8 and 50.3; IV, traces and 0; V, 2.0 and 0. Small amts. of divinyl were formed in all cases. The Cu-MgO catalysts gave by far the greatest yields of AcH, with correspondingly less side reactions. (3) Mixts. of EtOAc:AcH = 1:0, 4:2, 3:2, 1:1, and 0:1 mol., allowed to react over II at 400°, failed to result in establishment of equil., owing to side reactions; the amt. of AcH which reacted was higher than the amt. of EtOAc formed. The amts. (%) of EtOAc and AcH which reacted, and of EtOAc, AcOH, and AcH in the condensate, were: 35.6, 0, 46.0, 0.6, 10.9; 42.5, 76.6, 40.0, 1.0, 8.2; 56.5, 47.5, 50.0, 0.77, 14.0; 59.4, 41.6, 45.7, 0.77, 16.0; 0, 56.0, 19.7, 2.0, 44.0. (4) In the 100-14° fraction of the condensate of the reaction of EtOH over Cu-MgO catalysts, BuOH was found with II, the yield of the fraction being 4 and 11% (of the EtOH which reacted) at 300 and 400°, resp.; almost no BuOH was formed at 350° over CuO 20-MgO 80, CuO 40-MgO 60, and CuO 50-MgO 50. (5) A reaction scheme involving intermediate formation of ketene is suggested (without proof): EtOAc → EtOH + CH_2:CO, the latter giving AcH by hydrogenation and AcOH by hydration. Divinyl is formed through EtOAc → CH_2:CHCH:CH_2 + $2H_2O$. N. Thon

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0013438

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001343

RACHINSKIY, F. YU.

Contact transformation of cyclohexene and 1-methylcyclohexene on gumbrin. E. Yu. Rachinskii and N. I. Rzhekhina. *Zhur. Obshchei Khim.* 25, 590-603(1955); *J. Gen. Chem. U.S.S.R.* 25, 580-7[illegible]

CH

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0013438

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001343

MACHINSKIY, F. YU.

USSR/Chemistry - Polymers
Chemistry - Catalysis

Feb 1947

"Polymerization and Depolymerization: 2, Catalytic Thermopolymerization of Divinyl," J. M. Slobodin, F. Yu. Machinskiy, 3 pp

"Zhur Obshch Khim" Vol XVII, No 2

The thermopolymerization of divinyl over floridine leads to the formation of a new series of cyclic forms.

PA 15T56

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0013

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1ST AND 2ND ORDERS

3RD AND 4TH ORDERS

PROCESSES AND PROPERTIES INDEX

CA

10

Polymerization-depolymerization. III. New bivinyl trimer. Ya. M. Shbodin, F. Yu. Rachinskii, and I. N. Shokhor. *J. Gen. Chem.* (U.S.S.R.) 17, 1659-61 (1947) (in Russian); cf. *C.A.* 43, 512c.—The previously described bivinyl trimer from passage of bivinyl over floridin at 350-400° is shown to be *1,4,4a,5,8,8a-hexahydro-1,4-dimethylnaphthalene*, since its dehydrogenation over Ni according to Kommarewskii and Zelinskii (*C.A.* 18, 2885) yields 1,4- and 1,2-dimethyltetrahydronaphthalenes, aromatization being confined to 1 ring only; a possible admixt. is *1,2,4a,5,8,8a-tetrahydro-1,2-dimethylnaphthalene*. The trimer (b_{10} 75-100°, d_4^{20} 0.8673, n_D^{20} 1.48554) shows 2 double bonds (ICl method), gives a deep-red color with $C(NO_2)_4$, and fluoresces blue in ultraviolet light. Its passage over a Ni catalyst at 300° in a H atm. gave a crude product, d_4^{20} 0.8[illegible], n_D^{20} 1.50961, which was sepd. into a fraction b. 200-20°, d_4^{20} 0.8853, n_D^{20} 1.50219, and a fraction b. 220-2°, d_4^{20} 0.9086, n_D^{20} 1.51624. The latter with 5% $KMnO_4$ gave phthalic acid. This definitely disproved the possibility of a biphenyl structure of the trimer.

G. M. Kosolapoff

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0013438

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001343

RACHINSKIY, F. YU.

USSR/Chemistry - 1,3-Butadiene
Chemistry - Polymers

Oct 1947

"Rubbery Cyclopolymer of Bivinyl," Ya. M. Slobodin, F. Yu. Rachinskiy, Mil Med Acad imeni S. M. Kirov, 2 pp

"Dok Akad Nauk SSSR" Vol LVIII, No 1

Gives data on experiments in polymerization of bivinyl, as a result of which, properly constructed polymers were produced. Below 150° the rubbery cyclopolymers were accompanied by various amounts of aliphatic forms. 150° and higher, as a result of formation on the catalyzer of a large amount of chains and their frequent breaking away, polymerization is limited by formation of polumer forms of comparatively low molecular weight. Submitted by Academician A. A. Balandin, 14 Mar 1947.

PA 52T14

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0013438

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001343

CA 30

Rubberlike cyclic polymers of butadiene. Ya. M. Slobodin and F. Yu. Rachinskii. *Doklady Akad. Nauk S.S.S.R.* **58**, 69-71(1947); *Chem. Zentr.* (Russian Zone Ed.) **1948**, I, 954.—A study was made of the polymerization of butadiene in the liquid phase in steel containers under high pressure and in the presence of fluoridin. At 100° a rubberlike polymer contg. 1 ring per 4 butadiene mols. was formed. The content in cyclic forms increased with rise in temp. At 125°, 3 out of 4 mols. cyclized. At 150° only cyclic polymers were formed. This 150° product was no longer rubberlike, but formed a viscous liquid, which consisted of tetrameric and decameric forms.

M. G. Moore

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0013438

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001343

RACHINSKIY, F. YU.

USSR/Chemistry - Polymerization, Dimerization Aug 48
Chemistry - Vinyl Compounds

"Polymerization and Depolymerization: IV, The Dimerization of Divinyl," Ya. M. Slobodin, F. Yu. Rachinskiy, I. N. Shokhor, Mil Acad imeni S. M. Kirov, 3 pp

"Zhur Obshch Khimii" Vol XVIII (LXXX), No 8

Shows that during catalytic thermopolymerization of divinyl in presence of floridin dimer forms are produced, accompanied by migration of hydrogen atom. Main product of dimerization is 1,4-dimethyl-cyclohexadiene. By-product is 1,2-dimethyl-cyclohexadiene. Lebedev's dimer (vinyl-cyclohexene) is not formed under these conditions. Submitted 25 Jun 46.

PA 19/49T20

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0013438

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001343

RACHINSKII, F. In.

Slotodin, Ya. M., Rachinskii, F. In. And Shokhor, I. N., Polymerization-depolymerization. V. About tetrameric divinyl. P. 1548.

It is shown that tetramer formed during the thermo-polymerization of divinyl over floridin, in the interval of temperatures 300 - 400° represents 9,10-dimethyl-deca-hydro-anthracene.

The Kirov Military Medical Academy
June 22, 1946

SO: Journal of General Chemistry (USSR) 18, (80) No. 8 (1948)

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0013438

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001343

RACHINSKIY, F.Yu.; PERVOMAYSKIY, G.S.; CHAGIN, K.P.

Dimethylphthalate as gnat repellent. Zool.zhurnal 30 no.1:69-72 1951. (CLML 20:5)

1. Of the Department of General Biology and Parasitology imeni Academician Ye.N.Pavlovskiy (Head--Ye.N.Pavlovskiy, Lieutenant General, Medical Corps) and of the Department of Inorganic Chemistry (Head--F.Yu.Rachinskiy, Engineer Lt-Col) of the Military Medical Academy imeni S.M.Kirov.

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"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001343

RACHINSKIY, F. YU.

Dimer of piperylene. F. Yu. Rachinskii and M. Z. Zal'manovich. *Sbornik Statei Obshchei Khim., Akad. Nauk S.S.S.R.* 1, 415-18(1953).—Heating *MeCH:CHCH:CH₂* 21 hrs. at 175-80° leads to its polymerization with formation of 75% *dimer*, b_{16} 90-2°, b_{18} 60°, b_{761} 105-6°, d_{20} 0.8401, n^{20}_{D} 1.47117, aniline point −1.7°, Raman spectrum given. Hydrogenation of 6 g. dimer in EtOH over PtO_2 gave $C_{10}H_{20}$ in 2 fractions: 0.3 g., b. 107-70.5°, and 4.5 g., b. 170.5-1.5°, the latter, d_{20} 0.8073, n^{20}_{D} 1.44407, aniline point 67°; treatment with 85% H_2SO_4 to remove traces of unsatd. compd. raised the aniline point to 65.5°. When the dimer (10 g.) was passed 3 times over Pd-C at 300-10° and the product was washed with 85% H_2SO_4 there was obtained *1-methyl-3-propylbenzene*, b_{760} 179-80°, d_{20} 0.8639, n^{20}_{D} 1.49355, which oxidized with $KMnO_4$ in 10% NaOH to isophthalic acid. Oxidation of the dimer (4.5 g.) with aq. $KMnO_4$ gave no HCO_2H, but did give AcOH and *α-methyl-β'-carboxyadipic acid*, m. 174.5-5.5°, whose *tri-Ag salt* was also isolated. The dimer treated with Br in Et_2O gave an undistillable *tetrabromide*. These results indicate that the dimer is predominantly *1-methyl-3-propenyl-5-cyclohexene*.

G. M. Kosolapoff

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0013438

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001343

RACHINSKIY, F. Yu.

3

1 β-Phenylisopropylamide of nicotinic acid (Phenatine). S. Ya. Arbuzov, L. A. Kaukhova, S. G. Kuznetsov, and F. Yu. Rachinskiy. *Sbornik Statei Obshchei Khim., Akad. Nauk S.S.S.R.* 1, 714-16(1953).—Nicotinoyl chloride (b$_4$ 71-2°; 38.5 g.) was slowly added in 30 ml. C_6H_6 to 27 g. $PhCH_2CHMeNH_2$ in C_6H_6 with cooling, after which the mixture was refluxed 1 hr., washed with H_2O, dil. HCl and Na_2CO_3 yielding 99.4% *β-phenylisopropylamide of nicotinic acid* (I), m. 99-100° (from C_6H_6); I (24 g.) in abs. EtOH treated with 23.61 g. 83% H_3PO_4 in EtOH, followed by a little Et_2O gave a ppt. of 90% I *phosphate*, $C_{15}H_{16}ON_2.2H_3PO_4$ (II) m. 160-2° (from EtOH-Et_2O); pure product, m. 162°. II is sol. in H_2O and warm alc. but is not hygroscopic; it is insol. in Et_2O. I and II can be boiled in aq. soln. 2-3 hrs. without change. G. M. Kosolapoff

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"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001343

RACHINSKIY, F. YU.

4

CZECH

Contact transformations of piperylene and its dimer under the influence of gumbrin. F. Yu. Rachinskii, M. Z. Zal'manovich, and R. P. Tsiper. *Sbornik Statei Obshchei Khim.* 2, 837-40(1953). cf. *C.A.* 49, 888e.—Piperylene heated with gumbrin clay at 270-5° in a N atm. is partially dimerized and partly hydrogenated to 2-pentene. The dimer (1-methyl-3-propyl-5-cyclohexene) under such conditions was converted into cyclohexadiene hydrocarbons and also yields *m*-PrC_6H_4Me and 1-methyl-3-propylcyclohexane in 2:1 ratio. The higher-boiling fractions contain trimeric and tetrameric forms of piperylene, whose structures are undetd. G. M. Kosolapoff

2

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0013438

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001343

RACHINSKIY, F.YU.

USSR/Chemistry - Pharmacology

Card 1/1 Pub. 151 - 18/38

Authors : Rachinskiy, F. Yu., and Vinokurova, N. M.

Title : Synthesis of certain phenamine derivatives

Periodical : Zhur. ob. khim. 24/2, 272-280, Feb 1954

Abstract : Thirteen phenamine (phenocoll) derivatives with elongated carbon side chain were synthesized and their properties investigated. Phenyl derivatives were found to be more active nerve stimulants than phenamine. The synthesis and properties of two new phenamine derivatives: 2-amino-3-phenylheptane and 2-amino-2,4-dimethyl-1-phenylpentane are described, together with the synthesis and characteristics of seven hitherto unknown nicotinic acid amides found to possess highly therapeutic values. Eight references: 3-USA; 2-USSR and 3-German (1928-1953). Tables.

Institution : ...

Submitted : July 6, 1953

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0013438

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001343

RACHINSKIY, F. Yu; RZHEKHINA, N.I.

Contact conversion of cyclohexene and 1-methylcyclohexene-1 over humbrine. Zhur.ob.khim. 25 no.3:599-603 Mr. '55 (MLRA 8:6) (Cyclohexene)

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0013438

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001343

Chem

Catalytic conversion of *cyclo*-olefine hydrocarbons. F. Rachinskii and N. I. Rzhekhina (*Zh. obshch. Khim.*, 1955, 25, 2[illegible]). — Catalytic conversion of *cyclo*-olefines with unsaturated bonds in side chains, in the presence of natural aluminosilicates, has not previously been thoroughly investigated. Dipentene by a catalytic process gave α-terpinene as the main isomerization product. By heating dipentene at 160—180° with activated clay, mixtures of

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7 3 4

Contact transformation of cycloölefin hydrocarbons with unsaturated side chain in the presence of gumörin. Ye. Yu. Rachinskii and N. I. Rzhekhina. *J. Gen. Chem. U.S.S.R.* 25, 2325-9(1955)(English translation).—See *C.A.* 50, 9310i.

B. M. R.

RM

MT

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0013438

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001343

KNIPOVICH, Yuliya Nikolayevna, redaktor; MORACHEVSKIY, Yuriy Vital'yevich, redaktor; RACHINSKIY, F.Yu., redaktor; ERLIKH, Ye.Ya., tekhnicheskiy redaktor

[Analysis of mineral raw materials] Analiz mineral'nogo syr'ia. Izd. 2-oe, perer. i dop. Leningrad, Gos. nauchno-tekhn. izd-vo khim. lit-ry, 1956. 1055 p. (MLRA 10:4)
(Mineralogy, Determinative) (Water, Underground--Analysis)

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0013438

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001343

AUTHORS: Berdichevskiy, E. G., Rachinskiy, F. Yu. 79-28-3-28/61
Novoselova, Ye. K.

TITLE: Some Derivatives of Mercaptocaffeine and Mercaptotheobromine (Nekotoryye proizvodnyye merkaptokofeina i merkaptoteobromina)

PERIODICAL: Zhurnal Obshchey Khimii, 1958, Vol. 28, Nr 3, pp. 689-692 (USSR)

ABSTRACT: The importance of sulfohydrylcompounds in physiological processes is the object of comprehensive investigations. Therefore the mercapto derivatives of caffeine and theobromine are of special interest to scientists. E. Fischer (ref. 2) had patented the synthesis of 8-mercaptocaffeine, obtained by the reaction of 8-chlorocaffeine with potassium hydrosulfide. On the synthesis of 8-mercaptotheobromine nothing has been published, that of 8-mercaptotheophylline was, however, described in a patent (ref. 3). Khaletskiy and Eshman synthetized thiocompounds of theobromine similar in structure. The authors carried out the synthesis of 8-mercaptocaffeine (I) under somehow changed conditions starting

Card 1/3

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"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001343

Some Derivatives of Mercaptocaffeine and Mercaptotheobromine 79-283-28/61

from 8-bromocaffeine and the sodiumhydrosulfide dissolved in alcohol. Analogously also the 8-mercaptotheobromine (II) was produced. The sodium salts soluble in water (mercaptides) of the mercaptocaffeine and the mercaptotheobromine can pharmacologically be compared to caffeine and theobromine and can be used only in place of the soluble preparations of caffeine and theobromine. Of practical interest is the substitution of diuretine by mercaptotheobromine, as the high basicity of the former brings about its carbonization and decreases its solubility in water. As mercaptanes are subject to oxidation the sulfohydrylgroup must be protected against any reactions in order to increase the resistivity of the preparations. Some derivatives of mercaptocaffeine and mercaptotheobromine were synthetized by substituting the hydrogen by the sulfohydrylgroup, this with a view to the fact that sulfides and disulfides can be converted in the organism to compounds with free sulfohydrylgroups. The disulfides were of little pharmacological interest because of their insolubility in water. 8 derivatives of mercaptopurine were synthetized, 6 of which were described for the first time.

Card 2/3

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"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001343

Some Derivatives of Mercaptocaffeine and Mercaptotheobromine 79-28-3-28/61

There are 4 references, 3 of which are Soviet.

SUBMITTED: December 14, 1956

Card 3/3

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0013438

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001343

AUTHORS: Rachinskiy, F. Yu., Slavachevskaya, N. M., Ioffe, D. V. SOV/79-28-11-21/55

TITLE: Mercapto Amines (Merkaptoaminy) I.β-Mercapto Ethyl Amine and Its N-Substituted Forms (I. β-Merkapto-etilamin i yego N-zameshchennyye)

PERIODICAL: Zhurnal obshchey khimii, 1958, Vol 28, Nr 11, pp 2998 - 3004 (USSR)

ABSTRACT: β-mercapto ethyl amine and its derivatives due to their pharmacological and chemical properties (Refs 1-5) attract more and more the attention of scientists. Its synthesis and properties are, however, insufficiently explained. The experiments by I.S.Ioffe on the synthesis of β-mercapto ethyl amine led the authors to two closely related methods, as they believe: The reaction of ethylenimine with H_2S, and the acid cleavage of mercapto thiazoline, which is directly obtained from ethanol amine. Unlike Knorr (Ref 10) the synthesis of the 2-mercapto thiazoline in aqueous medium was carried out in the presence of an emulsifier (yield:85%). Its acid

Card 1/3

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cleavage is obtained by long boiling with concentrated hydrochloric acid. The formed β-mercapto ethyl amine hydrochloride contained 5% bis-(β-amino ethyl)-disulfide. Mercapto ethyl amine is a strong base and easily forms salts (Table 1); it is easily oxidized to the disulfide by atmospheric oxygen in alkaline medium. The taurine is obtained by strong oxidizing agents. The authors found a synthesis that was more convenient than the one described in reference 13 for the N-substituted β-mercapto ethyl amine, in the condensation of the ethylene thio-oxide with amines, which hitherto has not been sufficiently dealt with in references as regards its reaction conditions. The authors succeeded in demonstrating that in this reaction two cases must be distinguished: The reaction of the ethylene thio-oxide with amines of high basicity, and that with those of low basicity. In table 2 the properties of the synthesized N-substituted β-mercapto ethyl amines are mentioned.

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"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001343

Mercapto Amines. I. β-Mercapto Ethyl Amine and Its N-Substituted Forms SOV/79-28-11-21/55

The results obtained show that the β-mercapto ethyl amine is an accessible preparation for the further synthesis of its pharmacological derivatives to be investigated. The synthesis of the amino sulfides was improved proceeding from the β-halogen alkyl amines and sodium disulfide. The properties of the synthesized amine disulfides are given in table 3. There are 3 tables and 19 references, 7 of which are Soviet.

SUBMITTED: September 25, 1957

Card 3/3

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0013438

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001343

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~~5 (3), 19 (10)~~

67748

AUTHORS: Rachinskiy, F. Yu., Mozzhukhin, A. S., Slavachevskaya, N. M., Tank, L. I. SOV/74-28-12-23/25

TITLE: Chemical Prophylactics Against Acute Radiation Disease

PERIODICAL: Uspekhi khimii, 1959, Vol 28, Nr 12, pp 1488-1522 (USSR)

ABSTRACT: With this review, the authors wished to provide an aid to facilitate search of new, efficient protective agents against the deteriorating effect of ionizing radiation. The search of rational ways to protect organism against the action of radiation is based on the study of primary processes connected with the influence of radiation on organism. By numerous investigations (Refs 3, 15 to 29), it has been established that during the first phase of the action of ionizing radiation on organism, energy absorbed by the tissue is manifested by a series of chemical reactions. The deteriorations observed are the consequences of chemical alterations of some macromolecules occurring in the biosubstrate. From these fundamental concepts, modern ideas result on the possible mechanisms to reduce radiosensitivity of animals by means of pharmacological substances administered to organism prior to irradiation. Since the chief biological

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Chemical Prophylactics Against Acute Radiation Disease SOV/74-28-12-23/25

effect of ionizing radiation takes place through products of radiohydrolysis, the protective agents should, first of all reduce the formation of active radicals and interaction with radiosensitive substances (Refs 3, 11, 30). Facts observed (Refs 3, 11, 31 to 50) lead to the conclusion that substances with a potential protective efficiency against ionizing radiation must necessarily show antioxidative properties. They must take an active part in transfer reactions, form intra-complex compounds with heavy metals, cause anoxia, and reduce exchange processes in the irradiated organism. The biological method is the only reliable one to evaluate protective agents. For being lengthy and tedious, however, investigators are compelled to look for simpler models. Experiments were performed on polymethacrylate (Refs 38, 42), fatty (Refs 51, 62 - Table 1), oxygen-containing (Ref 64), monoiodine acetate (Ref 64 - Table 2), and enzyme models. These, presumably, cannot be considered a substitution for experiments to choose efficient protective agents, but, if an appropriate selection of models is carried out, a simplified choice of perspective groups of preparations and classes of chemical compounds could be achieved. It was first observed in 1949 (Refs 70, 71) that

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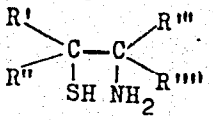
Chemical Prophylactics Against Acute Radiation Disease SOV/74-28-12-23/25

chemical substances can reduce the effect of radiation. It was, however, only after the protective effect of β-mercapto ethyl amine (Ref 72) had been discovered that medical prophylaxis was recognized, and β-mercapto ethyl amine and the corresponding disulfide (cystamine) were experimentally and clinically used (Refs 1 to 5, 7, 9, 30, 38, 40, 63, 66, 68, 72 to 91). Methods of preparation and the protective effects of mercapto amines and their derivatives are described: β-mercapto ethyl amine $H_2NCH_2CH_2SH$ (Refs 30, 38, 63, 65, 68, 73, 75, 78, 92 to 95, 102, 105 to 108). The protective effects of some β-mercapto ethyl amine salts are shown in table 3. The oxidation rates of some amino mercaptans with oxygen in absence and presence of Fe^{2+} are shown on the figure (p 1499). In addition, mercapto amines having the general formula $HS(CH_2)_nNH_2$ ($n > 2$) (Table 4); mercapto amines having the general formula



(Table 5); N-substituted derivatives of

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Chemical Prophylactics Against Acute Radiation Disease SOV/74-28-12-23/25

β-mercapto ehtyl amine (Table 6); S-substituted derivatives of β-mercapto ethyl amine $R-S-CH_2CH_2NH_2$ (Table 7); N,S-substituted derivatives of β-mercapto ethyl amine (Table 8), and amino disulfides (Refs 3, 68, 95, 98, 167 to 169, 171, 172, 176) are discussed. From the thiocarbamates, the highest protective efficiency was shown by the sodium diethyldithiocarbamate (Table 9). Thiazolidine, thiazole, and thiazoline derivatives were investigated (Table 10). The syntheses and protective efficiencies of isothiuronium compounds (Table 11) and mercapto guanidine (Table 12) as well as of nitriles (Refs 6, 246 to 251 - Table 13), of aryloxy ketones (Refs 252 to 257, 41 - Table 14) as well as of amines and amino acids (Refs 30, 36, 38, 45, 71, 258 to 262 - Tables 15 and 16) are described. Preparations showing the highest protective efficiencies are given in table 17. Practically, however, only amino thiols and isothiuronium compounds (cysteamine, cystamine, and S-β-amino ethyl isothiuronium) have been hitherto used. The principal shortcomings of the efficient preparations is their limited efficiency range (little difference between minimum efficient and minimum toxic doses), and the short term of their

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protective efficiency. It has been established that the SH- and NH_2-groups are actively efficient in the protective agents. Lack or substitution of these groups cause a considerable reduction of the protective effects of the preparations, or these become completely inefficient. There must be certain steric relations between these groups. It was observed (Ref 68) that, in dependence on the mutual position of the SH- and NH_2-groups in the molecule, preparations show either protective (α-homocysteine, cysteine) or sensitizing (β-homocysteine, isocysteine) properties to ionizing radiation. A study of the relation between the chemical structure and the protective efficiency leads to the conclusion that it will be hardly possible to find any more efficient substances in the classes of chemical compounds hitherto investigated as compared to the substances already known. Since not all substances which are anti-oxidizing agents, show a protective efficiency, the protective agents must evidently have some additional properties. It has not yet been possible to establish the character of these properties, and the degree to

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Chemical Prophylactics Against Acute Radiation Disease SOV/74-28-12-23/25

which the protective efficiency is influenced by them. It can be assumed, however, that one of the most important properties of the protective agents is their capacity to penetrate into the cells, and to disperse between the individual tissues, and, moreover, their capacity to form complex compounds with such heavy metals which may initiate oxidative chain reactions. There are 1 figure, 17 tables, and 269 references, 47 of which are Soviet.

ASSOCIATION: Voyenno-Meditsinskaya akademiya im. S. M. Kirova (Military-medical Academy imeni S. M. Kirov)

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"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001343

MOZZHUKHIN, Aleksandr Sergeyevich; RACHINSKIY, F.Yu.

[Chemical treatment of radiation sickness] Khimicheskaia profilaktika luchevoi bolezni. Leningrad, Ob-vo po rasprostraneniiu polit. i nauchn. znanii RSFSR. 1960. 31 p. (MIRA 14:11)

(RADIATION SICKNESS)

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0013438

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001343

MOZZHUKHIN, A.S.; RACHINSKIY, F.Yu.; TANK, L.I.

Relation of chemical structure to the protective activity of various mercaptoamines against X- and γ-radiations. Med.rad. 5 no.4:78-81 Ap '60. (MIRA 13:12)

(RADIATION PROTECTION)
(ETHYLAMINE)

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0013438

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001343

RACINSKI, F.I. [Rachinskiy, F.Yu.]; MOZJUHIN, A.S. [Mozzhukhin, A.S.]; SLAVACEVSKAIA, N.M. [Slavochevskaya, N.M.] ; TANK, L.I.

Chemical agents for theprophylaxis of acute actinic diceases. Analele chimie 15 no.2:65-106 Ap-Je '60. (EEAI 9:11)
(Radiation)

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"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001343

89916

S/191/61/000/002/003/012
B118/B203

158102

AUTHORS: Matveyeva, Ye. N., Rachinskiy, F. Yu., Kremen', M. Z., Potapenko, T. G.

TITLE: Aging and stabilization of the copolymer of ethylene with propylene

PERIODICAL: Plasticheskiye massy, no. 2, 1961, 12 - 16

TEXT: The authors studied samples of copolymers of ethylene with propylene of the type СЭП-15 (SEP-15). As compared with low-pressure polyethylene, such a copolymer shows a lower crystallizability, higher elasticity and, compared with high-pressure polyethylene, a higher thermal capacity and stability. There are no publications on aging and stabilization of SEP. Accelerated aging of the copolymer was achieved by rolling at 160°C for 4-6 hr. In this procedure, the authors observed a rapid decrease of the angular tangent of dielectric losses at 10^6 cycles/sec, and of the content of fraction insoluble in boiling xylene. They examined the stabilizing effect of azomethines of the aromatic series with various substituents;

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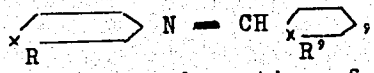
B118/B203

Aging and stabilization ....

the azomethines were of the general formula  , where $R = OH, NH_2$; $R' = OH, N(CH_3)_2$, and were obtained by condensation of o-, p-aminophenols or o-, p-phenylene diamines with benzoic, p-dimethyl-amino benzoic, and salicylic acid aldehydes. When rolling the sample of SEP-15 for 6 hr, the relative elongation was ~4%. The tangent δ at 10^6 cycles/sec grows by the 1·15-fold, with 63% of fraction insoluble in boiling xylene being formed. The o- and p-oxy-anilines first used as stabilizers were only effective for 2 hr of rolling; phenylene diamines proved to be completely inactive. The azomethines obtained by condensation of unsubstituted aniline with benzoic and p-dimethyl-amino benzoic acid aldehyde, and from o- and m-oxy-aniline and benzoic acid aldehyde, showed no stabilizing effect. SEP kept its physicomechanical properties after 6 hr of rolling only in the presence of benzylal-p-oxy-aniline, and dissolved completely in boiling xylene. Among the phenylene diamine derivatives investigated, only benzylal-p-phenylene diamine stabilizes for 2 hr, and p-dimethyl-amino-benzylal-p-phenylene diamine for about 4 hr of rolling. Among the azomethines,

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B118/B203

Aging and stabilization ...

p-dimethyl-amino-benzylal-o-oxy-aniline and p-dimethyl-amino-benzylal-p-oxy-aniline showed the strongest stabilizing effect. These azomethines, however, give an intense color to samples of SEP-15, and, therefore, can only be used for colored copolymer goods. Azomethines from salicyl-aldehyde and oxy-anilines have an effect similar to that of compounds from p-dimethyl-amino benzaldehyde and oxy-anilines. Salicyl phenylene diamines are poorly efficient, and stabilize the properties of SEP-15 for 2 hr of rolling only. There are 5 figures, 1 table, and 5 Soviet-bloc references.

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"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001343

KIRILLOVA, E.I.; MATVEYEVA, Ye.N.; POTAPENKO, T.G.; RACHINSKIY, F.Ya.
SLOVACHEVSKAYA, N.M.

Effect of certain organic compounds on the thermal decomposition of polyvinyl butyrals. Plast.massy no.5:15-19 '61. (MIRA 14:4)
(Vinyl compounds)

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0013438

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001343

RAGHINSKIY, F. Yu.; SLAVACHEVSKAYA, N.M.; SOVALKOVA, L.K.

N-substituted 1.3.4-tetrahydroquinolines. Zhur.ob.khim. 31 no.8:2751-2758 Ag '61. (MIRA 14:8)
(Quinoline)

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0013438

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001343

RACHINSKIY, F.Yu., nauchn. red.; RUSAKOVA, L.Ya., ved. red.; YASHCHURZHINSKAYA, A.B., tekhn. red.

[Oxo synthesis; oxo process production of aldehydes, alcohols, and secondary products based on them] Oksosintez; poluchenie metodom oksosinteza al'degidov, spirtov i vtorichnykh produktov na ikh osnove. Leningrad, Gostoptekhizdat, 1963. 213 p. (MIRA 16:10)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut neftekhimicheskikh protsessov.
(Chemistry, Organic--Synthesis) (Aldehydes) (Alcohols)

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L 10117-63 EPF(c)/EWT(m)/BDG--AFFTC/APGC--Pr-4--RM/WW/BW/MN/MAY

ACCESSION NR: AP3001314 S/0933/63/005/000/0160/0176

70
67

AUTHOR: Bol'shakov, G. F.; Davy*dov, P. I.; Potapenko, T. G.; Rachinskiy, F. Yu.; Slavachevskaya, N. M.

TITLE: Effect of natural and synthetic sulfur- and nitrogen-containing compounds on the thermal oxidative stability of straight-run fuels [Report presented at the Sixth Scientific Session on the Chemistry of Organosulfur Compounds of Crude Oil and Petroleum Products held at Ufa, 27 June - 1 July 1961]

SOURCE: AN SSSR. Bashkirskiy filial. Khimiya seraorganicheskikh soyedineniy, soderzhashchikhsya v neftyakh i nefteproduktakh, v. 5, 1963, 160-176

TOPIC TAGS: TS-1, T-1, DA, thermal oxidative stability, S and N compounds, resin, Getseu corrosion, sediment, amino sulfides, amino disulfides, amino thiols, amino nitriles, thiazolidines, thiazolines, azomethines, ionol, tetrahydroxyquinoline, 2-phenyl-2-mercaptobutylamine

ABSTRACT: Mixtures of natural S- and N-containing compounds of a "basic" character, i.e., extractable with 25% H sub 2 SO sub 4, were separated from the

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"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001343

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ACCESSION NR: AP3001314

resinous portions of TS-1, T-1, and DA fuels by a method described by V. V. Getseu (Neftyanoye khozyaystvo, no. 11, 68, 1954). The effect of various amounts of these compounds on the thermal-oxidative stability (TOS) of resin-free fuels at 150C was studied by means of a device designed by the authors. The TOS was evaluated from the corrosion of and amount of sediment on a bronze strip and from the amount of fuel-insoluble sediment. It was shown that mixtures of S- and N-containing compounds improve the TOS of the fuels when used in certain optimum amounts (0.03-0.05% for TS-1, 0.05-0.99% for DA, and 0.02-0.06% for T-1). This improvement was attributed to the ability of certain of these components to inhibit fuel oxidation and to form films on bronze which "protect" the fuel from the catalytic effect of the metal. The effect of individual S- and N-containing compounds on the TOS of fuels was studied by adding to TS-1 fuel 0.05% of one of the synthetic compounds (such as amino sulfides, amino disulfides, amino thicls, amino nitriles, thiazolidines, thiazolines, azomethines, ionol and its derivatives, and tetrahydroxyquinoline and its derivatives). It was shown that most of these compounds lower the TOS of straight-run fuels (with the exception of 2-phenyl-2-mercaptobutylamine, 1,2,3, 4-tetrahydroquinoline, certain ionol derivatives, and a reaction product of phenol and styrene). The results of the study indicate that resins of TS-1, T-1, and DA fuels contain compounds (mainly heterocyclic with thiol, amino,

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L 10117-63

ACCESSION NR: AP3001314

and phenyl groups) which, in small amounts, can improve the TOS of fuels. Orig. art. has: 3 figures and 2 tables.

ASSOCIATION: none

SUBMITTED: 00 DATE ACQ: 28May63 ENCL: 00

SUB CODE: 00 NO REF SOV: 004 OTHER: 002

Cdrd 3/3

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L 13370-63 EWP(j)/EPF(c)/EWT(m)/BDS ASD Pc-4/Pr-4 RM/WW

ACCESSION NR: AP3003311 S/0191/63/000/007/0048/0051

68

AUTHORS: Rachinskiy, F. Yu.; Slavachevskaya, N. M.; Potapenko, T. G.; Kreman, M. Z.; Matveyeva, Ye. N.

TITLE: Synthesis and investigation of antioxidative properties of some analogues of ionol(3,5-di-tert-butyl-4-oxitoluene)

SOURCE: Plasticheskiye massy, no. 7, 1963, 48-51

TOPIC TAGS: butyloxitoluene, antioxidant inhibitor, ethylene polymer, propylene polymer, thermooxidation.

ABSTRACT: A number of derivatives of 3,5-di-tert-butyl-4-oxitoluene have been synthesized and tested as possible antioxidant inhibitors. The antioxidant properties of these compounds were evaluated according to their ability to delay the oxidation of bone fat and by their ability to thermostabilize ethylene and propylene co-polymers. It was established that most of the synthesized derivatives, excluding 3,5-di-tert-butyl-4-oxibenzaldehyde and 3,5-di-tert-butyl-4-oxibenzylal-n-phenylenediamine, are effective inhibitors of the thermooxidation destruction processes of bone fat and ethylene and propylene co-polymer. Their activities in most cases exceed the activities of 3,5-di-tert-butyl-4-oxitoluene.

Card 1/2

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"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001343

ABRAMOVA, N.A., nauchn. sotr.; BEL'CHENKO, G.V., kand. tekhn. nauk; BERENBLIT, V.V., nauchn.sotr.; VASIL'YEV, V.P., kand.khim. nauk; DOBROHIN, D.F., doktor khim. nauk; IOFFE, B.V., dokt. khim.nauk; KAMINSKIY, Yu.L., nauchn.sotr.; KARPOVA, I.F., kand. khim. nauk; KOPYLEV, B.A., doktor khim. nauk; LUTUGINA, N.V., kand. khim. nauk; MATEROVA, Ye.A., kand. khim. nauk; MORACHEVSKIY, Al.G., kand. khim. nauk; MORACHEVSKIY, An.G., kand. khim. nauk; NIKEROV, A.E., kand. khim. nauk; PAL'M, V.A., kand. khim. nauk; RABINOVICH, V.A., kand. khim. nauk; SOKOLOV, P.N., kand. khim. nauk; FRIDRIKHSBERG, D.A., kand. khim. nauk; TSYGIR, Ye.N., nauchn. sotr.; SHAGITSULTANOVA, G.A., kand. khim. nauk; SHKODIN, A.M., doktor khim. nauk; YATSIMIRSKIY, K.B.; GRIGOROV, O.N., doktor khim. nauk, red.; ZASLAVSKIY, A.I., kand. khim. nauk, red.; MORACHEVSKIY, Yu.V., prof., red.; RACHINSKIY, F.Yu., kand. khim. nauk, red.; POZIN, M.Ye., doktor tekhn. nauk, red.; PORAY-KOSHITS, B.A., doktor khim. nauk, red.; PROTASOV, A.M., kand. fiz.-mat. nauk, red.; ROMANKOV, P.G., red.

[Handbook for the chemist] Spravochnik khimika. 2. izd., perer. i dop. Moskva, Khimiia. Vol.3. 1964. 1004 p. (MIRA 18:1)

1. Chlen-korrespondent AN SSSR (for Romankov). 2. Deystvitel'nyy chlen AN Ukr.SSR (for Yatsimirskiy).

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L 33553-65 EWG(j)/EWT(m)
ACCESSION NR AM4042769 BOOK EXPLOITATION 16 S/
B+1

Mozzhukhin, Aleksandr Sergeyevich; Rachinskiy, Foma Yur'yevich

Chemical prevention of radiation injuries (Khimicheskaya profilaktika radiatsionnykh porazheniy), Moscow, Atomizdat, 1964, 243 p. illus., biblio. 3,000 copies printed.

TOPIC TAGS: radiation injury, radiation protection, radiation chemistry

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Ch. II. Chemical protection of certain organic systems against ionizing

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Ch. IIII. Certain mechanisms of the biological effect of ionizing radiation -- 65

Ch. V. Chemical protection of biological subjects against X-rays and gamma rays -- 87

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L 33553-65

ACCESSION NR AM4042769

Ch. VI. Behavior of radiation-protection sulphur containing compounds in the organism of higher animals and man -- 150

Ch. VII. Effect of radiation protection preparations on the functional

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prophylactics against radiation damage -- 216
Conclusion -- 241

SUBMITTED: 30Nov63 SUB CODE: CB, LS, PH

NO REF SOV: 313 OTHER: 437

Card 2/2

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"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001343

L 41613-65 EWG(j)/EWT(m) GS S/0000/64/000/000/0170/0178

ACCESSION NR: AT5008043

AUTHOR: Mozzhukhin, A. S.; Rachinskiy, F. Yu.; Slavachevskaya, N. M.; Tank, L. I.

TITLE: Relation between the chemical structure and radiation-protective properties in a series of aminothioles and certain of their derivatives

SOURCE: Patogenez, eksperimental'naya profilaktika i terapiya luchevykh porazheniy (Pathogenesis, experimental prevention, and therapy of radiation injuries); sbornik statey. Moscow, Izd-vo Meditsina, 1964, 170-178

TOPIC TAGS: radiation protection, radiation sickness, aminothiole

ABSTRACT: During the course of a search for new radiation-protection agents considerable numbers of mercaptoamines and mercaptoguanidines and a much smaller num- [illegible] of mercaptoamines and thiazolidines were synthesized and studied.

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were obtained with the aminosulfides. Derivatives

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L 41613-65

ACCESSION NR: AT5008043

and mercaptoguanidines are no more effective with respect to radiation protection than the original compounds. Orig. art. has: 5 tables.

ASSOCIATION: none

SUBMITTED: 19Aug64 ENCL: 00 SUB CODE: LS, OC

NO REF SOV: 005 OTHER: 011

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Card 2/2

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001343

L 41617-65 EWG(j)/EWT(m) GS S/0000/64/000/000/0233/0247 27 B+1

ACCESSION NR: AT5008048

AUTHOR: Rachinskiy, F. Yu.; Kushakovskiy, M. S.; Matveyev, B. V.; Potapenko, T. G.; Slavachevskaya, N. M.; Tank, L. I.; Titov, A. V.; Yampol'skaya, L. I.

TITLE: Comparative evaluation of certain models for the initial selection of radiation protection compounds 17

SOURCE: Patogenez, eksperimental'naya profilaktika i terapiya luchevykh porazheniy (Pathogenesis, experimental prevention, and therapy of radiation injuries); sbornik statey. Moscow, Izd-vo Meditsina, 1964, 233-247

TOPIC TAGS: radiation protection, radiation sickness, aliphatic compound, oxygen compound, methemoglobin

ABSTRACT: Assuming that the antioxidant and reducing properties of radiation protection compounds of bivalent sulfur are related to their ability to decrease the severity of radiation sickness, models using these properties were compared. It was established that not a single model, taken separately, was adequate for a biological method of selecting antiradiation agents; however, the results of tests of

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L 41617-65

ACCESSION NR: AT5008048

0

substances on several models can serve as an initial test for the selection of active substances. Aliphatic, oxygen, and methemoglobin models most fully reflect the potential radiation protection activity of substances. Orig. art. has: 8 tables.

ASSOCIATION: none

SUBMITTED: 19Aug64 ENCL: 00 SUB CODE: LS,OC

NO REF SOV: 002 OTHER: 023

Card 2/2

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0013438

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001343

L 43927-65 EWT(m)/EPF(c)/T Pr-4 WE

ACCESSION NR: AT5008624 S/2933/64/007/000/0047/0057

AUTHORS: Pachinskiy, F. Yu.; Bol'shakov, G. F.; Bruk, Yu. A.; Kremen', M. Z.; Pavlova, L. V.; Potapenko, T. G.; Slavachevskaya, N. M.

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22
B+1

TITLE: Synthesis and antioxidant properties of sulfur- and nitrogen-bearing Ionol derivatives

SOURCE: AN SSSR. Bashkirskiy filial. Khimiya seraorganicheskikh soyedineniy, soderzhashchikhsya v neftyakh i nefteproduktakh, v. 7, 1964, 47-57

TOPIC TAGS: antioxidant, sulfur, nitrogen, thermooxidation/ Ionol

ABSTRACT: The retardation of oxidative degradation of hydrocarbon fuels, polyolefins, fats, and many synthetic and derived products was studied. In the present [illegible] have synthesized and studied the antioxidant properties of a [illegible]

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tertiary amines takes place with the formation of

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L 43927-65

ACCESSION NR: AT5008624

di-tert-butyl-4-methylene quinone. Synthetic nitrogen- and sulfur-bearing structural analogs of Ionol are able to retard oxidation reactions not only during degeneration but during development. This results from a capacity to react with

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fuels. Orig. art. has: 1 figure and 4 tables.

ASSOCIATION: none

SUBMITTED: 00 ENCL: 00 SUB CODE: OC, FP

NO REF SOV: 008 OTHER: 010

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ACCESSION NR: AP4027978 S/0205/64/004/002/0266/0269

AUTHOR: Rachinskiy, F. Yu.; Kushakovskiy, M. S.; Matveyev, B. V. (Deceased); Slavachevskaya, N. M.; Tank, L. I.

TITLE: Radioprotective action of thiazolidines

SOURCE: Radiobiologiya, v. 4, no. 2, 1964, 266-269

TOPIC TAGS: thiazolidine, thiazolidine hydrolysis, thiazole ring substitution, radioprotective action, X-irradiation, lethal dose, 2,2-dimethylthiazolidine, 2-phenylthiazolidine, 2-oxymethylthiazolidine, 2-n-nitrophenylthiazolidine, 2-n-dimethylaminophenylthiazolidine

ABSTRACT: Radioprotective action of 25 thiazolidines with substitutions in the second position of the thiazole ring was investigated in 2000 experimental mice. Most of the thiazolidine preparations were administered intramuscularly to groups of experimental animals in the form of neutral aqueous solutions 5-15 min before irradiation, and some of the preparations were administered intraperitoneally in the form of an oil solution 1 hr before irradiation. Control and

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experimental animal groups were X-irradiated with single 700-r doses (RUM-3, 180 kv, 15 ma, 34-36 r/min), and all control animals died shortly. Of the 25 preparations tested, ten increase survivability of irradiated animals. 2,2-dimethylthiazolidine and 2-phenylthiazolidine protected more than 50% of the animals from death in their respective groups. But these two preparations are radioprotective only with large doses approaching the toxic level. Other preparations displaying protective action are 2-oxymethylthiazolidine, which is not stable, and salts of 2-n-nitrophenylthiazolidine and of 2-n-dimethylaminophenylthiazolidine, which hydrolyze too fast. Hydrocarbon derivatives are also radioprotective. Preparations which hydrolyze slowly administered 1 hr before irradiation were not found to be more radioprotective than preparations which hydrolyze fast. This study has not determined the effect of second position substitutions in the thiazole ring on radioprotective activity, but the data suggest a possible relationship may be established for some thiazolidine preparations. Orig. art. has: 3 tables.

Association: Voenno-meditsinskaya ordena Lenina akademiya im. S. M. Kirova, Leningrad (Military-Medical "Order of Lenin" Academy.)

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Card

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"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001343

ACCESSION NR: AP4043219 S/0205/64/004/004/0632/0637

AUTHOR: Kakushkina, M. L.; Kudryashov, Yu. B.; Rachinskiy, F. Yu.; Dmitriyeva, N. G.

TITLE: The use of radiomimetic (erythrocytic) models for studying the potential radioprotectors of the thiazolidine group

SOURCE: Radiobiologiya, v. 4, no. 4, 1964, 632-637

TOPIC TAGS: radiation protection, radiomimetic model, thiazolidine, oleinic acid, erythrocyte

ABSTRACT: Thiazolidine derivatives in 0.02-M concentrations were selected as potential radioprotective agents. In each test, the comparative effectiveness of mercamine on irradiated human erythrocytes was studied. Oxidized oleinic acid with standard toxicity was employed as the radiomimetic agent. Preparation of the solutions and their addition to the erythrocytes took place immediately before the tests. It was determined that oleinic acid destroyed half the erythrocytes in 1.5—2.0 minutes. The hemolytic activity of oleinic acid was established after erythrocytes were washed in a potassium

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hydroxide bath (0.05 M) and a phosphate buffer (pH 7) was added. The effectiveness of potential radioprotectors was evaluated as a function of decreased hemolysis rate. The comparative ability of compounds to protect against the effects of oleinic acid was established by irradiating the erythrocytes with gamma rays from a GUT-Co-400 in 100—1000-kr doses. The criterion for erythrocyte damage under these conditions was the time it took to destroy half of them with respect to the controls. It was found that thiazolidine derivatives exerted a protective influence against the effects of gamma radiation and oleinic acid and that the mechanism of this influence depended upon the character of the radicals in the displacement of hydrogen atoms. The authors conclude that radiomimetic models can be employed for preliminary evaluation of aminothiole-type radioprotectors or those compounds which possess the ability to form aminothioles. Orig. art. has: 2 figures and 2 tables.

ASSOCIATION: none

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SUB CODE: LS,OC NO REF SOV: 005 OTHER: 001

Card 2/2

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"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001343

BAK, Yu.A.; BACHINSKIY, F.Yu.

Hindered phenols. Part 1: Reaction of 3,5-ditert-butyl-4-hydroxybenzyl bromide with amines. Zhur. ob. khim. 34 no.9:2983-2987 S '64. (MIRA 17:11)

1. Voyenno-meditsinskaya akademiya im. S.M. Kirova.

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L 34588-65 EWT(m)/EPF(c)/EWP(j)/EWA(c) Pc-4/Pr-4 RPL JW/RM

ACCESSION NR: AP5008198 S/0286/65/000/005/0070/0070

32

AUTHORS: Bruk, Yu. A.; Rachinskiy, F. Yu.; Potapenko, T. G.; Matveyeva, Ye. N.; Kremen', M. Z.; Lazareva, N. P.

B

15

TITLE: A method for producing stabilizers for vinyl polymers. Class 39, No. 168877

15

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 5, 1965, 70

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NO REF SOV: 000 OTHER: 000
Card 1/1

L 38276-65 EPF(c)/EWP(j)/EWT(m) Pc-4/Pr-4 RM

ACCESSION NR: AP5008236 S/0286/65/000/005/0129/0130

AUTHORS: Rachinskiy, F. Yu.; Slavachevskaya, N. M.; Matveyeva, Ye. N.; Kremen', M. Z.; Lazareva, N. P.

25
B

TITLE: Method of stabilizing polyolefins. Class 39, No. 151024

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 5, 1965, 129-130

TOPIC TAGS: stabilization, olefin, polymer, additive

ABSTRACT: This Author Certificate presents a method for stabilizing polyolefins by introducing into the prepared polymer a stabilizing additive. To obtain a [illegible] treatment 2,6-ditertiary-

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butyl-4-oxybenzoic acid is used as the stabilizing

ASSOCIATION: none

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PAVLOVA, L.V.; NASHINSKIY, F.Yu.

Intramolecular rearrangements Part 1: Rearrangement of aminoalkyl-substituted isothiourea and isoselenurea. Zhur. ob. khim. 35 no.3:493-497 Mr '65. (MIRA 18:4)

1. Voyenno-meditsinskaya ordena Lenina akademiya imeni S.M. Kirova.

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"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001343

RABINOVICH, Il'ya Moiseyevich; RACHINSKIY, F.Yu., kand. khim. nauk, nauchn. red.;

[Chemistry in the service of public health] Khimiia na sluzhbe zdravookhraneniia. Leningrad,"Znanie" 1965. 31 p. (MIRA 18:12)

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"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001343

RACHINSKIY, Foma Yur'yevich; SLAVACHEVSKAYA, Nina Mikhaylovna;
KHAVIN, Z.Ya., red.

[Chemistry of amino thiols and of some of their derivatives]
Khimiia aminotiolov i nekotorykh ikh proizvodnykh. Moskva,
Khimiia, 1965. 295 p. (MIRA 19:1)

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"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001343

NIKOL'SKIY, B.P., glav. red.; GRIGOROV, O.N., doktor khim. nauk, red.; PORAY-KOSHITS, B.A., dok[redacted]m. nauk, [redacted] red.; ROMANKOV, P.G., red.; FRIDRIKHSBERG, D.A., kand. khim. nauk, red.; RABINOVICH, V.A., kand. khim. nauk, red.; RACHINSKIY, F.Yu., kand. khim. nauk, red.; ZAYDEL', A.N., doktor fiz.-mat. nauk, red.; ZASLAVSKIY, A.I., kand.khim. nauk, red.; MORACHEVSKIY, Yu.V., prof., red.; GRIVA, Z.I., red.; KOTS, V.A., red.; TOMARCHENKO, S.L., red.

[Chemist's handbook] Spravochnik khimika. 2., izd., perer. i dop. Moskva, Khimiia. Vol.4. 1965. 919 p. (MIRA 19:1)

1. Chlen-korrespondent AN SSSR (for Nikol'skiy, Romankov).

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L 18000-66 EWT(m)/T WE
~~ACC NR:~~ AP6007932 SOURCE CODE: UR/0065/66/000/003/0052/0054

54
B

AUTHOR: Bol'shakov, G. F.; Bruk, Yu. A.; Rachinskiy, F. Yu.

ORG: none

55, 44

TITLE: Additive designed to improve the thermal-oxidative stability of hydrocarbon [jet] fuels

SOURCE: Khimiya i tekhnologiya topliv i masel, no. 3, 1966, 52-54

TOPIC TAGS: fuel additive, antioxidant additive, anticorrosion additive, fuel deposit formation, jet fuel

ABSTRACT: A study has been made of the antioxidant effectiveness in [jet] fuels of an Ionol derivative, 3, 5-di-tert-butyl-4-hydroxybenzylmercaptan (designated BOBM in the source). 0.01—0.05% BOBM was added to the standard hydrocarbon [jet] fuels T-1, TS-1, T-2, and T-5. The thermal-oxidative stability of the fuels with or without BOBM was tested on a LSA RT apparatus (not described) at 100—180C for 4 hr in airtight vessels in the presence of VB-24 bronze. The criteria used for thermal-oxidative stability were: insoluble sediments formed (mg/100 ml), fuel optical density, fuel corrosivity (g/m^2), oxygen absorption (ml), peroxide number (mg O_2/ml), and acidity (mg KOH/100 ml). It was found that BOBM was superior to Ionol with respect to insoluble sediments and corrosivity. BOBM also prevented peroxide and carboxylic acid formation and slowed down yellowing and oxygen absorption. It is

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