"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308610010-2

Higher n-Paraffins of Bitkovsk and Dolinsk Petroleum

77928
SOV/65-60-3-1/19

Key to Table: (A) Hydrocarbons; (B) Literature data; (C) Experimental data on Bitkovsk petroleum; (D) Experimental data on Dolinsk petroleum; (E) Refractive index; (F) mp, °C; (G) Molecular weight; (H) Aniline point, °C; (I) Amount of petroleum, %; (J) Note: The intermediate fractions are not given in the Table and were not considered in calculations. (1) n-Hexadecane, (2) n-Heptadecane, (3) n-Octadecane, (4) n-Nonadecane, (5) n-eicosane, (6) n-Heneicosane, (7) n-Docosane, (8) n-Tricosane, (9) n-Tetracosane, (10) n-Pentacosane, (11) n-Hexacosane, (12) n-Heptacosane, (13) n-Octocosane, (14) n-Nonacosane, (15) n-Triacontane, (16) n-Hentriacontane, (17) n-Dotriacontane, (18) n-Tritriacontane, (19) n-Tetratriacontane, (20) n-Pentatriacontane.

Card 5/5

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308610010-2"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308610010-2

CHERNOZHUKOV, N. I.

31978
S/081/61/000/023/055/061
B106/B101

11.2230

AUTHORS: Betts, G. E., Gubenko, I. B., Karmin, B. K., Lukashevich, I. P., Markova, L. M., Segalevich, A. Ye., Troitskaya, N. I., Chernozhukov, N. I., Guseva, V. I.

TITLE: Test of petroleum products as plasticizer fillers for rubber compounds from divinyl styrene rubber. Communication I

PERIODICAL: Referativnyy zhurnal. Khimiya, no. 23, 1961, 560, abstract 23P346. (Tr. N.-i. in-ta shin. prom-sti, sb. 5, 1960, 5-20)

TEXT: For the purpose of examining the possibility of enlarging the raw material basis for the production of olefin rubber, a study has been made of the effect of paraffin-naphthene hydrocarbons (I) and aromatics (II), isolated from different kinds of petroleum at different stages of processing, on the physicomechanical properties of standard rubbers from СКС-30А (SKS-30A). Addition of I and II in an amount of 35% to a mixture of rubber and softener deteriorates the physicomechanical properties of vulcanizates and enhances their elasticity. The tensile strength of rubber containing I drops from 274 (standard rubber) to 173 - 226 kgf/cm^2 while

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B106/B101

Test of petroleum products...

its tear resistance drops from 81 to 47 - 54 kgf/cm. The tensile strength of rubber containing II drops to 200 - 245 kgf/cm² and its tear resistance to 52 - 64 kgf/cm. The thermal stability and the bonding strength of doubled rubbers decrease substantially after vulcanization. High-molecular products of comparatively higher viscosity deteriorate the strength properties of rubber less than do low-molecular ones. A test of 29 products, obtained from differently processed petroleum asphalts, deasphalted products, distillates, and raffinates, have shown that the most interesting of these products are a deasphalted petroleum asphalt, the residual high-viscosity oil, a secondary raffinate, and an aviation tar. These products ensure satisfactory phygicomechanical properties, elasticity, and brittleness temperature (-30 C) of vulcanizates. [Abstracter's note: Complete translation.]

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"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308610010-2

YATSENKO, Ye.F.; CHERNOZHUKOV, N.I.

Aromatic hydrocarbons of the oil fractions from Dolina and Bytkov petrodeums. Khim.i tekh.topl.i masel 5 no.8:1-6 Ag '60. (MIRA 13:8)

1. Moskovskiy institut neftekhimicheskoy i gazovoy promyshlennosti im.akad.Gubkina.
(Petroleum--Analysis) (Hydrocarbons)

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308610010-2"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308610010-2

YATSENKO, Ye.F.; CHERNOZHUKOV, N.I.

Naphthenes of the lubricating-oil fraction of Dolina and Bytkov crudes. Khim.i tekh.topl.i masel 5 no.10:6-10 O '60. (MIRA 13:10)

1. Ukrainskiy nauchno-issledovatel'skiy gornorudnyy institut.i Moskovskiy institut neftekhimicheskoy i gazovoy promyshlennosti im. akad. Gubkina.
(Naphthenes) (Petroleum products)

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308610010-2"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308610010-2

S/081/61/000/011/038/040
B110/B201

AUTHORS: Chernozhukov, N. I., Susanina, O. G., Kazakova, L. P., Sadchikova, M. F.

TITLE: Methods of separating and studying naphthenic and aromatic hydrocarbons of oil fractions and ceresins

PERIODICAL: Referativnyy zhurnal. Khimiya, no. 11, 1961, 493, abstract 11M267 (11M267) (Sb. tr. Mezhvuz. soveshchaniya po khimii nefti, 1956. M., Mosk. un-t, 1960, 114-127)

TEXT: Naphthenic hydrocarbons were separated from the distillate of Baku "автол-10" (avtol-10) by chromatography on silica gel. They were then freed from impurities by adsorption on activated carbon and dissolved in an eightfold volume of methyl-ethyl ketone. As the solution was cooled to various temperatures, five fractions of liquid hydrocarbons were separated, which, on further cooling of the solution, displayed an almost uniform decrease of n_D^{20} (1.4947 - 1.4914); d_4^{20} (0.9000 - 0.8928), and of the molecular weight (458-298), and which mainly consisted of

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bicyclic and tricyclic naphthenic hydrocarbons with naphthenic-aromatic hydrocarbon impurities. In the second method, the solution of one part of distillate in eight parts of acetone was cooled from -5 to -70°C. Every 5-10°C in the cooling process, the fractions of separated hydrocarbon crystals were filtered off. By silica gel chromatography, naphthenic paraffin hydrocarbons, from which the paraffins were removed by activated carbon, were separated from the fractions. Fractions (n_D^{20} = 1.4839-1.4860; d_4^{20} = 0.8872-0.8392, molecular weight 370-430) were obtained. They consisted, however, of a mixture of naphthenic and naphthenic aromatic hydrocarbons. The compositions of Borislav and Shor-su ceresins (n_D^{20} = 1.4660 and 1.4689, respectively; d_4^{20} = 0.8628 and 0.8640; molecular weights: 542 and 590; melting points: 73 and 85°C) was examined by the following method: Chromatographic separation on silica gel, removal of paraffins and oils in the acetone-benzene-toluene mixture, treatment with urea, repeated recrystallization, and adsorptive separation of the paraffin-naphthene fraction on activated carbon. The following was found in Borislav and Shor-su ceresins: 12 and 12.2% n-paraffins,

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respectively; 64.4 and 74.5% naphthenes, and 3.3 and 0.6% aromatics. From the fraction 400-450°C (n_D^{20} = 1.4949; d_4^{20} = 0.8832, viscosity = 87 cst at 100°C) of Devonian petroleum from Tuymazy, 10 fractions of aromatic hydrocarbons were separated by adsorption on silica gel. From them, the sulfur compounds were removed by the Ginzberg method, through oxidation by H_2O_2 in the presence of glacial acetic acid. In various desulfurized fractions, the presence of the following hydrocarbons was established by spectrum analysis: monocyclic and bicyclic aromatics, naphthalenes, tricyclic condensed naphthalenes and phenanthrenes. [Abstracter's note: Complete translation.]

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"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308610010-2

30651

S/081/61/000/020/086/089
B110/B147

15.6400
11.9200

AUTHORS: Chernozhukov, N. I., L'vova, A. I.

TITLE: The problem of the synthesis of synthetic lubricants on the basis of ethylene oxide

PERIODICAL: Referativnyy zhurnal. Khimiya, no. 20, 1961, 411, abstract 20M164 ([Tr.] Groznensk. neft. in-t, sb. 23, 1960, 225-231)

TEXT: The production of monoethers of polyethylene glycol (I), which are suited as lubricants, by condensation of ethylene oxide (II) with CH_3OH, C_2H_5OH, n-C_4H_9OH, n-$C_5H_{11}OH$, n-$C_6H_{13}OH$, n-$C_9H_{19}OH$ and with the residuum of cellosolve production was examined. Fraction I was separated from the condensation products by vacuum distillation. When II has a polymerization degree of 3-7, the optimum condensation conditions (in a rotating autoclave) for producing I are as follows: 190°C, duration 3-4 hr, molar ratio II:alcohol = 2:1, catalyst: $Fe_2(SO_4)_3$. I from CH_3OH, C_2H_5OH, and from the residuum are readily soluble in water, I from

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30651

The problem of the synthesis of synthetic... S/081/61/000/020/086/089
B110/B147

$n-C_4H_9OH$ are poorly soluble, and I from $n-C_5H_{11}OH$ and $n-C_9H_{19}OH$ are insoluble. I display good viscosity and temperature characteristics, and low solidification points (from -65 to <-70°C at viscosities of 2-19 centistokes/50°C), except for I from $n-C_9H_{19}OH$ (-26, -30°C). Water-soluble I were converted into water-insoluble benzyl ethers of I which likewise possess low solidification points and good viscosity and temperature characteristics. [Abstracter's note: Complete translation.]

Card 2/2

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"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308610010-2

CHERNOZHUKOV, N.I.; VAYNSHTOK, V.V.; KARTININ, B.N.

Crystal submicrostructure of solid hydrocarbon mixtures in a hydrocarbon medium. Izv. vys. ucheb. zav.; neft' i gaz 5 no.11:53-57 '62. (MIRA 17:6)

1. Moskovskiy institut neftekhimicheskoy i gazovoy promyshlennosti imeni akademika Gubkina.

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"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308610010-2

34336

S/152/62/000/003/001/002
B126/B101

5.3300

AUTHORS: Skidanova, N. I., Chernozhukov, N. I.

TITLE: Investigation of liquid paraffin-naphthene hydrocarbons in oil distillates of Kotur-Tepe petroleum

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy. Neft' i gaz, no. 3, 1962, 79-83

TEXT: Six narrow fractions of liquid paraffin-naphthene hydrocarbons were obtained from each of three distillates of Turkmenian petroleum from the Kotur-Tepe oilfield. The boiling ranges of the distillates were 350 - 400°C, 400 - 450°C and 450 - 500°C and the respective pour points +10°C, +23°C and +35°C. The methods applied were chromatography with silica gel of АСК(ASK) brand, dewaxing in acetone-benzene-toluene solution at -10°C, treating with carbamide, fractional crystallization of those hydrocarbons which did not combine with carbamide when dissolved in acetone at +20°C, -20°C and -40°C, and chromatography with activated

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charcoal of БАУ(BAU) brand; mainly iso-octane was used for desorption. The test results showed that at a lower crystallization temperature the solidification point of the separated hydrocarbons also falls, their molecular weight decreases and ring formation increases. Part of the naphthene hydrocarbons from all three distillates remained in the acetone solution even at -40°C and contained less naphthene rings in the molecule than those separated at +20°C, -20°C and -40°C; this implies that their paraffin chains are very long. All naphthene fractions of the 350-400°C distillate are on the average mono and bicyclic, the viscosity index is somewhat lower than that of similar fractions of the 400-450°C distillate as the side chains are shorter. The 400-450°C distillate contains more bicyclic and also some tricyclic hydrocarbons separated at -40°C, the viscosity index is lower than that of similar fractions of the other two distillates as the side chains are longer. In general the higher the boiling range the greater is the quantity of naphthene hydrocarbons insoluble in acetone at +20°C, probably due to the increase in the number

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"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308610010-2

of carbon atoms in the side chains. The number of rings was determined by elementary analysis. There are 6 tables.

ASSOCIATION: Moskovskiy institut neftekhimicheskoy i gazovoy promyshlennosti im. akad. I. M. Gubkina (Moscow Institute of Petrochemical and Gas Industry imeni Academician I. M. Gubkin)

SUBMITTED: November 21, 1961

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308610010-2"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308610010-2

CHERNOZHUKOV, N.I.; VAYNSHTOK, V.V.; KARTININ, B.N.

Submicrostructure of solid hydrocarbons in a hydrocarbon medium. Izv. vys. ucheb. zav.; neft' i gaz 4 no.8:83-86 '61. (MIRA 14:12)

1. Moskovskiy institut neftekhmicheskoy i gazovoy promyshlennosti imeni akademika I.M. Gubkina.
(Hydrocarbons--Analysis)

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308610010-2"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308610010-2

38256

S/065/62/000/006/002/007
E075/E136

11.9100

AUTHORS: Gubenko, I.B., Karaseva, A.A., and Chernozhukov, N.I.

TITLE: Two-stage deasphalting of vacuum residues from Eastern crudes

PERIODICAL: Khimiya i tekhnologiya topliv i masel, no.6, 1962, 15-17

TEXT: A two-stage deasphalting process was used to produce viscous cylinder oils. The process was carried out in a large pilot plant including a countercurrent column of 75 mm diameter, height 6.3 m. Ratios of propane to oil volumes used in the first stage were 7-8:1 and 13:1. With the use of the two-stage process the yield of the deasphalted residue increased by 30-40% for the vacuum residues from sulphurous Eastern crudes and by 15-20% for the residues with low sulphur contents. All hydrocarbon groups in the oil deasphalted by the two-stage process have higher viscosities (from 20 to 62 cs at 100 °C) than the corresponding hydrocarbons in the single-stage deasphalted oil (from 12 to 46 cs at 100 °C). The aromatic hydrocarbons in the latter oil

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Two-stage deasphalting of vacuum .. S/065/62/000/006/002/007
E075/E136

have lower viscosity indices (10 to 20 units) than the oils after the two-stage deasphalting process. The oils contain 48-52% aromatic hydrocarbons with $n_D^{20} > 1.54$ compared with 20-26% for the oils obtained with the single-stage deasphalting. The viscous oils (37 cs at 100 °C) from the sulphurous crudes had better anti-wear and load carrying properties than the oil П -28 (P-28) from Baku crudes.
There are 3 tables.

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"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308610010-2

CHERNOZHUKOV, N.I.; FAL'KOVICH, M.I.; GERVITS, E.S.; Prinimali uchastiye: BUROVA, V.M., studentka; VOROB'YEVA, Z.P., studentka.

Separation of paraxylene from a mixture of xylenes. Khim. i tekh. topl.i masel 7 no.1:19-24 Ja '62. (MIRA 15:1)

1. Moskovskiy institut neftekhimicheskoy i gazovoy promyshlennosti im. akad. Gubkina.

(XYLENE)

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"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308610010-2

S/152/63/000/003/002/005
B117/B186

AUTHORS: Fauzi, M. A., Kartinin, B. N., Chernozhukov, N. I.

TITLE: Effect of deparaffination conditions on the crystallization character of solid hydrocarbons of residual oil

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy. Neft' i gaz, no. 3, 1963, 59-64

TEXT: The conditions of deparaffination were studied for the residual refined product (d_4^{20} = 0.8865, $\nu_{100°C}$ = 14.91 cm^3 (c. c. ?), solidifying point +51°C, coking capacity 0.3%) of Tuymazy petroleum; solvent: toluene mixtures with 20-60% acetone, or 40-80% MEK (MEK); weight ratio oil : solvent 1:3, 1:4, 1:5, heating up to 60°C; filtration temperature -25°C; cooling rate 40-200°C/hr. Results: with increasing ketone concentration, the yield of deparaffined oil was reduced, the filtration accelerated, and the solidifying point of the oil lowered. Toluene mixtures with 40% acetone or 60% MEK were found to be optimum solvents. Electron-microscopic pictures (made for the first time for crystals of

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hexagonal structure) showed that an increase in ketone concentration led to the formation of larger, well structured crystals of solid hydrocarbons. This resulted in a higher permeability of the precipitate, which accelerated the filtration and made it easier to separate the liquid from the solid phase. An increase in the cooling rate (from 40 to 90°C/hr) led to the formation of smaller crystals, which unfavorably affected the filtration and the yield of deparaffined oil. A further increase of the cooling rate (up to 200°C/hr) had no effect on the size of crystals. Therefore the mean cooling rate should not exceed 60°C/hr; a rate of about 40°C/hr is recommended for the beginning of crystallization, followed by a faster cooling at the final stage. Repeated dilution of the raw material favorably affects the microstructure of solid hydrocarbons; less viscous liquids produce larger, well shaped crystals effecting an accelerated filtration and higher yields of the deparaffined oil. The temperature gradient is impaired by higher solubility of solid hydrocarbons with increasing solvent content. Addition of the solvent in portions is not expedient as it makes the oil more consistent during the cooling, thus retarding the crystallization process. There are 12 figures and 4 tables.

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"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308610010-2

S/152/63/000/003/002/005
Effect of deparaffination conditions on ... B117/B186

ASSOCIATION: Moskovskiy institut neftekhimicheskoy i gazovoy promyshlennosti im. akad. I. M. Gubkina (Moscow Institute of Petrochemical and Gas Industry imeni Academician I. M. Gubkin)

SUBMITTED: June 23, 1962

Card 3/3

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308610010-2"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308610010-2

SKIDANOVA, N.I.; CHERNOZHUKOV, N.I.

Studying liquid paraffin-naphthenic hydrocarbons, components of oil distillates of the Kotur-Tepe petroleum. Izv. vys. ucheb. zav.; neft' i gaz 5 no.3:79-83 '62. (MIRA 16:8)

1. Moskovskiy institut neftekhimicheskoy i gazovoy promyshlennosti imeni akademika I.M. Gubkina.

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"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308610010-2

CHERNOZHUKOV, N.I., doktor tekhn. nauk, prof., nauchnyy red.; ZHERDEVA, L.G., red.; IVANOVA, L.V., red.; ISAGULYANTS, V.I., red.; ISMAILOV, R.G., red.; KREYN, S.E., red.; KULIYEV, A.M., red.; MAMEDOV, M.A., red.; PAPOK, K.K., red.; SPEKTOR, Sh.Sh., red.; FEDOTOVA, A.F., red.; SHKHIYAN, S.Kh., red.; LEVINA, Ye.S., ved. red.; POLOSINA, A.S., tekhn. red.

[Improvement of the quality and the production of lubricating oils] Uluchshenie kachestva i sovershenstvovanie proizvodstva smazochnykh masel; trudy. Moskva, Gostoptekhizdat, 1963. 255 p. (MIRA 16:6)

1. Vsesoyuznoye soveshchaniye po uluchsheniyu kachestva bakinskikh smazochnykh masel i usovershenstvovaniyu tekhnologii ikh proizvodstva, Baku, 1961.

(Lubrication and lubricants)

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"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308610010-2

L 10589-63 EPF(c)/EWT(m)/BDS Pr-4 RM/WW

ACCESSION NR: AP3001471 S/0152/63/000/004/0043/0048

58
57

AUTHOR: Skidanova, N. I.; Gundyrev, A. A.; Chernozhukov, N. I.

TITLE: Solubility of aromatic hydrocarbons (found in oil fractions of Koturtepin petroleum) in furfurol and its dependence on the structure of their compounds

SOURCE: IVUZ. Neft' i gaz, no. 4, 1963, 43-48

TOPIC TAGS: Intermolecular bonds, bond energy, solubility of aromatic hydrocarbons, furfurol, aromatic hydrocarbons

ABSTRACT: The viscosities and densities of closely-distilled aromatic hydrocarbons and their mixtures were measured in the temperature interval between 50 and 100C, and the intermolecular bond energy was measured on the basis of these values. It was shown that, with an increase of molecular weight of the fraction, the bond energy decreases on account of the increased number of hydrogen atoms in the side chains, and the number of cycles in the aromatic hydrocarbon molecules are simultaneously decreased. The bond energies were calculated for the solutions of various concentrations of one of the closely-distilled fractions in furfurol. It was found that the lowest bond energy is present in compounds which are closely related to the compounds with the worst mutual solubility. It was also shown

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ACCESSION NR: AP3001471

that the value b, which is a constant for a given fraction, depends on the structure of mixed hydrocarbons and it is always higher than the value of b for the original fractions of binary mixtures of aromatic hydrocarbons. The study of solubility of close aromatic hydrocarbon fractions in furfurol can be useful in establishing the structure of hydrocarbons present in these fractions. Orig. art. has: 3 tables and 2 graphs.

ASSOCIATION: Moskovskiy institut neftekhimicheskoy i gasovoy promy*shlennosti im. akad. I. M. Gubkina (Moscow Institute for the Petrochemical and Gas Industry)

SUBMITTED: 22Jun62 DATE ACQD: 10Jun63 ENCL: 00

SUB CODE: 00 NO REF SOV: 003 OTHER: 001

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"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308610010-2

FAUZI, M.A.; KARTININ, B.N.; CHERNOZHUKOV, N.I.

Studying the effect of dewaxing on the crystallization of solid hydrocarbons in residual oil. Izv. vysh. ucheb. zav.; neft' i gaz 6 no.3:59-64 '63. (MIRA 16:7)

1. Moskovskiy institut neftekhimicheskoy i gazovoy promyshlennosti imeni akdemika I.M. Gubkina.
(Paraffin wax) (Hydrocarbons)

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308610010-2"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308610010-2

FAUZI, Mokhamed; KARTININ, B.N.; CHERNOZHUKOV, N.I.

Effect of the depth of phenol purification of residual oil on the characteristics of dewaxing. Izv. vys. ucheb. zav.; neft' i gaz 6 no.8:61-64 '63. (MIRA 17:6)

1. Moskovskiy institut neftekhimicheskoy i gazovoy promyshlennosti imeni akademika I.M. Gubkina.

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308610010-2"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308610010-2

FAUZI, Mokhamed; KARTININ, B.N.; CHERNOZHUKOV, N.I.

Effect of certain depressants on the nature of the crystallization of solid hydrocarbons in the dewaxing of residual raffinates. Izv.vys.ucheb.zav.; neft' i gaz 6 no. 12:61-63 '63. (MIRA 17:5)

1. Moskovskiy institut neftekhimicheskoy i gazovoy promyshlennosti im. akademika I.M.Gubkina.

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"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308610010-2

SKIDANOVA, N.I.; GUNDYREV, A.A.; CHERNOZHUKOV, N.I.

Solubility in furfural of aromatic hydrocarbons separated from oily fractions from the petroleum of the Koturtepe field. Trudy MINKHiGP no.44:235-241 '63. (MIRA 18:5)

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"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308610010-2

L 2106-65 EWT(m)/EPF(c)/K/EPR/T/EWP(q)/EWP(b) Pr-4/Ps-4 AS(mp)-2/AFWL/SSD/ESD(gs)/ESD(t) WW/DJ/WH

ACCESSION NR: AP4042329 S/0065/64/000/007/0059/0065

35
33

AUTHOR: Fuks, I. G.; Vaynshtok, V. V.; Chernozhukov, N. I.; Kartinin, B. N.

TITLE: Fillers as components of thickened lubricants.

SOURCE: Khimiya i tekhnologiya topliv i masel, v. 9 no. 7, 1964, 59-65

TOPIC TAGS: lubricant, lubricant filler, thickened lubricant, lithium lubricant, hermetic property, filler mechanism, yield value, particle size, inert filler, active filler, chemically reactive filler, amorphous lubricant, crystalline lubricant, fibrous lubricant structure, colloidal stability, molecular structure

ABSTRACT: The effect of fillers on the structure and properties of thickened lithium lubricants was investigated in order to obtain data on the mechanism of the action of the fillers and to study the possibility of increasing the hermeticity of the lubricants. Castor oil with 20 weight % lithium ricinoleate, and 5, 10, 15 and 30 wt.% of mica, graphite, chemically pure TiO_2 and oxides of lead, magnesium, zinc, iron and aluminum was used for the investigation. The fillers were added to the lubricant while it was held at 205-210C for 15 minutes. Hermeticity was determined by the maximum pressure that the lubricant could withstand and

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ACCESSION NR: AP4042329

2

by the number of opened-closed stopcock cycles at 25-200 atmospheres before the seal was broken. It was concluded that the yield value obtained could be used as a basic laboratory index of the operating properties of the thickened lubricants. The nature of the filler and its particle size and concentration affect the yield value. The inert filler, graphite, did not change the molecular structure of the soap but increased the yield value approximately proportionally to its concentration. The particle size of the graphite changed the yield value only slightly. The active fillers TiO_2, Al_2O_3, Fe_2O_3 and mica did not affect the strength of the soap but raised the yield point much less than graphite. The effect of the particle size of this type of fillers on the yield value was significant. It was found that the finer particle material (35-50 micron) increasing the yield values much more than the larger particle filler (100-120 micron). The colloidal stability of the lubricant with mica was higher than with graphite. The chemically reactive fillers ZnO, MgO and PbO significantly lowered the yield value even at 5-10% concentrations, lowered the drop point 35-40 degrees, affected the colloidal stability and changed the structure of the lubricant from crystalline to amorphous (MgO and PbO) or fibrous (ZnO). Orig. art. has: 4 figures and 3 tables.

ASSOCIATION: MINKh i GP

Card ~~2/3~~ 2/2

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308610010-2"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308610010-2

L 21105-65 EWT(m)/EPF(c)/T Pr-4 DJ

ACCESSION NR: AP4049881 S/0318/64/000/003/0007/0010

AUTHOR: Glazov, G. I., Fal'kovich, M.I., Chernoz[illegible] N.I.

TITLE: Some recommendations for dewaxing distillate oils

SOURCE: Neftepererabotka i neftekhimiya, no. 3, 1964, 7-10

TOPIC TAGS: petroleum refining, distillate oil, oil dewaxing, solvent extraction

ABSTRACT: The authors studied the influence w[illegible] conditions of dilution of the stock and the rate of cooling of its s[illegible] the process of dewaxing of distillate oils. The stock used [illegible] wide fraction (350-490C) of Korobkovo pet[illegible] NPZ (Volgograd Petroleum Refinery). All [illegible] laboratory conditions with a Buchner funn[illegible] tion temperature of -25C and a cooling rat[illegible] toluene mixtures were used, their optimum [illegible] and methyl [illegible] ketone was 27-30 and 40-55%, respectively. [illegible] experiments, the solvents used were acetone-toluene mixtures. The effect of the temperature of mixing of the stock and of the solvent on the characteristics of the dewaxing (yield of

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L 21105-65

ACCESSION NR: AP4049881

oil, filtration rate of the solvents, solidification temperature of the oil) was determined. A detailed study was made of [illegible] ence of the yield of relatively oil-free paraffin on the filtra[illegible] of the solvent [illegible] on the acetone content of the solvent mix[illegible] reached. In dewaxing distillate raffinate[illegible] of the solvent to the stock in portions, [illegible] improved by: (1) decreasing the temperatu[illegible] portions of the solvent and stock; (2) decre[illegible] of solvent; (3) feeding the last portion of s[illegible] filtration temperature of the solvent; (4) red[illegible] tion in a temperature range close to the filtra[illegible] has: 3 figures and 1 table.

[illegible] part of the first [illegible] stock cooled down to the [illegible] cooling rate of the st[illegible] [illegible]ratura. Orig. art[illegible]

ASSOCIATION: MINKh i GP

SUBMITTED: 00 ENCL: 00 SUB CODE: FP

NO REF SOV: 000 OTHER: 000

Card 2/2

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308610010-2"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308610010-2

ACCESSION NR: AP4026848 S/0065/64/000/004/0016/0021

AUTHORS: Glazov, G.I.; Unksova, L.Ye.; Fal'kovich, M.I.; Chernozhukov, N.I.

TITLE: Intensifying the process of deparaffination of distillate raffinates

SOURCE: Khimiya i tekhnologiya topliv i masel, no. 4, 1964, 16-21

TOPIC TAGS: raffinate, deparaffination, solvent, deparaffination intensification, batch solvent addition, acetone toluene solvent, high acetone solvent

ABSTRACT: The possibility of intensifying the deparaffination of raffinates by adding a solvent containing 60% or more acetone to the crude oil at the start of the dilution was verified. Experiments were run comparing a single addition with three batch-wise additions of solvent to the basic crude oil (a wide fraction of raffinate with 6.7 centistokes viscosity at 100C, with 90% potential oil content) to be deparaffinated; acetone-toluene was the solvent;

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ACCESSION NR: AP4026848

the cooling rate was 100-120C/hour, and filtration was at -25C under 400 mm. Hg. The solvent added initially to the crude oil should contain 60-80% acetone. The amount of solvent used and its temperature affect the deparaffination process. For the second dilution the solvent was fed to the cooled crude oil at 0-15C in such amounts thast the overall acetone content in admixture with the toluene is 45-50%. The third portion of solvent was added to the solution cooled to nearly the filtering temperature in such amounts that the acetone content in the total solvent after all three stages of addition was 30%. The batch-wise addition of the acetone-containing solvent in comparison to the single stage addition of solvent to the crude oil is more economical, giving a larger amount of oil with a higher paraffinic-naphthenic content and reduced aromatics and resins. The use of a solvent containing over 60% acetone permitted effective deparaffination of broad distillate fractions with viscosities up to 10 centistokes at 100C. Recovery of the deparaffinated oil was increased 3-5% and the rate of

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ACCESSION NR: AP4026848

filtration was increased by 70%. In narrow distillate fractions obtained on a vacuum column by boiling up to 460C, the results of deparaffination seem independent of the method of solvent addition. In the high boiling fraction, 450-480C, the batch-wise additon was again more favorable, giving a higher yield of oil and a more porous filter cake. Orig. art. has: 4 tables and 2 figures.

ASSOCIATION: MINKh i GP im. I. M. Gubkina (Moscow "Order of the Red Banner of Labor" Institute of the Petrochemical and Gas Industry)

SUBMITTED: 00 DATE ACQ: 28Apr64 ENCL: 00

SUB CODE: FL NR REF SOV: 002 OTHER: 001

Card 3/3

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308610010-2"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308610010-2

L 53610-65 EWT(m)/EPF(c)/T Pr-4 DJ

ACCESSION NR: AP5016258 UR/0065/64/000/012/0011/0015

AUTHOR: Rasulov, A. M.; Chernozhukov, N. I.; Kuliyev, R. Sh.; Sadykhova, S. A.

TITLE: Production of oils by the method of destructive hydrogenation

SOURCE: Khimiya i tekhnologiya topliv i masel, no. 12, 1964, 11-15

TOPIC TAGS: catalysis, temperature, hydrogenation, petroleum refining, petroleum refinery product

Abstract: The influence of temperature and catalyst on the yield and quality of destructive hydrogenation [illegible] the deasphaltate [illegible] petroleum of the Neftyanyye Kamni [illegible] investigated [illegible] temperature of the hydrogenation pr[illegible] catalysts [illegible] leads to an improvement of the qualities [illegible] hydrogenate [illegible] Optimum temperature for the hydrogenat[illegible] deasphaltate of [illegible] Kamni crude with a coking quality of [illegible] production of [illegible] oils is 435°C with WS_2 catalyst and [illegible] Al-Co-Mo catalyst [illegible] WS_2 catalyst was found to be more effe[illegible] the catalyst [illegible] The catalyst WS_2 makes it possible to [illegible] the hydrogenat[illegible]

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L 53610-65

ACCESSION NR: AP5016258

relatively low temperature and to obtain oils with better quality and in higher yield (more than 18% of the crude). The aviation oil [illegible] hydrogenation on the WS_2 catalyst conta[illegible] of the methane-[illegible] hydrocarbons and less of the light [illegible] oil produced on the Ni-Co-Mo catalyst [illegible] heavy aromatic hydrocarbons, but does con[illegible] of the intermediate fractions of aromatic hydrocarbons. The [illegible]gated oils contain [illegible]imately the same amount of resinous matte[illegible] art. has 2 [illegible]

ASSOCIATION: INKhP AN Azerb. SSR

SUBMITTED: 00 ENCL: 00 SUB CODE: FP, [illegible]

NO REF SOV: 000 OTHER: 000 JPRS

Card 2/2

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308610010-2"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308610010-2

OL'KOV, P.L.; CHERNOZHUKOV, N.I.

Two-stage dewaxing using crystallization and the complex formation of carbamide. Izv. vys. ucheb. zav.; neft' i gaz 7 no.12: 45-48 '64 (MIRA 18:2)

1. Moskovskiy institut neftekhimicheskoy i gazovoy promyshlennosti im. akademika I.M. Gubkina.

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308610010-2"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308610010-2

L 35428-65 EPF(c) EWP(k)/EWT(1)/EWT(m)/T Pf-4/Pi-4/Pr-4 WE

ACCESSION NR: AP5006659 S/0065/65/000/003/0029/0033

AUTHOR: Abramovich, S. Sh.; Ishmayeva, R. M.; Chernozhukov, N. I.

TITLE: Effect of ultrasound on the deparaffinization of oil fractions

SOURCE: Khimiya i tekhnologiya topliv i masel, no. 3, 1965, 29-33

TOPIC TAGS: ultrasonic treatment, deparaffinization, gatch, oil fraction, magnetostriction, cloud point, paraffin crystal, filtration rate/ UZG-2.5 generator

ABSTRACT: Recently there has appeared a large number of studies of the effect of high-frequency vibrations on the processes of crystallization as well as on the colloidal-chemical properties of certain gels and ashes. In this connection, the authors experimentally investigated the effect of ultrasound on the properties of paraffin suspensions in a mixture of raffinate and solvent subjected to deparaffinization. Five different fractions of distilled Soviet crude were investigated. The solvent used was acetone-benzene-toluene in the ratio of 30:35:35. The thermal processing was performed at +40°C; the cooling, at the rate of 120°C/hr; and the mixing rate was constant. Ultrasonic treatment was performed with the aid of a magnetostriction device excited by an UZG-2.5 generator. The optimal conditions

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L 35428-65

ACCESSION NR: AP5006659 0

for ultrasonic treatment were tentatively established as follows: suspension temperature must be 6-10°C below the cloud point of the solution, and the treatment should be in a weak acoustic field, as otherwise the paraffin crystals would melt; further, conditions for the formation of a standing wave must be created. Given all these conditions, ultrasonic treatment of distilled oil fractions increases the filtration rate of suspensions 1.5-2 times and reduces by more than in half the oil content of gatch while at the same time correspondingly increasing the yield of deparaffinized oil. In addition it serves to increase the efficiency of deparaffinization of not only sulfur-containing but also sulfur-free raw materials. Orig. art. has: 3 figures, 4 tables.

ASSOCIATION: BashNII NP, MINKh i GP

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

NO REF SOV: 003 OTHER: 003

Card 2/2

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308610010-2"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308610010-2

L 56466-65

ACCESSION NR: AP5016197 UR/0318/65/000/006/0026/0029
665.5[illegible]:665.54.54[illegible]

AUTHORS: Rudenko, N. D.; Chernozhukov, N. I.

TITLE: Phenol and furfurol purification of oily distillates of the Korobkovskaya petroleum

SOURCE: Neftepererabotka i neftekhimiya, no. 6, 1965, 26-29

TOPIC TAGS: petroleum, distillate, lubricant, furfurol, phenolic, extracting agent

ABSTRACT: Lube oil distillates of the Kor[illegible] (350-400C; [illegible] and 450-500C) were purified by equal quan[illegible] waterless furfurol in a laboratory counter[illegible] The results of both purifications are ta[illegible] tities of low-cyclic compounds, tars, an[illegible] of the latter for phenol was twice as large for the [illegible]-400C, 2.2 times for 400-450C, and 2.4 times for 450-500C fractions. Furfurol purification required higher temperatures and resulted in a 3-4% higher yield of raffinates with higher densities and viscosities. These raffinates were deparaffinized at -28C in the

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"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308610010-2

L 56466-65

ACCESSION NR: AP5016197

30-35-35% acetone-benzene-toluene solution, and were cleaned with 5% bleaching earth (gumbrine) at 100C. The results of both [illegible] ation methods differed little in qualities; both showed improvement [illegible] because of a larger raffinate yield, the [illegible] the purification of lube oil fractions [illegible]
4 tables.

ASSOCIATION: Volgogradskiy NIING, MINKh i GP im. I. M. Gubkina (Volgograd NIING, MINKh and GP)

SUBMITTED: 00 ENCL: SUB CODE: [illegible]

NO REF SOV: 000 OTHER: [illegible]

Card 2/2

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"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308610010-2

L 53660-65 EWT(m)/EPF(c)/T Pr-4 D

ACCESSION NR: AP5014949 UR/0065/65/000/006/0034/0037
665.521.5:531.321.9

AUTHOR: Abramovich, E. Sh.; Chernozhukov, N. I.

TITLE: Dewaxing of oils using ultrasound

SOURCE: Khimiya i tekhnologiya topliv i masel, no. 6, 1965, 34-37

TOPIC TAGS: dewaxing, oil, lubricating oil, ultrasound

ABSTRACT: It has been shown that in distillate-oil feed-stock dewaxing by stage-wise extraction with methyl ethyl ketone solvent, the number of stages can be reduced to two by the use of ultrasonic irradiation of the wax suspension in the oil-solvent solution. Two-stage dewaxing using ultrasonic irradiation produced both a dewaxed oil and substantially oil-free wax. Ultrasonic irradiation prior to first-stage filtration speeded up filtration in both stages. It was also shown that the use of an oil feed-stock having a narrower boiling range improved the dewaxing without resort to ultrasound. However, [illegible] in this case, [illegible] further improved the dewaxing. Orig. art. has [illegible] tables and 1 figure. [illegible]

Card 1/[illegible]

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308610010-2"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308610010-2

L 53660-65

ACCESSION NR: AP5014949

ASSOCIATION: BashNII NP, MINKh i GP

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

NO REF SOV: 004 OTHER: 000 ATD PRESS: 4013

Card 2/2

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308610010-2"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308610010-2

LISOVSKIY, A.Ye.; KARTININ, B.N.; GUKHMAN, L.A.; CHERNOZHUKOV, N.I.

Mechanism of the action of tars on the crystallization of paraffins. Izv. vys. ucheb. zav.; neft' i gaz 8 no.6:57-61 '65. (MIRA 18:7)

1. Azerbaydzhanskiy institut nefti i khimii im. M.Azizbekova i Moskovskiy institut neftekhimicheskoy i gazovoy promyshlennosti im akademika I.M.Gubkina.

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308610010-2"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308610010-2

GLAZOV, G.I.; KARTININ, B.N.; CHERNOZHUKOV, N.I.

Structure of the solid hydrocarbons of distillation raffinates. Khim. i tekh. topl. i masel 10 no.10:18-23 O '65. (MIRA 18:10)

1. Moskovskiy ordena Trudovogo Krasnogo Znameni institut neftekhimicheskoy i gazovoy promyshlennosti im. akad. Gubkina.

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308610010-2"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308610010-2

IVANOVA, N.N.; CHERNOZHUKOV, N.I.

Comparative analysis of hydrocarbons of the 290 to 350°C fractions of Kazakhstan and Shkapovo oils. Khim. i tekhn. topl. i masel 10 no.12:7-10 D '65.

(MIRA 19:1)

1. Orskiy neftepromyslovyy zavod i Moskovskiy ordena Trudovogo Krasnogo Znameni institut neftekhimicheskoy i gazovoy promyshlennosti im. akad. Gubkina.

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308610010-2"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308610010-2

L 20365-66 EWT(m)/T/EWP(t) IJP(c) JD/JG/DJ

ACC NR: AP6006446 (A) SOURCE CODE: UR/0065/66/000/002/0024/0026

48

B

AUTHORS: Fuks, I. G.; Vaynshtok, V. V.; Chernozhukov, N. I.

ORG: MINKh I GP

TITLE: Influence of fillers on the thickening ability of lithium soaps

SOURCE: Khimiya i tekhnologiya topliv i masel, no. 2, 1966, 24-26

TOPIC TAGS: lubricant, organometallic lubricant, lubricant additive, lithium compound, viscosity, lubricant filler additive

ABSTRACT: The effect of different fillers on the thickening ability of lithium soaps when added to castor oil and cabel oil "S-220" was investigated to extend the previously published work of I. G. Fuks, V. V. Vaynshtok, N. I. Chernozhukov, and B. N. Kartinin (Khim. i tekhnol. topliv i masel, No. 7, 1964). The thickening ability was determined at 0, 50, and 100C after the method described in Konsistentnyye smazki. Trudy MINKh i GP, vyp. 32 Gostoptekhizdat, 1960, and the effective viscosity was determined at 20C according to the procedure specified by GOST 7163-63. The experimental results are tabulated. It was found that the thickening effect of the lithium soap depended on the nature and concentration of the dispersive medium. Addition of mica and graphite fillers to lithium grease

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L 20365-66

ACC NR: AP6006446

increases the viscosity and strength limit of the latter. The change in viscosity when expressed as a function of filler concentration exhibits a maximum. Orig. art. has: 3 tables.

SUB CODE: 11/ SUBM DATE: none

Card 2/2 vmb

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"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308610010-2

L 29708-66 EWT(m)/T DJ
ACC NR: AP6015115 (A) SOURCE CODE: UR/0065/66/000/005/0026/0030

53
B

AUTHOR: Fuks, I. G.; Vaynshtok, V. V.; Kartin'in, B. N.; Chernozhukov, N. I.

ORG: MINKh and GP

TITLE: Effect of surface active agents on the structure and strength characteristics of lithium lubricants with fillers

SOURCE: Khimiya i tekhnologiya topliv i masel, no. 5, 1966, 26-30

TOPIC TAGS: lubricant surface active agent, alkali metal lubricant, lithium compound, shear stress

ABSTRACT: The effect of stearic acid and glycerin admixtures on the structure and properties of lithium lubricants prepared with S-220 oil with and without fillers (mica and graphite in amounts of 5, 15, and 30 wt. %) was studied. The lubricants were prepared by thickening the oil with lithium stearate (20 wt. %). The dependence of the limit shear stress of the lubricants containing fillers on the concentration of the surfactants (stearic acid, glycerin, and water) has an extremal character: minimum limit shear stress values correspond to surfactant concentrations of

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up to 0.2% while maximum values correspond to higher concentrations. Critical concentrations of surfactants in the lubricants correspond to sharp differences in their structure. The presence of fillers enhances the effect of surfactants on the strength characteristics and causes the difference in the maximum values of the limit shear stress to increase (particularly when the concentration of fillers is raised). Glycerin and stearic acid considerably increase the thickening effect of lithium stearate in castor oil. Orig. art. has: 4 figures and 1 table.

SUB CODE: 11/ SUBM DATE: 00/ ORIG REF: 011/ OTH REF: 000

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APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308610010-2"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308610010-2

CHERNOZHUKOV, P.I.

ZHIGACH, K.F., professor, otvetstvennyy redaktor; MURAV'YEV, I.M., professor, redaktor; TIKHOMIROV, A.A., kandidat ekonomicheskikh nauk, redaktor; YEGOROV, V.I., kandidat ekonomicheskikh nauk, redaktor; CHARYGIN, M.M., professor, redaktor; DUNAYEV, F.F., professor, redaktor; NAMETKIN, N.S., dotsent, redaktor; BIRYUKOV, V.I., dotsent, redaktor; YEGOROV, A.F., dotsent, redaktor; CHARNYY, I.A., professor, redaktor; CHERNOZHUKOV, P.I., professor, redaktor; KUZMAK, Ye.M., professor, redaktor; DOKHNOV, V.N., professor, redaktor; PANCHENKOV, G.M., professor, redaktor; ALMAZOV, N.A., dotsent, redaktor; TAGIYEV, E.I., redaktor; GUREVICH, redaktor; ZHIGACH, K.F., redaktor; DAYEV, G.A., vedushchiy redaktor; GENNAD'YEVA, I.M., tekhnicheskiy redaktor

[The tenth scientific and technical conference, 1955] Desiataia nauchno-tekhnicheskaia konferentsiia, 1955 g. Leningrad, Gos. nauchno-tekhn. izd-vo neftianoi i gorno-toplivnoi lit-ry, Leningradskoe otd-nie, 1956. 167 p. (MIRA 9:7)

1. Moscow. Moskovskiy neftyanoy institut. Nauchnoye studencheskoye obshchestvo
(Petroleum engineering) (Petroleum geology)

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308610010-2"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308610010-2

CHERNOZUBOV, K.P.; CHAPSKIY, O.U., red.; FRIDMAN, Z.L., tekhn. red.; BARANOVA, L.G., tekhn. red.

[Concise manual for rural electricians] Kratkii spravochnik sel'skogo elektrifikatora. Sost. K.P.Chernozubov. Leningrad, Izd-vo sel'khoz. lit-ry zhurnalov i plakatov, 1961. 430 p. (MIRA 15:1)
(Rural electrification--Handbooks, manuals, etc.)

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308610010-2"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308610010-2

CHERNOZUBOV, S.; GEL'FMAN, A.; ARUTINOV, I.

Making blocks from bricks constitutes one part of "large block" construction. Stroi. mat., izdel. i konstr. 1 no.10:10-13 O '55. (MLRA 9:1)

1.Direktor instituta "Rosstromproyekt"(for Chernozubov).
2.Nachal'nik Leningradskogo otdeleniya instituta (for Gel'fman).
3.Glavnyy tekhnolog Leningradskogo otdeleniya (for Arutinov).
(Building blocks)

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CHERNOZOBOV

USSR

1656. New [illegible] using dry press [illegible]

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CHERNOZUBOV, S.A., inzh.; MOROZOV, N.V., kand.tekhn.nauk; SYRITSKIY, P.L., inzh.

Experimental shop for making thin-walled brick panels. Stroi. mat. 5 no.3:22-23 Mr '59. (MIRA 12:5)
(Building blocks)

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"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308610010-2

CHERNOZUBOV, S.A., inzh.; FRADKIN, B.P., inzh.; PELEVIN, V.M., inzh.

Converting a sand-lime brick plant to the production of large panels. Stroi. mat. 10 no.6:24-27 Je '64.
(MIRA 17:10)

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"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308610010-2

CHERNOZUBOV, S.A., inzh.

Manufacture of small concrete blocks in construction yards.
Stroi. mat. 11 no.6:23-24 Je '65. (MIRA 18:7)

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308610010-2"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308610010-2

CHERNTSOV, I.A., kandidat biologicheskikh nauk; TOVSTOLES, M.D., redaktor; SHENDAREVA, L.V., tekhnicheskiy redaktor.

[Increasing the buoyancy of birch lumber] Povyshenie splavosposobnosti berezovogo syr'ia. Moskva, Goslesbumizdat, 1949. 9 p. [Microfilm]

(Birch) (MLRA 7:10)

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308610010-2"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308610010-2

CHERNTSOV, I. A., VAKIN, A. T. and AKINDINOV, M. V.

"Technical Properties of Western Ukrainian Beech Lumber," Les. Prom., 12, No.3, 1952

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"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308610010-2

GORSHIN, Sergey Nikolayevich; CHERNTSOV, I.A., red.; PITERMAN, Ye.L., red.izd-va; PARAKHINA, N.L., tekhn.red.

[Wood preservation in Sweden] Zashchita drevesiny v Shvetsii. Moskva, Goslesbumizdat, 1959. 109 p. (MIRA 13:2)
(Sweden--Wood--Preservation)

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308610010-2"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308610010-2

GORSHIN, S.N.; CHERNTSOV, I.A.

Comparative investigation of the effectiveness of preserving birch wood by the sprinkling method. Nauch. trudy TSNIIMOD no.12:62-79 '62. (MIRA 16:12)

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"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308610010-2

CHERNTSOV, Igor' Aleksandrovich; AKINDINOV, M.V., red.; SARMATSKAYA, G.I., red. izd-va; VDOVINA, V.M., tekhn. red.

[Preservation of wood and lengthening its service life] Sokhranenie drevesiny i prodlenie srokov ee sluzhby. Moskva, Goslesbumizdat, 1960. 87 p. (MIRA 14:9)

(Wood—Preservation)

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308610010-2"

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The specific gravities of aqueous solutions of dimethylamine of various concentrations. M. N. Uyedinov and O. M. Chernizov. *Anilinokrasochnaya Prom.* 1931, No. 11/12, 30-1; *Chem. Zentr.* 1933, I, 580.
M. G. Moore

Simple boiling point correction

COMMON ELEMENTS

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3RD AND 4TH ORDERS

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1X

3D

Vulcanization accelerator. N. S. Drozdov and O. M. Cherntsov.— Russ. 37,331, June 30, 1934. Zn methylene-dithiocarbamate is used.

COMMON ELEMENTS

COMMON VARIABLES INDEX

OPEN

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1ST AND 2ND ORDERS

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CA

10

The action of some secondary amines on epichlorohydrin. N. S. Drozdov and O. M. Cherutsov. *J. Gen. Chem.* (U. S. S. R.) 4, 969-74(1934).—The condensation of epichlorohydrin with Et_2NH, Me_2NH and piperidine at 28-30° in aq. soln. gave the corresponding disubstituted aminochloropropanols, $CH_2ClCH(OH)CH_2NR_2$ (I), together with a small quantity of products containing ionizable Cl. These latter increased in amt. as the reaction mixt. stood. Caustic alkalies effected the process I → $O.CH_2.CHCH_2NR_2$ (II). Treatment of the initial condensation products with 20% K_2CO_3 stabilized the ionizable Cl content and made impossible the subsequent sapn. of II. II heated with NH_3 in MeOH for 30 min. in a boiling H_2O bath gave $NH_2CH_2CH(OH)CH_2NR_2$. The alk. decompn. of the condensation products where R was Me gave polymers. *Diethylaminoepihydrin*, $O.CH_2.CHCH_2NEt_2$, b_{18} 55-60°. *1-Diethylamino-3-amino-2-propanol*, b_{18} 118-23°. *Piperidylepihydrin* $O.CH_2.CHCH_2NC_5H_{10}$, b_{18} 86.5-8°. *1-Piperidyl-3-amino-2-propanol*, b_{18} 128-33°. L. W. B.

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"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308610010-2

Alkaline saponification of glycerol chlorohydrins. N. S. Dvorzov and O. M. Cherntsov. *J. Gen. Chem.* (U. S. S. R.) 4, 1305-9(1934).—To improve the method of production of epichlorohydrin (I), the kinetics of alk. sapon. of glycerol chlorohydrins was studied. $CH_2ClCH(OH)CH_2OH$ (II), b_{20} 124-6°, and $CH_2ClCH(OH)CH_2Cl$ (III), b_{20} 81-3°, were prepd. by the method of Ger. pat. 197,308. I was obtained in 62-8% yield by the method of Frydlender (*C. A.* 26, 2255). The chlorohydrins showed no traces of sapon. on treating with H_2O at 50° for several hrs. Contrary to Klimont (*C. A.* 16, 3001) the chlorohydrins when treated with 100% excess of 0.1 *N* KOH split off 50% Cl at 18-20° in 3 min., and by digesting on a water bath for 20 min. are completely sapond. The last procedure was used for the detn. of I with excellent results by back-titrating the excess NaOH with H_2SO_4 against methyl orange. The sapon. velocities for I and III, tested at 50.5°, are uniformly const., and contrary to Smith (*C. A.* 7, 2710) show no decrease or increase with time. This equality of consts. shows that they relate to the same reaction, *viz.*, I + NaOH → $O.CH_2.CHCH_2OH$ + NaCl; the 1st step of the conversion of III to I does not affect the results of the detn. because of its high velocity. The sapon. velocities at different temps. in aq. and alc. KOH are the same. The sapon. of II, tested at 13.5°, produced sufficiently uniform bimol. consts. While the alk. hydrolysis of I is a simple sapon., the sapon. of II and III is effected by the formation of an ethylene oxide ring, which can be represented thus: II + NaOH → $CH_2ClCH(ONa)CH_2OH$ + H_2O; $CH_2ClCH(ONa)CH_2OH$ → $O.CH_2.CHCH_2OH$ + NaCl. Hence the reaction velocity should correspond to the monomol. equation, but actually it agrees with the bimol. equation. Thus, evidently, the process proceeds by way of a simple sapon. with a simultaneous cleavage of H_2O. An equally tenable conception of the kinetic results of the mechanism of the reaction of alk. sapon. of chlorohydrins is proposed by Nef (*Ann.* 318, 34(1901); 335, 231(1904)). The glycide formed rapidly adds H_2O on heating, giving glycerol, which is recovered in the distn. of the reaction mixt. (cf. Nef, *loc. cit.*; Nivière, *C. A.* 7, 3113; Smith, *C. A.* 14, 2020). A yield of 79% I was obtained by mixing 20 g. III in 150 cc. H_2O at 50° with 17 g. KOH in 150 cc. H_2O at 50°, cooling rapidly, adding an excess of H_2SO_4, extg. several times with Et_2O, evapg. the Et_2O and distg. I at 117°. Similar results were obtained by working at room temp.

Chas. Blanc

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1ST AND 2ND ORDERS

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3RD AND 4TH ORDERS

CA

10

Comparison of methods used in the preparation of phenyl-β-naphthylamine. O. M. Chernizov and N. S. Drozdov. *J. Applied Chem.* (U. S. S. R.) 7, 785-9 (1934).—In the prepn. of phenyl-β-naphthylamine from β-naphthol and aniline the highest yield (83%) was obtained when using 1 mol. of β-naphthol and 1.5 mols. of aniline at 200° and carrying the reaction out in an autoclave during 12 hrs. The crude product m. 102-4°. When using β-naphthol and $PhNH_2.HCl$ a product m. 103-4° was obtained from equimol. proportions of the original substances heated for 4-5 hrs. at 200°. The same ingredients when used in the presence of dehydrating media ($CaCl_2$ and $ZnCl_2$), yielded identical results. The prepn. of β-$C_{10}H_7NHPh$ was undertaken for the purpose of developing a *rubber antioxidant*. A literature index contg. 20 references is appended. A. A. Hochtlingk

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1ST AND 2ND ORDERS

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Meso derivatives of acridine. IV. 9-Phenoxyacridines. N. S. Drozdov and O. M. Chernzov. *J. Gen. Chem.* (U. S. S. R.) 8, 1578-80(1938); cf. Magulson and Grigorovskii, *C. A.* 28, 1139[illegible]. Heating 9-chloroacridine and its deriv. with about 10 parts of PhOH in a water bath results in the formation of HCl salts of 9,9-diphenoxy-9,10-dihydroacridines as the 1st reaction products. These compds. are unstable and decompose either spontaneously or by the action of alkalies and hot H_2O with the formation of 9-phenoxyacridines. The latter easily cleave the OPh group and on heating with dil. acids or alc. give corresponding acridones. HCl salt of 9,9-diphenoxy-9,10-dihydroacridine, m. 202-4°, gives with H_2O 9-phenoxyacridine, m. 125-6°, and this on boiling with dil. HCl gives acridone. 2-Methoxy-9-phenoxyacridine, m. 151-2°, gives 2-methoxyacridone, m. 281-2°. 2-Nitro-7-methoxy-9-phenoxyacridine, m. 173°, gives 2-nitro-7-methoxyacridone. 2-Chloro-7-methoxy-9-phenoxyacridine, m. 169-70°, gives 2-chloro-7-methoxyacridone.

Chas. Blanc

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9-Cyanoacridine and its substitution products. O. M. Chernisov. Russ. 51,799, Sept. 30, 1937. Acridine or its substitution products are heated in an aq. alc. medium with alkali cyanide in the presence of salts of weak acids, such as CO_2 or H_2SO_3, and the mixt. is oxidized in the air.

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1ST AND 2ND ORDERS

3RD AND 4TH ORDERS

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Ca

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ms-Derivatives of acridine. XVI. 9-Methoxy-9-hydroxy-9,10-dihydroacridines and 9,9-diphenoxy-9,10-dihydroacridines. N. S. Drozdov and O. M. Cherntsov. *J. Gen. Chem.* (U.S.S.R.) 14, 181-5(1944)(English summary); cf. *C.A.* 34, 2847[3].—When 9-chloroacridine (I) is heated with MeONa and H_2O is added, 74-9% 9-methoxyacridine hydrate (II), m. 103°, is formed. When this is dissolved in Me_2CO, $CHCl_3$, or C_6H_6 and the solvent is distd. off, 9-methoxyacridine (III), m. 65°, is left. II reacts with HCN to form 9-cyanoacridine (IV), m. 180.5-1°. Similarly, when I is heated with PhOH to give 9,10-dihydro-9,9-diphenoxyacridine, and KCN is added to the mixt., 31% IV is obtained. Neither III nor 9-phenoxyacridine reacts with HCN. These reactions extend to *2-methyl-9-methoxyacridine hydrate*, m. 97-9°, and 9,10-dihydro-2-methoxy-9,9-diphenoxyacridine, which give 2-methyl-9-cyanoacridine, m. 178.5-9°, while 2-methyl-9-methoxyacridine, m. 88-90° (tartrate softens 120-2°, then solidifies and does not m. above 300°), and 2-methyl-9-phenoxyacridine do not; and to *2,9-dimethoxyacridine hydrate*, m. 64-6°, and 9,10-dihydro-2-methoxy-9,9-diphenoxyacridine, which give *2-methoxy-9-cyanoacridine*, m. 185°, while 2,9-dimethoxyacridine, m. 83-5° (tartrate decomps. 113-14°), and 2-methoxy-9-phenoxyacridine do not. These reactions show that the hydrates have green prisms, m. 269-70°, *6-Me₂N*, dark green platelets, m. 243-4°, *6-AcNH*, dark green needles m. above 300°, *4,5-benzo*, violet needles m. 275-6°, *6,7-benzo*, brown needles m. 290-2°, *4,5(2,3-naphtho)*, dark red needles m.

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CA

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m,-derivatives of acridine. XXII. 9-Cyanoacridines and their preparation from acridines. N. S. Drozdov and O. M. Cherntsov. *Zhur. Obshchei Khim.* (J. Gen. Chem.) 21, 1918-23(1951); cf. *C.A.* 39, 2290[1]; 46, 4009e.—Addn. of 2.5 g. KCN in 7-8 ml. H_2O to 10 g. gently boiling acridine-$NaHSO_3$ adduct in 50 ml. EtOH, boiling 40 min., concn., and grinding with 5% NaOH gave a little insol. *9,9'-biacridan*, m. 214°, while the C_6H_6 ext. yielded a little acridine and 80-5% *9-cyanoacridine* (*C.A.* numbering), m. 180-1°, also formed by adding 0.5 g. KCN in H_2O to 0.9 g. acridine in 30 ml. EtOH and refluxing 2 hrs. (yield 60%). Similarly the $NaHSO_3$ adduct of 2-methylacridine gave 44-6% *2-methyl-9-cyanoacridine*, yellow needles, m. 178.5-9.0° (from EtOH), also formed in 48% yield by direct action of KCN on the base (see above). Similarly was prepd. 55% *2-methoxy-9-cyanoacridine*, yellow needles, m. 185° (from aq. EtOH). G. M. Kosolapoff

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5 (3)

AUTHORS: Cherntsov, O. M., Mur, V. I. SOV/79-29-7-36/83

TITLE: The Reaction of Sulfur Monochloride With 1,2,4-Trichlorobenzene (O reaktsii khloristoy sery s 1,2,4-trikhlorbenzolom)

PERIODICAL: Zhurnal obshchey khimii, 1959, Vol 29, Nr 7, pp 2271-2275 (USSR)

ABSTRACT: The transformation of sulfur monochloride with aromatic halogen derivatives is little investigated. Only two patents describe reactions with 1,2,3- and 1,2,4-trichlorobenzenes and 2,4-dichlorotoluene (Ref 1). These reactions take place in the presence of anhydrous iron chloride and lead to the formation of disulfides, which can be reduced to the coreesponding halogen-substituted thiophenols by zinc-dust. According to this reaction the authors investigated the transformation of S_2Cl_2 with 1,2,4-trichlorobenzene. This was chosen because the product to be expected at a further reduction of trichlorothiophenol as a possible plasticizer of synthetic caoutchouc and as an activator for the regeneration of caoutchouc from rubber could come into consideration. Investigations showed that the above reaction does not take place without catalysts, even with extended heating up to boiling temperature; it takes place only in the

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energetic way in presence of $FeCl_3$ according to patents. The present paper indicates that all kinds of metallic iron exert the same effect. This reaction takes place under formation of HCl already at 35 to 40°, and at 50 to 55° even very energetically within 5 to 6 hours. At 70 to 80° a considerable resinification of the reaction product results. In this case of transformation of S_2Cl_2 (together with Fe) with 1,2,4-trichlorobenzene a mixture of disulfide, trisulfide and monosulfide is formed which is difficult to be separated. A practically similar product, e.g. the hexachloro diphenyl-trisulfide with some monosulfide can be obtained by transformation of S_2Cl_2 and elementary S with 1,2,4-trichlorobenzene in quantities corresponding to the following scheme:

$$2\ C_6H_3Cl_3 + S_2Cl_2 + S \xrightarrow{FeCl_3} (C_6H_2Cl_3)_2S_3 + 2\ HCl.$$

The yield of trisulfide is nearly quantitative. Beside the main reaction also a subreaction takes place with formation of small

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"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308610010-2

The Reaction of Sulfur Monochloride With 1,2,4-Trichlorobenzene SOV/79-29-7-36/83

quantities of 1,2,4,5-tetrachlorobenzene (experimental part). The convenient synthesis method of 2,4,5-trichlorothiophenol by transformation of 2,4,5,2',4',5'-hexachloro diphenyl-trisulfide was worked out with caustic alkali lyes. There are 2 Soviet references.

ASSOCIATION: Nauchno-issledovatel'skiy institut organicheskikh poluproduktov i krasiteley imeni K. Ye. Voroshilova (Scientific Research Institute for Organic Semiproducts and Dyes imeni K. Ye. Voroshilov)

SUBMITTED: May 15, 1958

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"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308610010-2

CHERNTSOV, O.M.; CHALYKH, E.A.

Derivatives of 2-mercaptobenzothiazole and dithiocarbamic acid. Part 1: Reactions of benzothiazyl-2-mercaptides. Zhur.ob.khim. 33 no.6:1958-1964 Je '63. (MIRA 16:7)

1. Nauchno-issledovatel'skiy institut organicheskikh poluproduktov i krasiteley.

(Benzothiazole) (Mercaptides)

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"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308610010-2

CHERNTSOV, O.M.; CHALYKH, E.A.; GUR'YANOVA, Ye.N.

Derivatives of 2-mercaptobenzothiazole and dithiocarbamic acids. Part 2: Transformations of benzothiazolyl esters of dithiocarbamic acids. Zhur. ob. khim. 34 no. 3:952-955 Mr '64. (MIRA 17:6)

1. Nauchno-issledovatel'skiy institut organicheskikh poluproduktov i krasiteley.

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"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308610010-2

CHERNTSOV, O.M.; CHALYKH, E.A.

Derivatives of 2-mercaptobenzothiazole and dithiocarbamic acids. Part 4: Reactions of zinc salts with N-N-disubstituted dithiocarbamic acids with 2-chlorobenzothiazoles. Zhur. org. khim. 1 no.4:765-767 Ap '65. (MIRA 18:11)

1. Nauchno-issledovatel'skiy institut organicheskikh poluproduktov i krasiteley.

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"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308610010-2

CHERNTSOV, P. V.

23150 Ratsionalizatsiya individual'nogo kolodeznogo vodosnabzheniya (konstruktsiya vnutridomovogo kolodtsa). gigiyena I sanitariya, 1949, No. 7, c. 49-50.

SO: LETOPIS' No. 31, 1949

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"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308610010-2

CHERNTSOV, P.V.

USSR/Medicine - Epidemiology FD-1647

Card 1/1 : Pub. 148-27/28

Author : Cherntsov, P. V.

Title : Gross deficiencies in a textbook

Periodical : Zhur. mikro. epid. i immun. 7, 109-112, Jul 1954

Abstract : The book, "Epidemiology and Medical Parasitology for Entomologists", edited by Sh. D. Moshkovskiy and M. G. Rashina (1951) is reviewed and criticized because of ideological shortcomings.

Institution : --

Submitted : --

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"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308610010-2

CHERNTSOV, S.M.

25(5) 06010
SOV/64-59-6-2/28

AUTHORS: Karpov, V. L., Malinskiy, Yu. M., Nitrofanova, L. V., Sinitsyn, S. T., Finkel', E. E., Fridman, A. S., Cherntsov, S. M.

TITLE: Increase in the Thermostability of the Polyethylene Insulation of Cables by Means of Exposure to Ionizing Radiation

PERIODICAL: Khimicheskaya promyshlennost', 1959, Nr 6, pp 468 - 474 (USSR)

ABSTRACT: The thermostability of polyethylene can be increased by the action of ionizing radiations (Ref 1). Polyethylene exposed to a sufficiently large dose of radiation at 110-115° possesses properties similar to those of rubber (Ref 3). An investigation was made of the irradiation conditions and testing methods of cables (1 mm thick copper wire) insulated with polyethylene (type OKhK-501). The insulating material was exposed to γ-rays of Co^{60} (gamma plant "K-20000" (Ref 8)) with a capacity of 0.6-0.9 Mrad/h or to fast electrons from a linear accelerator of 1 Mev. The tensile strength of the exposed samples was tested by means of a dynamometer designed by V. A. Belynskiy, S. D. Prokudin, and B. I. Zverev at the Fiziko-khimicheskiy institut im. L. Ya. Karpova (Physico-chemical Institute imeni L. Ya. Karpov). The thermostability of the irradiated samples was determined by means of an apparatus (Ref 10). At the same time, the dependence of the deformation on time was investigated at

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a definite load and a constant rate of temperature increase (50°C/h). The thermodynamic curves obtained (Figs 2-10), the tensile-strength coefficients (Table 1), and the data of electric resistance (Table) as well as data concerning the thermal aging of the irradiated samples permit the following statements: an irradiation of either of the two above-mentioned kinds permits an increase in the temperatures to which polyethylene insulations may be exposed. The optimum mechanical properties of the insulation were reached in the case of γ-irradiation in a vacuum with doses up to 100-150 Mrad and in the case of electrons in air during 2-4 minutes at a tension of 1 mgv or during 8 minutes at 0.6 mgv and a current density of approximately 15 $\mu a/cm^2$. The cables irradiated with the optimum dose operate without failure for some hours at temperatures up to 230-250°, some ten hours at 130°, and several hundred hours at 110°. The use of corresponding stabilizers may essentially lengthen the life of irradiated polyethylene insulation and increase the maximum working temperature. There are 10 figures, 3 tables, and 11 references, 7 of which are Soviet.

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L 2265-66 EWT(m)/EPF(c)/EPF(n)-2/EWP(j)/EWA(h)/EWA(1) GG/RM

ACCESSION NR: AP5022220 UR/0191/65/000/009/0008/0012
678.742.2.01:539.12.04:678.048

AUTHOR: Gladkova, G. I.; Yegorova, Z. S.; Karpov, V. L.; Leshchenko, S. S.; Mitrofanova, L. V.; Slovokhotova, N. A.; Finkel', E. E.; Cherntsov, S. M.

TITLE: Thermal stabilization of irradiated polyethylene by industrial antioxidants

SOURCE: Plasticheskiye massy, no. 9, 1965, 8-12

TOPIC TAGS: antioxidant additive, polyethylene, antirad additive, gamma radiation, radiation effect

ABSTRACT: The following industrial antioxidants were introduced into polyethylene in amounts of 2, 5, and 10%: 2,2'-methylenebis(4-methyl-6-tert-butylphenol); 4,4'-methylenebis(2-methyl-6-tert-butylphenol); 2,2'-methylenebis(4-ethyl-6-tert-butylphenol); N-isopropyl-N'-phenyl-p-phenylenediamine (nonox ZA); 4,4'-thiobis (6-tert-butyl-m-cresol); 4,4'-thiobis(2-tert-butyl-m-cresol); phosphite of P-24 (P-24 being a phenol-styrene condensation product); and di-β-naphthyl-p-phenylenediamine. The polyethylene samples were then irradiated, kept in air thermostated at 150 and 200C for various periods of time, and tested for relative elongation and tensile strength. The compounds were found to have a stabilizing effect if

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their content is 10 to 20 times the amount introduced into polyolefins to protect the latter from oxidation during processing. The most effective antiradiation additives kept the elongation of polyethylene irradiated with Co^{60} gamma rays at 300-350%. Infrared analysis showed that during irradiation, particularly in the course of thermal aging, the stabilizer concentration in polyethylene decreases markedly. It is found that irradiation not only causes the formation of trans-vinylene unsaturation, but also gives rise to systems of conjugated double bonds whose number increases substantially during thermal aging. Carbonyl groups are formed both during irradiation and thermal aging, but in much smaller quantities than in cable polyethylene. "The authors thank G. Ya. Richmond for supplying the antioxidant samples." Orig. art. has: 7 figures. 44,55

ASSOCIATION: none

SUBMITTED: 00 ENCL: 00 SUB CODE: MT, GC

NO REF SOV: 005 OTHER: 005

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CHERNTSOVA, T.A.; VLADOS, Kh. Kh.(deceased); TERENT'YEVA, E.I.; and KAKHATELIDZE, M.G.

"New USSR Liver Preparation Antianemin," Sov Prob Gematol i Pereliv Krovi, No 30, pp 269-74, 1953

Summary W-31279, 13 May 55

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"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308610010-2

CHERNTSOVA, T.A.

Changes of iron content in blood serum in anemia with simultaneous administration of iron and campolon. Klin. med., Moskva 31 no.5:88 May 1953. (CIML 25:1)

1. Of the Hematological Clinic (Head -- Prof. Kh. Kh. Vlados, deceased) and of the Clinical Laboratory (Head -- A. P. Belousov), Central Order of Lenin Institute of Hematology and Blood Transfusion.

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"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308610010-2

CHERNTSOVA, T.A.

VLADOS, Kh.Kh. (Moscow); TERENT'YEVA, E.I. (Moscow); KAKHETELIDZE, M.G. (Moscow); CHERNTSOVA, T.A. (Moscow).

Antianemin, a new liver preparation. Klin. med. 31 no.11:40-44 N '53. (MLRA 6:12)

1. Iz Tsentral'nogo ordena Lenina instituta gematologii i perelivaniya krovi (direktor - chlen-korrespondent Akademii meditsinskikh nauk SSSR professor A.A.Bagdasarov).

(Liver extract) (Anemia)

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"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308610010-2

CHERNTSOVA, T. A.

BAGDASAROV, A.A., professor, otvetstvennyy redaktor; BUKIN, V.N., professor, doktor biologicheskikh nauk, redaktor; DUL'TSIN, M.S., professor, doktor meditsinskikh nauk, redaktor; CHERNTSOVA, T.A., redaktor; SUCHKOV, A.V., redaktor; GABERLAND, M.I., tekhnicheskiy redaktor

[Vitamin B_{12} and its clinical uses] Vitamin B_{12} i ego klinicheskoe primenenie. Moskva, Gos. izd-vo med. lit-ry, 1956. 222 p. (MLRA 10:1)

1. Chlen-korrespondent AMN SSSR (for Bagdasarov)
(VITAMINS--B)

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308610010-2"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308610010-2

CHERNTSOVA, T.A., Cand Med Sci--(diss) "On the treatment of certain forms of macrocytary anemia and Addison-Birmer's disease." Mos, 1958. 14 pp (Second Mos Med Inst im N.I.Pirogov), 250 copies (KL,47-58,136)

- 80 -

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308610010-2"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308610010-2

CHERNTSOVA, T.A.

Supporting treatment with vitamin B_{12} in Addison-Biermer's disease [with summary in English, p.62]. Probl.gemat. i perel.krovi 4 no.1:34-36 Ja-F '59. (MIRA 12:2)

1. Iz TSentral'nogo ordena Lenina instituta gematologii i pereliyaniya krovi (dir. - deystvitel'nyy chlen AMN SSSR prof. A.A. Bagdasarov) Ministerstva zdravookhraneniya SSSR.
(VITAMIN B_{12}, ther. use,
anemia, pernicious, supporting ther. (Rus))

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"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308610010-2

CHERNTSOVA, T.A.; KAKHETELIDZE, M.G.

Hemopoietic factor content in the gastric juice and saliva in macro- and megaloblastic types of hemopoiesis. Probl.gemat. i perel.krovi 4 no.4:29-31 Ap '59. (MIRA 12:6)

1. Iz TSentral'nogo ordena Lenina instituta gematologii i perelivaniya krovi (dir. - deystvitel'nyy chlen AMN SSSR prof.A.A.Bagdasarov) Ministerstva zdravookhraneniya SSSR.

(ANEMIA, HYPERCHROMIC, physiol.
hemopoietic eff. of gastric juice & saliva from anemic patients (Rus))
(ANEMIA, PERNICIOUS, physiol.
same)
(GASTRIC JUICE,
hemopoietic eff. of gastric juice from patients with pernicious & hyperchromic anemias (Rus))
(SALIVA,
hemopoietic eff. of saliva from patients with parnicious & hyperchromic anemias (Rus))

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"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308610010-2

EYDINOVA, M.B.; CHERNTSOVA, T.A.; AKSENOVA, O.V.; LAVROVA, O.P.

Treating funicular myelosis with vitamin B_{12}. Vit. res. i ikh isp. no.5:229-234 '61. (MIRA 15:1)

1. Gematologicheskaya klinika TSentral'nogo ordena Lenina instituta gematologiia i perelivaniya krovi, Moskva.
(CYANOCOBALAMINE) (LEUKEMIA)

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"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308610010-2

SHVEDSKIY, B. P.; MESSINEVA, N. A.; CHERNTSOVA, T. A.; SOBOLEVA, Yu. G.; SHEL'GAS, L. Ye.

Functional study of the adrenal cortex in leucoses under treatment with hormones and chemotherapeutic preparations. Probl. gemat. i perel. krovi no.10:34-42 '61. (MIRA 14:12)

1. Iz gematologicheskoy kliniki (zav. - prof. M. S. Dul'tsin) i klinicheskoy laboratorii (zav. N. A. Messineva) TSentral'nogo ordena Lenina instituta gematologii i perelivaniya krovi (dir. - deystvitel'nyy chlen AMN SSSR prof. A. A. Bagdasarov [deceased]) Ministerstva zdravookhraneniya SSSR.

(LEUCOSIS) (ADRENAL CORTEX) (HORMONE THERAPY) (CHEMOTHERAPY)

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"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308610010-2

CHERNTSOVA, T.A.; IVANOVA, V.D.; AKSENOVA, O.V.

Clinical characteristics and properties of the course of chronic leukemia during the early stages of its development. Report No.1. Problemy gemat. i perel. krovi 8 no.8:9-13 Ag '63. (MIRA 17:8)

1. Iz gematologicheskoy kliniki (zav. - prof. M.S. Dul'tsin), radiobiologicheskoy laboratorii (zav. - prof. M.O. Raushenbakh) i laboratorii klinicheskoy biokhimii (zav. N.A. Messineva) TSentral'nogo ordena Lenina instituta gematologii i perelivaniye krovi (dir. - dotsent A.Ye. Kiselev) Ministerstva zdravookhraneniya SSSR.

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"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308610010-2

KAKHETELIDZE, M.G.; CHERNTSOVA, T.A.; MOSKALEVA, G.P.; NIKOLAYEVA, N.V.

Hemopoietins in some diseases of the blood system. Probl. gemat. i perel. krovi 10 no.2:13-19 F '64. (MIRA 19:1)

1. Patofiziologicheskaya laboratoriya (zav. - deystvitel'nyy chlen AMN SSSR prof. N.A. Fedorov) i gematologicheskaya klinika (zav. - prof. M.S. Dul'tsin) TSentral'nogo ordena Lenina instituta gematologii i perelivaniya krovi (dir. - dotsent A.Ye. Kiselev) Ministerstva zdravookhraneniya SSSR, Moskva.

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"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308610010-2

CHERNTSOVA, T.M.

Rheumatic vasculitis of the retina. Vest.oft. no.1:64-67 '62. (MIRA 15:11)

1. Glaznoye otdeleniye (zav. - N.A. Yepifanova) oblastnoy klinicheskoy bol'nitsy (Kirov).
(RETINA—DISEASES) (RHEUMATIC FEVER)

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"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308610010-2

CHERNUCHENKO, A. M.

"Oscillograph to Observe and Photographically Record Electric Signal Shapes up to 15 Thousand Megacycles," a paper presented at the Internatiohal Conference on Microwave Tubes, Paris, 29 May to 2 Jun 1956

B-99309, 30 Aug 56

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