"APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135010019-0

PROCESSES AND PROPERTIES INDEX

CA

Hydrogenation of oxygen-containing compounds. III. Preparation of 2,3-dimethylbutane from pinacolone. B. L. Moldavskii and T. V. Nimvkina. *J. Gen. Chem.* (U.S.S.R.) 10, 653-4(1940); cf. *C. A.* 29, 2151[9].—With the view to prepare 2,2-dimethylbutane (I), pinacolone (53 g.) was dissolved in 50 ml. xylene, the soln. was placed in an autoclave and powdered MoS_2 was added in an amt. of 10% of the wt. of pinacolone. The hydrogenation was carried out under an initial pressure of 80 atm. H at 340-50° for 4 hrs. The yield of hydrocarbons was 87% of the theoretical amt. Fractional distn. gave 75% of *2,3-dimethylbutane* (II), b. 58°, d_4^{20} 0.6628, n_D^{20} 1.3759, instead of the expected I, thus showing that retropinacolone rearrangement had taken place. The above method is recommended for the prepn. of II.

Gertrude Berend

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135010019-0"

"APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135010019-0

1ST AND 2ND ORDERS

PROCESSES AND PROPERTIES INDEX

3RD AND 4TH ORDERS

10

ca

Isomerization of hydrocarbons. V. The isomerization of pentanes and their equilibrium relations. B. L. Moldavskii and T. V. Nizovkina. *J. Gen. Chem.* (U. S. S. R.) 10, 1183-8(1940); cf. *C. A.* 34, 3669⁸.—The reaction was studied with an $AlBr_3$ catalyst at 25° and $AlCl_3$ at 50-90°. No neopentane was formed. Equil. between pentane and isopentane can be calcd. by the equation $K_p = 511/T - 0.820$. During the reaction, gaseous products (30-50% of the wt. of the original pentane) were formed. These were almost entirely an equil. mixt. of isomeric butanes. Also, 25-40% of higher-boiling compds. were formed. About half this fraction was isohexane. H. M. Leicester

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135010019-0"

"APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135010019-0

1ST AND 2ND ORDERS

3RD AND 4TH ORDERS

PROCESSES AND PROPERTIES INDEX

F

4638. ISOMERIZATION OF HYDROCARBONS. VI. BY PRODUCTS FORMED IN THE ISOMERIZATION OF BUTANES AND PENTANES UNDER THE INFLUENCE OF ALUMINIUM HALIDES AND THE MECHANISM OF THEIR FORMATION. Moldavskii, B., Mebylova, E and Nizovkina, T. (J. Gen. Chem. (U.S.S.R.) 1944, 14, 343-9; Chem. Abstr. 1945, 39, 3783).
$CHMe_3$ was passed in vapour phase over $AlCl_3$ at 140°; pentane was similarly treated at 60° and 40° and Me_2CHEt was isomerized at 25°, using $AlBr_3$. The reaction products contain hydrocarbons boiling both below and above the starting materials. The formation of such products is explained by methylation and demethylation induced by Al halides. Butanes were shown to yield propane and pentane isomers, while pentanes gave isomeric butanes and hexanes, the latter contg. a large proportion of Me_3CEt. Small amts. of high boiling paraffin hydrocarbons were also obtained.

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135010019-0"

"APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135010019-0

CA

7

Isomerization of hydrocarbons. VII. Analysis of mixtures of isomeric pentenes. U. Mokiavskii and V. Zharkova. *J. Gen. Chem.* (U.S.S.R.) 14, 358-61(1944) (English summary); cf. *C.A.* 39, 3781[1].—For detg. isomeric pentenes a method is proposed based essentially on the procedure of McMillan (*C.A.* 32, 2722[1]). It consists of distg. 3-methyl-1-butene, detn. of total unsatn. in the residue and the amt. of unsatd. hydrocarbons with a double bond at the tertiary C atom, adding HCl, and treating with Br. The method is suitable for detn. of other hydrocarbons having double bonds at the tertiary C atom and can be used for pure compds. as well as in mixts. with paraffins, naphthenes, and aromatic hydrocarbons.
G. M. Kosolapoff

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135010019-0"

"APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135010019-0

1ST AND 2ND ORDERS

3RD AND 4TH ORDERS

PROCESSES AND PROPERTIES INDEX

CA

18

Catalyst. S. K. Makarov, B. L. Moldavskii, and E. I. Raisinovich. U.S.S.R. 65,828, Feb. 28, 1946. A mechanically strong catalyst, e.g., for the purification of oil-cracking products or the like, is made by first molding the clay and calcining the molded shapes at approx. 600°. The calcined clay is then activated by the usual means.

M. Hosch

COMMON ELEMENTS

OTHER MATERIALS INDEX

COMMON VARIABLES INDEX

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135010019-0"

"APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135010019-0

1ST AND 2ND ORDERS

PROCESSES AND PROPERTIES INDEX

3RD AND 4TH ORDERS

Ca

10

Methylation of hydrocarbons of the olefin series. [illegible] Moldavskii, T. V. Nizovkina, and V. R. Zharkova (Leningrad High Pres. Inst.). *J. Gen. Chem.* (U.S.S.R.) 16, 427-34(1946).—In a study of El'tekov's methylation reaction (*J. Russ. Phys. Chem. Soc.* 10, 86(1878)) of olefins by MeI in the presence of PbO, it was found that PbO causes side reactions of oxidative type with reduction of the oxide to Pb. It was also found that MgO may be substituted for PbO and MeCl for MeI. 2-Methyl-2-butene (60 g.), 51 g. MeCl, and 120 g. PbO were heated in an autoclave 8 hrs. at 280-90°; this resulted in the formation of 55 g. Pb and 26 g. $PbCl_2$, while the org. products were composed of 65 g. amylenes, 11.6 g. hexene-heptenes, and 16% diamylenes. Distn. through a Podbielniak column indicated the presence of isomeric amylenes in the 1st fraction, due to isomerization, while in the higher fractions there were indications of the presence of 2,3-dimethyl-2-butene, b. 73°; 2,3,3-trimethyl-1-butene, b. 78°; and 2,3-dimethyl-1-butene, b. 55-8°. Repetition of the expt. at 265° for 10 hrs., using 71 g. 2-methyl-2-butene, 252 g. MeCl, and 80 g. MgO, gave similarly 23% amylenes, 27.5% hexenes, and 31% heptylenes, with 14.3 g. undistd. residue; fractionation of the products gave the same distribution as above. Use of mixed butenes instead of 2-methyl-2-butene (the mixt. used consisted of 1-butene 25%, 2-butene 60%, and isobutylene 6%), gave 54.5% C_4-C_7 olefins, which contained 3-methyl-1-butene and 2-methyl-2-butene, besides the products listed above; quant. sepn. was not performed. G. M. Kosolapoff

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135010019-0"

"APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135010019-0

Hydrogenation of oxygen containing compounds. IV. Preparation of o-xylene. B. L. Moldavskii and E. E. Turetskaya. *J. Gen. Chem.* (U.S.S.R.) 15, 615-6 (1946).—Phthalic anhydride and phthalide were subjected to hydrogenation in an autoclave at 300-30° and 120 atm. H pressure (initial) with 10% of MoS_2 as catalyst. The best results were obtained when phthalide in 2 vols. tetralin was used; in 5 hr. there was obtained 85% o-xylene, which, fractionated through a Podbielniak column, b. 142-4°. Phthalic anhydride gave, at best, a 52% yield when run in tetralin as solvent. Elimination of the solvent led to drastic decrease of the o-xylene yield.

G. M. Kosolapoff

APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135010019-0"

"APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135010019-0

1ST AND 2ND ORDERS

3RD AND 4TH ORDERS

10

Aluminium silicate-catalyzed dealkylation of side chains in aromatic hydrocarbons. B. L. [illegible] and [illegible] S. Bezedel (Leningrad Inst. High Pressures). *J. Gen. Chem.* (U.S.S.R.) 16, 1633-42(1946)(in Russian).—The catalyst, gumbrin, a natural Gruzin (Georgian) bleaching clay, finely ground, was activated by 20% HCl in the cold during a few days, washed, dried at 100°, pressed, and granulated to 2-3 mm. The reactions were carried out uniformly at 410°, 1.5 vols. hydrocarbon per 1 vol. catalyst, for 1 hr., with 14 compds.: (I) BtPh; (II) PrPh; (III) *p*-Me-C_6H_4Pr; (IV) BuPh; (V) iso-BuPh; (VI) sec-BuPh; (VII) *p*-iso-PrC_6H_4Cl; (VIII) iso-PrPh; (IX) *m*-iso-Pr-C_6H_4Me; (X) *p*-iso-PrC_6H_4Me; (XI) *o*-iso-PrC_6H_4-Me; (XII) *tert*-BuPh; (XIII) *m*-*tert*-BuC_6H_4Me; (XIV); *p*-*tert*-BuC_6H_4Me. In this order, the yields of C_6H_6 (PhCl in case VII), detd. by fractionation of the product, were: 0, 0, 0, 0, 3, 3, 6, 20, 0, 0, 0, 67, 0, 0%; the yields of PhMe: 0, 0, 0, 0, 0, 0, 0, 0, 45, 56, 67, 0, 86, ~100%. The content of unsatd. hydrocarbons in the outgoing gas was detd. for IX, X, XI, XII: 94, 98, 93, 92 vol.-%; the content of $Me_2C:CH_2$, for XII, XIII, XIV: 70, 70, 77 vol.-%. The ease of splitting off the alkyl group evidently increases with increasing polarization of the bond between the alkyl and the ring, as in the $AlCl_3$-catalyzed reaction. The mechanism of the silicate catalysis is interpreted in terms of a formation of a complex between the alkylbenzene and the neg. charged O atoms of the catalyst, polarization of the alkyl-ring bond, exchange of alkyl against proton, and desorption of C_6H_6 from the catalyst. The carbonium ion splits off the surface of the catalyst as olefin, returning the proton to the catalyst. N. T.

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135010019-0"

"APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135010019-0

PROCESSES AND PROPERTIES INDEX

CA

10

Isomerization of hydrocarbons. VIII. Isomerization of 1-butene ⟷ 2-butene and their equilibrium relations. V. Zharkova and B. Moklavskii (Leningrad High Pressure Inst.). *J. Gen. Chem.* (U.S.S.R.) 17, 1268-76 (1947) (in Russian); cf. C.A. 39, 3701[1]. The isomerization of butenes over the following catalysts were studied: H_3PO_4 on pumice, silica gel, $Al_2(SO_4)_3$, and activated clay (Gumbrin). Al_2O_3 was prepd. by calcining pptd. hydroxide at 380°. Pumice was impregnated with H_3PO_4, d. 1.737, and dried in a tube furnace 24 hrs. at 180-90°. $Al_2(SO_4)_3$ was made by soln. of $Al(OH)_3$, dried at 100°, in H_2SO_4, followed by oven drying and pelleting. "Gumbrin," a Caucasian decolorizing clay, was boiled with dil. HCl, washed with water, dried at 100°, and made into pellets. Silica gel was the granulated cont. product. The catalyst was contained in a Pyrex tube which was electrically heated; the forward part was filled with broken porcelain; the catalyst vol. was about 60 cc. The products were fractionated in a Podbelniak column permitting satisfactory seps. of artificial mixts. of 1- and 2-butenes. When BuOH was passed over Al_2O_3 at 370° at the rate of 120 cc./hr., the products comprised 74.8% 1-butene and 25.2% 2-butene; increased temp. increased the former at the expense of the latter; at 380° were obtained 79% 1-butene and 21% 2-butene. H_3PO_4 on pumice, flow rate r = 40 cc./hr., at 380°, gave 24.3% 1-butene, 65.7% 2-butene, 10.2% isobutylene, and 3.3% products boiling below butenes; r = 57 cc./hr. at 380° gave 20.9, 66.0, 9.5, and 3.6%, resp.; r = 14 cc./hr. at 200° gave 13.4, 78.2, 7.8, and 0.6%, resp., while reduction of r to 6 cc./hr. gave 16.0, 71.3, 12.5, and 2.2%, resp. The equil. between 1- and 2-butene was studied by passage of the above mixts. of the 2 over the various catalysts and equil. points were approached from both sides. At 380° over H_3PO_4 the equil. lies at 18-20% 1-butene and 80-82% 2-butene. Attempts to fix the equil. conditions on this catalyst at 200° failed, as, in approaching the equil. from the 2-butene side, much isobutylene was formed and its formation was more rapid than the isomerization. On silica gel, equil. at 200° is reached at 10% 1-butene and 90% 2-butene. On an $Al_2(SO_4)_3$ catalyst at 380° the equil. is disturbed by fairly active formation of isobutylene (about 10.5%), and various reduction reactions which involve the catalyst also take place; at 200° the butene mixt. contains 9.5% 1-butene and 89% 2-butene; at 250° this is 12.2 and 83.5%, resp. The clay catalyst led to extensive polymerization at 200° (84% polymer) as well as at 380° (43% polymer). The av. equil. values found were: at 200° 9.8% 1-butene and 91.2% 2-butene; at 380°, 19.4% 1-butene and 80.6% 2-butene. The equil. const. is well represented by log K_p = (610.3/T) − 0.335, between 200° and 380°. The degree of conversion calcd. by this formula agreed with the exptl. values.

G. M. Kosolapoff

METALLURGICAL LITERATURE CLASSIFICATION

APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135010019-0"

"APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135010019-0

PA 30/49T23

USSR/Chemistry - Isomerization, Pentenes Sep 48
Chemistry - Pentenes, Isomerization

"Isomerization of Hydrocarbons: IX, Study of the Isomerization of Amylenes and Their Equilibrium Ratios," V. Zharkova, B. Moldavskiy, Leningrad Inst of High Pressures, 6½ pp

"Zhur Obshch Khimii" Vol XVIII, No 9

Reports data for isomerization of pentenes obtained at 200° and at 380° over silica gel. On basis of tabulated distribution of products, following equations have been derived for above interval. 1-pentene + 2-pentene $\rightleftarrows$ 2-methyl-1-butene + 2-methyl-2-butene: $\log Kp_1 = 432.7/T -$

30/49T23

[redacted]

USSR/Chemistry - Isomerization, Pentenes (Contd) Sep 48

0.302; for 3-methyl-1-butene $\rightleftarrows$ 1-pentene + 2-pentene: $\log Kp_2 = 277.6/T + 0.174$; for 3-methyl-1-butene $\rightleftarrows$ 2-methyl-1-butene + 2-methyl-2-butene: $\log Kp_3 = 708.6/T - 0.125$. Submitted 8 Feb 47.

MOLDAVSKIY, B.

[redacted]

30/49T23

APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135010019-0"

"APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135010019-0

MOLDAVSKII, B. L.

4E3d-1

Antidetonator. B. L. Moldavskii and M. V. Bilinova. U.S.S.R. 104,937, Feb. 25, 1957. Dicyclopentadienyiron is used as an antidetonator in fuels for internal combustion engines. M. Hasan

JMB aaz
NE

APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135010019-0"

"APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135010019-0

MOLDAVSKIY, B.L.; IVANOVA, I.I.

Reduction of nitrocyclohexane with hydroiodic acid as a method for its quantitative determination [with summary in English]. Zhur.anal.khim. 12 no.2:274 Mr-Ap '57. (MLRA 10:7)
(Cyclohexane) (Iodic acid)

APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135010019-0"

"APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135010019-0

SOV/65-58-10-2/15

AUTHORS: Alekseyeva, K. A. and Moldavskiy, B. L.

TITLE: Conversion of Oxygen-Containing Compounds of Cheremkhovo Tar During Liquid-Phase Hydrogenation (Prevrashcheniye kislorodsoderzhashchikh soyedineniy Cheremkhovskoy smoly pri zhidkofaznoy gidrogenizatsii.)

PERIODICAL: Khimiya i Tekhnologiya Topliv i Masel, 1958, Nr 10, pp 7 - 11 (USSR)

ABSTRACT: Results of investigations on the conversion of oxygen-containing compounds are reported as most publications on this subject deal with the selection of catalysts and conditions of reduction of the oxygen-containing compounds, especially of phenols into hydrocarbons (Ref.1). Tar from Cheremkhovo semi-coke was tested. The degree of conversion was evaluated according to the formation of the broad fraction (the fraction of the hydrogenation product boiling up to a temperature of 325°C). This fraction was freed of its light components by vacuum distillation. Physical data are tabulated. The experiments were carried out in an apparatus (Fig.1) which comprised a 2 litre isothermic autoclave with an electromagnetic drive and an agitator which was operated

Card 1/4

APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135010019-0"

"APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135010019-0

SOV/65-58-10-2/15

Conversion of Oxygen-Containing Compounds of Cheremkhovo Tar During Liquid-Phase Hydrogenation

at 2,800 revs/minute. S. A. Babushkin's method (Ref.5) was used with slight modifications for the direct determination of oxygen in the organic substances. The oxygen content in the initial tar and in the hydrogenation products (the broad fraction, the residue above 325°C, the gas and water) defined also the degree of conversion of the oxygen-containing substances. The influence of the length of the reaction, the temperature and pressure on the destructive hydrogenation of Cheremkhovo tar was also investigated. A series of experiments was carried out at a pressure of 290 atms and temperatures of 460 to 420°C (Table 1 and Fig.2). The highest degree of decomposition of the raw material occurs at the beginning of the reaction, after 20 minutes, when the temperature equals 460°C, and after 1 hour at a temperature of 420°C. The rate of conversion of oxygen-containing compounds is much quicker. The effect of the pressure of hydrogen on the conversion of oxygen-containing compounds was tested at a temperature of 460°C when the reaction was carried out for one hour at pressures of 290, 200 and 100 atms. A change in the pressure from 290 to 100 atms hardly affected the total

Card 2/4

APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135010019-0"

"APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135010019-0

SOV/65-58-10-2/15

Conversion of Oxygen-Containing Compounds of Cherembovo Tar During Liquid-Phase Hydrogenation

conversion of the oxygen-containing compounds which varied within the limits of 84 to 85%, but led to the distribution of the oxygen between the broad fraction, water and gas. Hydrogenation of Cherembovo tar at 100 atms pressure is accompanied by coke formation, and the residue boiling above 325°C shows low hydrogen content and considerable increase in the specific weight of the residue. This raw material should not be hydrogenated at 100 atms pressure in the presence of low-activity catalysts such as iron. The temperature coefficients for various degrees of conversions were also calculated (Table 3). Under the given process conditions, the decomposition of high molecular oxygen-containing compounds results in the formation of lower phenols and neutral oxygen-containing compounds having boiling temperatures in the range of those of the broad fraction: Table 4. An increase in the temperature intensifies the decomposition process of the raw material and also the conversion of the oxygen-containing compounds. The amount of phenols and neutral oxygen-containing compounds increases only slightly on raising the temperature because

Card 3/4

APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135010019-0"

"APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135010019-0

SOV/65-58-10-2/15

Conversion of Oxygen-Containing Compounds of Cherekhovo Tar During Liquid-Phase Hydrogenation

under the given condition the rate of formation of compounds only slightly exceeds the rate of their reduction. There are 4 Tables, 2 Figures and 7 Soviet References.

ASSOCIATION: LenNII

Card 4/4

APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135010019-0"

"APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135010019-0

AUTHORS: Moldavskiy, B. L.; Nazarova, Ye. V. SOV/32-24-7-15/65

TITLE: The Determination of the Inhibitor Dicyclohexylaminonitrite in Paper (Opredeleniye ingibitora nitrita ditsiklogeksilamina v bumage)

PERIODICAL: Zavodskaya Laboratoriya, 1958, Vol. 24, Nr 7, pp. 817 - 817 (USSR)

ABSTRACT: Recently this volatile corrosion inhibitor has been widely used. Paper is impregnated with it and then the objects to be protected are wrapped in the paper. The determination of the inhibitor by a titration with permanganate yields only inaccurate results, as the paper contains substances which are oxidized by the permanganate. A method of analysis was worked out. It consists of a volatilization of the free amine and a subsequent titration. The paper scraps are placed in a retort with the inhibitor. The retort contains distilled water and caustic soda. A Kjeldahl- (K'yel'dal)flask with a cooler is mounted on top of it and a part of the mixture is distilled off. The portion of the hydrate of the amine which remained in the cooler is washed out with alcohol. It is combined with the distillate and then titrated in 0,1 n hydrochloric acid solution

Card 1/2

APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135010019-0"

"APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135010019-0

The Determination of the Inhibitor Dicyclohexylamino-nitrite in Paper SOV/32-24-7-15/65

in the presence of bromothymol blue. The presence of ammonium salts in the paper or in the dicyclohexylamine disturbs this method of analysis.

ASSOCIATION: Leningradskiy institut po pererabotke nefte i polucheniyu iskusstvennogo topliva (Leningrad Institute of Crude Oil Processing and for the Production of Synthetic Fuels)

Card 2/2

APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135010019-0"

"APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135010019-0

MOLDAVSKIY, B.L.; BELOSTOTSKAYA, I.L.

Effect of sodium hydroxide and salts of manganese and cobalt on the oxidation of isopropylbenzene to hydroperoxide. Zhur.prikl. khim. 31 no.12:1885-1890 D '58. (MIRA 12:2)

1. Leningradskiy nauchno-issledovatel'skiy institut po pererabotke nefti i polucheniyu iskusstvennogo zhidkogo topliva.
(Cumene) (Oxidation)

APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135010019-0"

"APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135010019-0

ALEKSEYEVA, K.A.; MOLDAVSKIY, B.L.

Transformations of phenols in vapor-phase hydrogenation. Khim. i tekh.topl. i masel 4 no.1:43-48 Ja '59. (MIRA 12:1)

1. Leningradskiy neftyanoy issledovatel'skiy institut.
(Phenols) (Hydrogenation)

APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135010019-0"

"APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135010019-0

SOV/75-14-3-27/29

5 (3)

AUTHORS: Moldavskiy, B. L., Ivanova, I. I.

TITLE: Quantitative Determination of Cyclohexyl Nitrite, Cyclohexanone and Nitrocyclohexanone in Their Mixture (Kolichestvennoye opredeleniye tsiklogeksilnitrita, tsiklogeksanona i nitrotsiklogeksana v ikh smesi)

PERIODICAL: Zhurnal analiticheskoy khimii, 1959, Vol 14, Nr 3, pp 378-380 (USSR)

ABSTRACT: The determination of cyclohexyl nitrite is carried out according to the method suggested by J. Beab and Ch. Szalkow (Ref 1) for the determination of allyl and amyl nitrite. Cyclohexanone is determined according to the hydroxyl amine method (Ref 2) and nitrocyclohexane by reduction with hydrogen iodide. As cyclohexyl nitrite disturbs the determination of the other two compounds it is transformed with methanol and the methyl nitrite boiling at -12° is distilled-off in the CO_2-stream. After removal of the cyclohexyl nitrite the quantitative determination of cyclohexan and nitrocyclohexanone is possible. There are 1 figure, 3 tables, and 5 references, 2 of which are Soviet.

Card 1/2

APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135010019-0"

"APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135010019-0

Quantitative Determination of Cyclohexyl Nitrite, Cyclohexanone and Nitrocyclohexanone in Their Mixture SOV/75-14-3-27/29

ASSOCIATION: Moskovskiy tekhnologicheskiy institut myasnoy i molochnoy promyshlennosti (Moscow Technological Institute of Meat and Dairy Industry)

SUBMITTED: May 22, 1958

Card 2/2

APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135010019-0"

"APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135010019-0

S/195/60/001/002/005/010
B004/B067

AUTHORS: Moldavskiy, B. L., Kernos, Yu. D.

TITLE: Catalytic Oxidation of Butylenes to Maleic Anhydride in the Vapor Phase

PERIODICAL: Kinetika i kataliz, 1960, Vol. 1, No. 2, pp. 267 - 273

TEXT: The present paper was read at the Conference on Organic Catalysis, November 19, 1959. After giving a review of Western publications concerning the catalytic oxidation of butylenes to maleic anhydride, the authors describe their own experiments. The industrial butylene fraction which is obtained by dehydrogenation of n-butane and consists of 25% butene-1, 54% butene-2, 3% isobutylene, 8% divinyl, and 10% C_2 and C_3 hydrocarbons, was used as initial product. Some experiments were made with an enriched mixture of butene-1 and butene-2 which was obtained by dehydrating the corresponding primary and secondary n-butanols. Besides, experiments with 90% divinyl were made. The reaction mixture consisted of 1.5% butylene and air. The following catalysts were used: 1) Mo - Co catalyst (1 : 1), produced by mixing ammonium paramolybdate with cobalt

Card 1/4

APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135010019-0"

"APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135010019-0

nitrate and by annealing the precipitated cobalt molybdate at 450°C; 2) Mo - Co - B catalyst (1 : 1 : 1.6), produced in the same way as 1) with an addition of H_3BO_3; 3) Mo - Co - P catalyst (1 : 1 : 0.5), produced in the same way as 1) with an addition of H_3PO_4 and kieselguhr as carrier; 4) V - P catalyst (1 : 1) from ammonium metavanadate, phosphoric acid, and kieselguhr; 5) Mo - V catalyst (1 : 10 and 1 : 0.3), produced by impregnating kieselguhr with the ammonium salts of the corresponding acids; 6) Mo - V - Ti catalyst (1 : 0.6 : 1.2), produced in the same way as 5) with an addition of metatitanic acid and with kieselguhr or pumice as carrier; 7) Co - Cr catalyst (1 : 1), produced by reaction of the corresponding salts; 8) Co - W catalyst (1 : 1), produced in the same way as 7); 9) Co - P catalyst (1 : 1), produced in the same way as 7). Results are given in Table 2. The analytical data were converted to maleic acid. The following was found: Besides maleic aldehyde, considerable amounts of CO and CO_2, carbonyl compounds and volatile aliphatic acids were formed on all catalysts. The optimum content of maleic anhydride in the reaction product obtained with the best catalysts was 35 - 50 mole%. Higher yields (up to 73.3%) were obtained

APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135010019-0"

"APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135010019-0

Catalytic Oxidation of Butylenes to Maleic Anhydride in the Vapor Phase

S/195/60/001/002/005/010
B004/B067

when using divinyl. The isomerization of butene-1 to butene-2 was studied on the Mo-V-Ti catalyst. The cis-butene-2/trans-butene-2 ratio in the reaction product was higher than that corresponding to equilibrium. This proves that isomerization takes place via the cis-form and equilibrium was not attained during the experiment. A. Sh. Khabibulina, G. M. Borovaya, and I. L. Belostotskaya took part in the experiments. There are 1 figure, 5 tables, and 14 non-Soviet references.

ASSOCIATION: Vsesoyuznyy nauchno-issledovatel'skiy institut neftekhimicheskikh protsessov (All-Union Scientific Research Institute of Petrochemical Processes)

SUBMITTED: January 23, 1960

Legend to Table 2: 1) catalyst; 2) volume velocity v, h^{-1}; 3) temperature, °C; 4) total conversion x of C_4H_8,%; 5) yield of maleic acid related to the reacting quantity of C_4H_8, mole%; 6) yield of maleic acid related to the amount of C_4H_8, passing through the apparatus, mole%; 7) yield of maleic acid in g/l catalyst per hour; 8) none; 9) traces.

Card 3/4

APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135010019-0"

"APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135010019-0

S/195/60/001/002/005/010
B004/B067

1)	2)	3)	4)	5)	6)	7)
Mo — Co, № 1	2000	400	56	34,0	19,8	28,6
	4000	450	59	33,4	20,0	57,7
Mo — Co — B, № 2	4000	450	84	15,0	12,6	36,5
Mo — Co — P, № 3	2000	400	—	—	16,4	23,7
	2000	450	76	37,2	28,3	41,0
	4000	450	45	35,0	16,6	48,0
	8000	500	47	32,2	15,1	87,0
V — P, № 4	2000	350	63	19,3	12,3	17,6
	2000	450	93	18,6	17,1	24,8
	4000	350	48	15,6	7,5	21,5
	4000	450	86	22,7	19,8	56,8
	8000	450	80	17,0	13,5	78,0
Mo — V, № 5	4000	450	52	8,8	2,5	6,4
Mo — V, № 6	4000	350	27	20,0	5,4	15,8
	4000	450	37	23,9	8,8	25,6
Mo — V — Ti, № 7	4000	400	18	47,7	8,7	25,2
	4000	450	23	52,0	11,8	34,4
	4000	500	31	45,8	13,9	40,3
Mo — V — Ti, № 8	4000	350	88	12,0	10,9	31,5
		450	93	19,6	18,3	53,0
Co — Cr, № 9	4000	450	100	—	—	Нет 8)
Co — W, № 10	4000	450	100	—	—	Нет
Co — P, № 11	4000	450	8	—	—	Следы 9)

Table 2.

Card 4/4

APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135010019-0"

"APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135010019-0

80939
S/064/60/000/02/05/025
B022/B005

5.3400

AUTHOR: Moldavskiy, B. L.

TITLE: Production of Dicarboxylic Acids From Hydroxy Acids

PERIODICAL: Khimicheskaya promyshlennost', 1960, No. 2, pp. 112 - 114

TEXT: The author studied the possibility of producing various dicarboxylic acids of the aliphatic series from a cheap and abundant material, the oxidation products of paraffin hydrocarbons, by means of air. A mixture of dicarboxylic acids containing succinic acid and higher-molecular acids is formed by oxidation. The mean molecular weight of dicarboxylic acids rises with increasing molecular weight of the initial fatty acid. A product obtained by oxidation with air at 120° of liquid paraffins separated from diesel oil after deparaffinization with carbamide was used in the investigations. This oxidation product contained 62% of hydroxy acids, its acid number was 250, its saponification number 488. The experimental method applied is described. The upper unreacted layer can be re-oxidized with air, then follows the oxidation by means of nitric acid to give dicarboxylic acids (Table). The composition of the dicarboxylic acid mixture is

Card 1/2

APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135010019-0"

"APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135010019-0

80939

Production of Dicarboxylic Acids From Hydroxy Acids

S/064/60/000/02/05/025
B022/B005

indicated. The yield in dicarboxylic acids after distillation is about 75% of the crude dicarboxylic acids; their acid number is 815. According to the results of the chromatographic analysis, the composition of dicarboxylic acids is as follows: 35% of succinic acid, 20% of glutaric acid, 16% of adipic acid, 12% of pimelic acid, and 17% of higher-molecular (C_8 and C_9) acids. M. V. Blinova, V. G. Babel', Ye. Ya. Buslovich, R. I. Rudakova, T. G. Melent'yeva, M. Sh. Usmanova, E. I. Rubinshteyn, and N. K. Rozenblit cooperated in the investigation. There is 1 table.

ASSOCIATION: VNIIneftekhim (Vsesoyuznyy nauchno-issledovatel'skiy institut neftyanoy khimii = All-Union Scientific Research Institute of Petroleum Chemistry)

Card 2/2

APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135010019-0"

"APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135010019-0

5.3400

77652
SOV/80-33-2-27/52

AUTHORS: Moldavskiy, B. L., Rudakova, R. I.

TITLE: The Influence of the Molecular Weight of Aliphatic Acid on the Composition of Dicarboxylic Acids Obtained on Oxidation. Communication II

PERIODICAL: Zhurnal prikladnoy khimii, 1960, Vol 33, Nr 2, pp 417-420 (USSR)

ABSTRACT: Monocarboxylic acids C_7-C_{10} (enanthic, caprylic, pelargonic, and capric acids) from the Novocherkassk Synthetic Products Plant were oxidized with nitric acid. The upper oily layer, after hot water extraction of the sparingly soluble dicarboxylic acids, gave the starting monocarboxylic acids (yield 44-58%) which contained some products of the reaction, as evidenced by the changed acid numbers and the higher ester numbers. The lower, acid layer, to which the water extract was added, gave on evaporation crude dicarboxylic acids which were separated chromatographically. It was

Card 1/3

APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135010019-0"

"APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135010019-0

The Influence of the Molecular Weight of Aliphatic Acid on the Composition of Dicarboxylic Acids Obtained on Oxidation. Communication II

77652
SOV/80-33-2-27/52

found that the terminal methyl group was oxidized with great difficulty, since practically no dicarboxylic acids were obtained with the same carbon atom number as the starting acid. The mean average molecular weight of the dicarboxylic acids increased with the molecular weight of the starting acid. The dicarboxylic acids on further oxidation gave dicarboxylic acids with lower molecular weight. For example, adipic acid on boiling for 10 hr with nitric acid was oxidized partially (in 7%). The oxidized part yielded 25% glutaric acid and 75% succinic acid. Similarly, azelaic acid was oxidized (35%); it gave 23% suberic acid, 8% pimelic acid, 15% adipic acid, 21% glutaric acid, and 33% succinic acid. It was also established that the ease of oxidation of dicarboxylic acids increased with their molecular weight. There are 3 tables; and 2 references, 1 French, 1 Soviet.

ASSOCATION: All-Union Scientific Research Institute of Petrochemical

Card 2/3

APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135010019-0"

"APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135010019-0

77652
SOV/80-33-2-27/52

The Influence of the Molecular Weight of Aliphatic Acid on the Composition of Dicarboxylic Acids Obtained on Oxidation. Communication II

Processes (Vsesoyuznyy nauchno-issledovatel'skiy institut neftekhimicheskikh protsessov)

SUBMITTED: June 19, 1959

Card 3/3

APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135010019-0"

"APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135010019-0

5.3400

77660
SOV/80-33-2-35/52

AUTHORS: Moldavskiy, B. L., Blinova, M. V., Babel', V. G., Buslovich, Ye. Ya, Usmanova, M. Sh.

TITLE: Production of Dicarboxylic Acids by Oxidation of "Oxy Acids" With Nitric Acid. Communication III

PERIODICAL: Zhurnal prikladnoy khimii, 1960, Vol 33, Nr 2, pp 463-467 (USSR)

ABSTRACT: The oxidation of paraffins with nitric acid can yield, depending on the reaction conditions, a series of oxygen-containing compounds such as alcohols, aliphatic acids, esters, as well as products of further oxidation of the aliphatic acids (hydroxy-, aldehyde-, and keto-acids and their derivatives), lactones, lactides, etc. Unlike paraffins, alcohols, aliphatic acids, and their esters which are soluble in petroleum ether, the products of further oxidation of aliphatic acids are insoluble in petroleum ether and

Card 1/4

APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135010019-0"

"APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135010019-0

Production of Dicarboxylic Acids by Oxidation of "Oxy Acids" With Nitric Acid. Communication III

77660
SOV/80-33-2-35/52

can be easily separated. This insoluble fraction is called usually "oxy acids" (oksikisloty) in USSR, and it can be used for the synthesis of dicarboxylic acids. C. Paquot and F. Goursac reported (Bull. Soc. Chim., 1950, Vol 172) the auto-oxidation of saturated aliphatic acids with an even number of carbon atoms (C_6 to C_{18}) effected at 100-120° C, in the presence of nickel phthalocyanine. The above authors established that the oxidation of the chain took place chiefly in the β- position; the reaction yielded a monocarboxylic acid with a lower molecular weight (containing also an even number of C atoms), and oxalic acid. The chain became gradually shorter, until caproic acid was obtained and could not be oxidized anymore under the conditions of the reaction. The oxidation in δ and γ -positions was insignificant, and deeper oxidation of the β-atom only leads to the formation of malonic and

Card 2/4

APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135010019-0"

"APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135010019-0

Production of Dicarboxylic Acids by Oxidation of "Oxy Acids" With Nitric Acid. Communication III

77660
SOV/80-33-2-35/52

oxalic acids. The authors of the present study do not agree with the above. The starting material for their investigation was a mixture of paraffins obtained from the urea deparaffinization of diesel oils. This mixture was oxidized with air at 130° and gave a product consisting of 52% "oxy acids," 28% aliphatic acids, and 20% paraffins and neutral oxygen containing compounds. The above starting material was oxidized easily with 57% nitric acid at 75-80° C and yielded chiefly pimelic, adipic, glutaric, and succinic acids, in 66% yield, based on the reacted "oxy-acids." Lower aliphatic acids, distilled together with nitric acid, consisted of acetic acid (46%), propionic acid (26%), butyric acids (14%), and valeric acids (14%). There are 2 tables; and 5 references, 1 French, 1 German, 2 U.S., 1 Soviet. The 2 U.S. references are: C. Zellner, F. Lister, Ind. Eng. Chem., 48, 10, 1938 (1956); J. Buckmann, U.S. Pat. 2801219 (1957).

Card 3/4

APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135010019-0"

"APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135010019-0

Production of Dicarboxylic Acids by Oxidation of "Oxy Acids" With Nitric Acid. Communication III

77660
SOV/80-33-2-35/52

ASSOCIATION: All-Union Scientific Research Institute for Petrochemical Processes (Vsesoyuznyy nauchno-issledovatel'skiy institut neftekhimicheskikh protsessov)

SUBMITTED: March 3, 1959

Card 4/4

APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135010019-0"

"APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135010019-0

KERNOS, Yu. D.; MOLDAVSKIY, B.L.

Catalytic oxidation of propylene and acrolein. Zhur. prikl. khim. 33 no.11:2593-2597 N '60. (MIRA 14:4)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut neftekhimicheskikh protsessov. (Propene) (Acrolein)

APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135010019-0"

"APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135010019-0

S/204/62/002/004/009/019
E075/E436

AUTHORS: Kernos, Yu.D., Moldavskiy, B.L.

TITLE: Preparation of maleic anhydride from petroleum gases

PERIODICAL: Neftekhimiya, v.2, no.4, 1962, 519-523

TEXT: Maleic anhydride (MA) was prepared on a pilot plant scale by the oxidation of butylenes with air in the presence of vanadium catalyst. The catalyst used has weak activity in the oxidation of benzene into MA and that used in the oxidation of benzene is not active in the oxidation of butylenes. Best conditions for the oxidation are: C_4 concentration 0.9 to 1.2% vol; temperature 430 to 450°C, space velocity 4000 hours^{-1}. Under these conditions 80% of the butylenes are oxidized giving on average 75% yield of MA, the catalyst output being 50 to 80 g MA per litre of catalyst per hour. The by-products and intermediates in the reactor are: formic and acetic acids, formaldehyde, acetaldehyde, methylvinylketone and furan. In the pilot plant the production of MA was 1 kg per 24 hours. The catalyst in the plant maintained its activity for 2500 hours. Dilution of the top layer of the catalyst in the reactor tube

Card 1/2

APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135010019-0"

"APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135010019-0

S/204/62/002/004/009/019
E075/E436

Preparation of maleic ...

with an inert carrier (clay) lowered its temperature to 470°C which permitted increasing the output of MA from 60 to 90 g per litre of catalyst per hour. Technical and economic evaluation of the method shows that butylenes constitute one of the most convenient raw materials for the production of maleic anhydride. There are 5 figures.

ASSOCIATION: Vsesoyuznyy nauchno-issledovatel'skiy institut neftekhimicheskikh protsessov (All-Union Scientific Research Institute of Petrochemical Processes)

Card 2/2

APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135010019-0"

"APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135010019-0

KERNOS, Yu.D.; MOLDAVSKIY, B.L.; KLIONSKAYA, Ye.A.

Oxidation of C_5 hydrocarbons to maleic anhydride. Kin.i kat. 3 no.2:271-275 Mr-Ap '62. (MIRA 15:11)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut neftekhimicheskikh protsessov, Leningrad.
(Hydrocarbons) (Maleic anhydride)

APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135010019-0"

"APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135010019-0

LEVIN, S.Z.; DINER, I.S.; KUCHINSKIY, V.N.; Prinimali uchastiye: ~~MOLDAVSKIY, B.L.~~; KUCHINSKAYA, Z.Ye.; BAULIN, V.A.; ZISEL'SON, Kh.L.; TUKAY, O.P.

Synthesis of dicyclohexylamine nitrite, an inhibitor of the atmospheric corrosion of metals. Khim.prom. no.9:566-570 Ag '62. (MIRA 15:9)

(Cyclohexylamine) (Metals--Corrosion)

APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135010019-0"

"APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135010019-0

L 20710-65 EWT(m)/EPF(c)/EWP(j) Po-4/Pr-4 RM

S/0081/63/000/012/0503/0503

ACCESSION NR: AR3010295

SOURCE: RZh. Khimiya, Abs. 12N43

AUTHOR: Moldavskiy, B. L.; Kernos, Yu. D.

TITLE: The use of C-4 and C-5 hydrocarbons in the synthesis of maleic anhydride

CITED SOURCE: Vestn. tekhn. i ekon. inform. N.-i in-t tekhn.-ekon. issled. Gos kom-ta Sov. Min. SSSR po khimii, no. 9, 1962, 15-16

TOPIC TAGS: maleic anhydride, cracking gasoline, hydrocarbon oxidation, olefin oxidation, petroleum gas, oxidation catalyst

TRANSLATION: Maleic anhydride was synthesized by the oxidation of petroleum gases over Mo/Co and V/P catalysts at 450C and a volume rate of 4000/hr. Tests showed that the oxidation of C_4H_{10} gives low yields of maleic anhydride. During the oxidation of butylenes containing 90% unsaturated hydrocarbons, or of butylenes [illegible] V/P catalyst, the yield of maleic anhydride was 75 wt. % (based on the amount [illegible] of catalyst. During oxidation [illegible] at a rate of 73 g/hr. using [illegible] 15% butylenes, the yield of [illegible]

Card 1/2

APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135010019-0"

"APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135010019-0

L 20710-65
ACCESSION NR: AR3010295

maleic anhydride decreased in proportion to the decrease in the amount of butylenes in the raw material. It was possible to obtain significant amounts of maleic anhydride by oxidation of the amylene fraction of cracking gasoline (B.P. 25-50C). Comparative data are given on the relative consumption of raw material for the synthesis of 1 metric ton of maleic anhydride from benzene and from C_4-C_5 hydrocarbons. A table is also given showing the yields of maleic anhydride during oxidation of hydrocarbons on various catalysts. T. Ogibina

ENCL: 00

SUB CODE: OG; FP

Card 2/2

APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135010019-0"

"APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135010019-0

MOLDAVSKIY, B.L.; BLINOVA, M.V.

Thermal conversion of succinic acid into γ-ketopimelic acid. Neftekhimiia 5 no.1:108-110 Ja-F '65. (MIRA 18:5)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut neftekhimicheskikh protsessov.

APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135010019-0"

"APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135010019-0

L 31920-66 EWT(m)/EWP(j)/T IJP(c) RM

ACC NR: AP6007971 (A) SOURCE CODE: UR/0191/66/000/003/0054/0057

AUTHOR: Fotokhina, Ye. S.; Moldavskiy, B. L.; Molotkov, R. V.; Batalin, O. Ye.; Slobuslovich, Ye. Ya.; Rubinsteyn, E. I.; Ravkina, A. E.; Khanukova, E. S.; Slobina, A. V.; Lykova, T. A.; Bychkova, V. A.

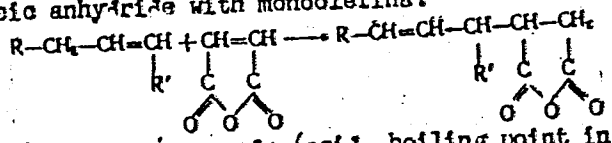
ORG: none

TITLE: Alkenylsuccinic acid anhydrides as hardening agents for epoxy resins

SOURCE: Plasticheskiye massy, no. 3, 1966, 54-57

TOPIC TAGS: epoxy plastic, hardening, solid mechanical property

ABSTRACT: The authors studied the synthesis and use of alkenylsuccinic acid anhydrides as liquid and low-toxic hardening agents for epoxy resins. The anhydrides were synthesized in an electrically heated steel autoclave with a mixing device by the reaction of maleic anhydride with monoolefins:



The following anhydrides were prepared: (acid, boiling point in C, at pressure in mm) crotylsuccinic, 122-147, 8; pentenylsuccinic, 135-148, 8; dodecenylsuccinic, 124-210,

Card 1/2 UDC: 678.643'42'5:678.043

APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135010019-0"

"APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135010019-0

2

L 31920-66

ACC NR: AP6007971

5; and a mixture of isooctenyl- and isononenylsuccinic (ASA), 155-169, 8. Epoxy resins ED-5, ED-6, and EDL were hardened by ASA at 140C for 24 hr, using 93-115, 73-93- and 47-57 g of ASA over 100 g of epoxy resins respectively. Using dimethylaniline or triethanolamine as the accelerators, the hardening process was accomplished within 1.5-2 hr at 100C. With the exception of thermal stability, which was 25-35C lower, the physicomechanical properties of the products obtained resembled very closely those obtained by the use of maleic anhydride as the hardening agent. Orig. art. has: 6 tables, 4 fig., and 1 formula.

SUB CODE: 11,07/ SUBM DATE: none/ ORIG REF: 004/ OTH REF: 003

Card 2/2

APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135010019-0"

"APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135010019-0

L 52127-65 EPF(c)/EWP(j)/EWT(m)/T Pc-4/Pr-4 RM UR/0286/65/000/009/0065/0065

ACCESSION NR: AP5015282

AUTHORS: Moldavskiy, B. L.; Batalin, O. Ye.; Zhelezniyak, E. N.; Pesin, L. M.; Polukhina, Ye. S.; Rabkina, A. E.; Bychkova, V. A.

TITLE: A method for obtaining epoxy compositions. Class 39, No. 170654

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 9, 1965, 65

TOPIC TAGS: epoxy, succinic acid, cumylsuccinic acid

ABSTRACT: This Author Certificate presents a method for obtaining epoxy compositions by applying the anhydride of substituted succinic acid as a hardener. To simplify the technique of hardening, the anhydride of cumylsuccinic acid is used as a hardener.

ASSOCIATION: Gosudarstvennyy nauchno-issledovatel'skiy institut plastmass (State Scientific Research Institute of Plastics)

SUBMITTED: 18May64 ENCL: 00 SUB CODE: OC, MT

NO REF SOV: 000 OTHER: 000

Card 1/1

APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135010019-0"

"APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135010019-0

MOLDAVSKIY, B.S.

Producible oil and gas reserves in foreign countries. Izv.vys. ucheb.zav.; neft' i gaz 1 no.12:130 '58. (MIRA 12:4)
(Gas, Natural) (Petroleum)

APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135010019-0"

"APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135010019-0

MOLDAVSKIY, B.S.

New type of filters for deep-well pumps (from "Petroleum Times," no.1564 August 19, 1957). Izv. vys. ucheb. zav.; neft' i gaz no.2:112 '58. (MIRA 11:8)

(United States—Filters and filtration)

APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135010019-0"

"APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135010019-0

MOLDAVSKIY, B.S.

Geological factors determining changes in the density of Azerbaijan sedimentary rocks. Izv. vys. ucheb. zav.; neft' i gaz no. 3:11-16 '58. (MIRA 11:7)

1. Azerbaydzhanskiy industrial'nyy institut im. M. Azizbekova.
(Azerbaijan--Rocks, Sedimentary)

APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135010019-0"

"APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135010019-0

MOLDAVSKIY, B.S.

World oil production. Izv. vys. uchab. zav.; neft' i gaz no.6:116 '58. (MIRA 11:9)
(Petroleum industry)

APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135010019-0"

"APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135010019-0

MOLDAVSKIY, B.S.

Oil and gas fields in the northern part of Alaska. Izv. vys. uchebn. zav.; neft i gaz no.8:106 '58. (MIRA 11:10)
(Alaska--Oil fields) (Alaska--Gas, Natural)

APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135010019-0"

"APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135010019-0

MOLDAVSKIY, B.S.

Improved classification of natural waters according to their chemical composition. Azerb.neft.khoz. 37 no.10:7-8 O '58. (MIRA 12:2)

(Oil field brines)

APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135010019-0"

"APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135010019-0

14(5)

AUTHOR: Moldavskiy, B. S. SOV/152-59-2-9/32

TITLE: The Hydrochemical Zonality of the Stratum Waters of Karadag (O gidrokhimicheskoy zonal'nosti plastovykh vod Karadaga)

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy. Neft' i gaz, 1959, Nr 2, pp 31 - 34 (USSR)

ABSTRACT: In the paper under review the hydrology of the Karadagskoye deposit was investigated and a specific hydrochemical zonality was determined. In the hydrochemical cross section of Karadag, the inversion characteristic of the deposits of the Apsheronskiy peninsula of genetic types of water with calcium chloride waters in the upper layers of the cross section and with sodium hydrocarbon waters in its lower layers was observed. An investigation of the chemical composition of the waters of different layers of Level V proved that although the limits of variation of various chemical components overlap with each other, the waters of the Levels V, Va and Vb are different from each other. The higher chlorine content is found in the waters of Level V. It decreases somewhat

Card 1/3

APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135010019-0"

"APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135010019-0

with increasing stratigraphic depth. This increasingly sweeter water in greater depths can be explained by the greater extent of the lower lying sand levels. It facilitates the exchange of water. In the table, the average values of various chemical components of Level V independent of the structural position of the drillings are listed. A relationship between the mineralization of the waters (chlorine content) and their position in relation to the petroleum deposits can be clearly seen. The waters that are in immediate contact with petroleum are more mineralized than those situated at a greater distance from the petroleum. The lowest mineralization can be observed beyond the periphery of petrolific layers and in the zone of the gas cap. It was noted that in a complete exploration and exploitation of the Karadagskoye deposit one may hit upon waters of differing concentration and differing chemical composition according to geologic conditions and the gas-petroleum satiation of individual tectonic fields of the Karadag fold. A further definition and analysis of the discovered regularities in the zonal distribution of stratum

APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135010019-0"

"APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135010019-0

waters will make it possible - with consideration of hydrochemical indices - to estimate the relative petroleum and gas satiation of various fields exploited at Karadag. There are 1 figure, 1 table and 13 Soviet references.

ASSOCIATION: Azerbaydzhanskiy industrial'nyy institut im. M. Azizbekova (Azerbaydzhan Industrial Institute imeni M. Azizbekov)

SUBMITTED: February 4, 1958

Card 3/3

APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135010019-0"

"APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135010019-0

MOLDAVSKIY, B.S.

Oil fields in Iraq. Izv.vys.ucheb.zav.; neft' i gaz 2 no.12: 76,82,94 '59. (MIRA 13:5)
(Iraq--Oil fields)

APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135010019-0"

"APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135010019-0

MOLDAVSKIY, B.S.

Efficient classification of oil field waters in the Azerbaijan portion of the Caspian Sea region. Izv. vys. uchebn. zav.; neft' i gaz 3 no.11:9-14 '60. (MIRA 14:1)

1. Azerbaydzhanskiy institut nefti i khimii imeni M.Azizbekova.
(Azerbaijan--Oil field brines--Classification)

APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135010019-0"

"APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135010019-0

MOLDAVSKIY, B.S.

Preliminary data on pH and Eh in formation waters of the Zyrya field. Izv. vys. ucheb. zav.; neft' i gaz 4 no.2:19-23 '61. (MIRA 15:5)

1. Azerbaydzhanskiy institut nefti i khimii imeni M.Azizbekova. (Apsheron Peninsula--Oil field brines)

APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135010019-0"

"APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135010019-0

MOLDAVSKIY, B.S.

Problem of the efficient classification of oil field waters. Izv. vys. ucheb. zav.; neft' i gaz 4 no.5:9-12 '61. (MIRA 15:2)

1. Azerbaydzhanskiy institut nefti i khimii im. M.Azizbekova.
(Oil field brines--Classification)

APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135010019-0"

"APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135010019-0

MOLDAVSKIY, B.S.

Hydrostatically screened gas pools and the possibility of finding them. Izv. vys. ucheb. zav.; neft' i gaz 5 no.1:111-112 '62. (MIRA 16:11)

1. Azerbaydzhanskiy institut nefti i khimii imeni M. Azizbekova.

APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135010019-0"

"APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135010019-0

MOLDAVSKIY, B.S.

Comparative hydrochemical characteristics of the Kyurovdag and Neftechala oil fields. Izv. vys. uch. zav.; neft' i gaz 5 no.9:23-28 '62. (MIRA 17:5)

1. Azerbaydzhanskiy institut nefti i khimii im. M. Azizbekova.

APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135010019-0"

"APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135010019-0

YAKUBOV, A.A.; MUSTAFAYEV, I.S.; MOLDAVSKIY, B.S.

New manual on prospecting for oil and gas. Izv. vys. uch. zav.; neft' i gaz 5 no.9:62,70 '62. (MIRA 17:5)

APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135010019-0"

"APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135010019-0

MOLDAVSKIY, B.S.

Reservoir waters of the Neftyanyye Kamni and Darwin Shoal oil fields and their efficient classification. Izv.vys.ucheb.zav.; neft' i gaz 7 no.4:19-21 '64. (MIRA 17:5)

1. Azerbaydzhanskiy institut nefti i khimii imeni M.Azizbekova.

APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135010019-0"

"APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135010019-0

MOLDAVSKIY, B.S.

Origin of the waters of the sub-Kirmaki series of the south-eastern sector of the Apsheron Archipelago. Izv. vys. ucheb. zav.; neft' i gaz 7 no.8:12 '64.

(MIRA 17:10)

1. Azerbaydzhanskiy institut nefti i khimii imeni Azizbekova.

APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135010019-0"

"APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135010019-0

MOLDAVSKIY, B.S.

Propsects of searches for oil and gas deposits in the Caspian Lowland of Azerbaijan from the point of view of hydrochemical zoning. Izv. vys. ucheb. zav.; neft' i gaz. 7 no.10:11-13 '64. (MIRA 18:2)

1. Azerbaydzhanskiy institut nefti i khimii im. M. Azizbekova.

APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135010019-0"

"APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135010019-0

MOLDAVSKIY, B.S.

Concerning the use of an international system of units in the representation of the chemical composition of oil and gas field waters. Izv. vys. ucheb. zav.; neft' i gaz 7 no.12: 6 '64 (MIRA 18:2)

1. Azerbaydzhanskiy institut nefti i khimii im. M. Azizbekova.

APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135010019-0"

"APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135010019-0

MOLDAVSKIY, B.S.

Brine waters of the Apsheron Archipelago and the conditions governing their formation. Izv. vys. ucheb. zav.; neft' i gaz 8 no.3:9-11 '65. (MIRA 18:5)

1. Azerbaydzhanskiy institut nefti i khimii im. M. Azizbekova.

APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135010019-0"

"APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135010019-0

DYAGILEV, Vladimir Yakovlevich; MOLDAVSKIY, Dm.

[Roads and encounters] Puti i vstrechi. Leningrad, Lenizdat, 1960. 201 p. (MIRA 15:3)
(Bulgaria--Description and travel)
(Bucharest--Description)

APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135010019-0"

"APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135010019-0

BELOZOROV, A.T., zasluzhennyy agronom RSFSR; MOLDAVSKIY, D.D.

Utilize the Siberian land wisely. Zemledelie 26 no.2:26-30 F '64. (MIRA 17:6)

1. Direktor Krasnoyarskogo nauchno-issledovatel'skogo instituta sel'skogo khozyaystva (for Belozorov). 2. Glavnyy agronom Upravleniya Vostochno-Sibirskogo rayona Ministerstva proizvodstva i zagotovok sel'skokhozyaystvennykh produktov RSFSR (for Moldavskiy).

APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135010019-0"

"APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135010019-0

MOLDAVSKIY, D. D.

High yields in grain crops and perennial grasses in Eastern Siberia; experience of the State seed farm "Sibirisk" Moskva, Gos. izd-vo sel'khoz. lit-ry, 1954. 125 p. (Peredovoi opyt v sel'skom khozialstve)

APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135010019-0"

"APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135010019-0

MOLDAVSKIY, D.D.; REDIKH, V.K.

Raising chicks all year long in eastern areas. Ptitsevodstvo 8 no.11:15-17 N '58. (MIRA 11:11)

1. Glavnyy agronom Glavnogo upravleniya ptitsevodstva Ministerstva sel'skogo khozyaystva RSFSR (for Moldavskiy). 2. Glavnyy zootekhnik po plemennomu delu Glavnogo upravleniya ptitsevodstva Ministerstva sel'skogo khozyaystva RSFSR (for Redikh).
(Poultry)

APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135010019-0"

"APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135010019-0

MOLDAVSKIY, D.D.; BREDIKHINA, V.I., kand.veterinarynykh nauk

Use Siberian land sensibly. Zemledelie 24 no.4:20-24 Ap '62. (MIRA 15:4)

1. Glavnyy agronom upravleniya sovkhozov Vostochnoy Sibiri (for Moldavskiy).

(Siberia—Agriculture)

APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135010019-0"

"APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135010019-0

MOLDAVSKIY, D. D., agronom

"Grow peas - it pays" by V. M. Kavun. Reviewed by D. D. Moldavskii. Zemledelie 24 no.9:94-96 S '62. (MIRA 15:10)

(Peas)
(Kavun, V. M.)

APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135010019-0"

"APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135010019-0

TANANAKIN, Ye.I.; TANZYBAYEV, M.G., kand.sel'skokhozyaystvennykh nauk; MOLDAVSKIY, D.D.

Introduce cultivation practices controlling erosion in Khakassia. (MIRA 16:5)
Zemledelie 25 no.2:44-48 F '63.

1. Direktor Khakasskoy sel'skokhozyaystvennoy opytnoy stantsii (for Tananakin). 2. Glavnyy agronom Upravleniya zony Vostochnoy Sibiri Ministerstva proizvodstva i zagotovok RSFSR (for Moldavskiy).
(Khakass Autonomous Province—Soil conservation)

APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135010019-0"

"APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135010019-0

SHIKHEL'MAN, Z., inzhener; MOLDAVSKIY, G., inzhener.

Restoration of interchangeable parts of moving-picture equipment by chromium plating. Kinomekhanik no.12:23-28 D '53. (MLRA 6:12)
(Motion-picture projectors)

APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135010019-0"

"APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135010019-0

MOLDAVSKIY, G. KH.

Moldavskiy, G. Kh.

"Investigation of the Process of Hermetization, and a New Machine for Rolling Container Glass." Moscow Technological Inst of the Food Industry. Moscow, 1955 (Dissertation for the degree of Candidate in Technical Science)

SO: Knizhnaya letopis' No. 27, 2 July 1955

APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135010019-0"

"APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135010019-0

MOLDAVSKIY, G.KH.

MOLDAVSKIY, G.Kh.

Pressure calculations for a seamer machine. Kons. i ov. prom. 12 no.11:29-32 N '57. (MIRA 11:1)

1.Odesskiy tekhnologicheskiy institut pishchevoy i kholodil'noy promyshlennosti.
(Canning and preserving--Equipment and supplies)

APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135010019-0"

"APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135010019-0

MOLDAVSKIY, G.Kh.

Make economical use of tin plate. Kons. i ov. prom. 12 no.12:32-34 D '57. (MIRA 11:1)

1. Odesskiy tekhnologicheskiy institut pishchevoy i kholodil'noy promyshlennosti.
(Tin plate) (Canning industry--Equipment and supply)

APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135010019-0"

"APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135010019-0

DIKIS, M.Ya.; MOLDAVSKIY, G.Kh.

Urgent objectives of the tin can manufacture. Kons.i ov.prom. 16 no.5:19-22 My '61. (MIRA 14:5)

1. Odesskiy tekhnologicheskiy institut pishchevoy i kholodil'noy promyshlennosti.

(Tin cans)

APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135010019-0"

"APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135010019-0

MOLDAVSKIY, G.Kh.; VAROV, I.M.

"Control of seaming machines" by A.E.Rozenbelov. Reviewed by G.Kh.Moldavskii, I.M.Varov. Kons. i ov.prom. 17 no.4:31-34 Ap '62. (MIRA 15:3)

(Canning and preserving--Equipment and supplies)
(Rozenbelov, A.E.)

APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135010019-0"

"APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135010019-0

GERNET, M.M., doktor tekhn.nauk,prof.; DIKIS, M.Ya., doktor tekhn.nauk, prof.; LUK'YANOV, V.V., doktor tekhn.nauk,prof.[deceased]: POPOV, V.I., doktor tekhn.nauk,prof.; SOKOLOV, A.Ya.,doktor tekhn.nauk,prof.; SOKOLOV,V.I.,doktor tekhn.nauk,prof.; SURKOV,V.D.,doktor tekh.nauk,prof.; BARANOVSKIY, N.V., kand.tekhn.nauk,dots.; BROYDO, B.Ye., kand.tekhn. nauk, dots.; BUZYKIN, N.A., kand.tekhn.nauk, dots.; GOROSHENKO, M.K., kand.tekhn.nauk, dots.; GORTINSKIY, V.V., kand.tekhn.nauk, dots.; GREBENYUK, S.M., kand.tekhn.nauk, dots.; GUS'KOV, K.P., kand.tekhn. nauk, dots.; DEMIDOV, A.R., kand.tekhn.nauk, dots.; ZHISLIN, Ya.M., kand.tekhn.nauk, dots.; KARPIN, Ye.B., kand.tekhn.nauk, dots.; KOSITSYN, I.A., kand. tekhn.nauk, dots. [deceased]; GEYSHTOR, V.S., kand.tekhn.nauk, dots.; MARSHALKIN, G.A., kand.tekhn.nauk, dots.; MOLDAVSKIY, G.Ye., kand.tekhn.nauk, dots.; ODESSKIY, D.A., kand. tekhn.nauk, dots.; PELEYEV, A.I., kand.tekhn.nauk, dots.; RUB, D.M., kand.tekhn.nauk, dots.; SKOBLO, D.I., kand.tekhn.nauk, dots.; SHUVALOV, V.N., kand.tekhn.nauk, dots.; KHMEL'NITSKAYA, A.Z., red.; SOKOLOVA, I.A., tekhn. red.

[Principles of the design and construction of machinery and apparatus for the food industries] Osnovy rascheta i konstruirovaniia mashin i apparatov pishchevykh proizvodstv. Moskva, Pishchepromizdat, 1960. 741 p. (MIRA 14:12)

(Food industry—Equipment and supplies)

APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135010019-0"

"APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135010019-0

CHUPAKHIN, Vasiliy Mikhaylovich; DORMENKO, Vladimir Vladimirovich; DRYAMOV, S.I., dots., retsenzent; MOLDAVSKIY, G.Ye., dots., retsenzent; TERENT'YEV, A.V., ~~kand. tekhn. nauk,~~ spets. red.; KUZ'MINA, V.S., red.

[Technological equipment of fish processing plant] Tekhnologicheskoe oborudovanie ryboobrabatyvaiushchikh predpriiatii. Izd.2., perer. i dop. Moskva, Pishchevaia promyshlennost', 1964. 566 p. (MIRA 18:2)

APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135010019-0"

"APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135010019-0

BRODETSKIY, G., kand. tekhn. nauk; MOLDAVSKIY, I., inzh.

Reconstruction of platform vessels into hatch-type vessels. Rech. transp. 24 no.8:29 '65. (MIRA 18:9)

APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135010019-0"

"APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135010019-0

RANDS, E., zamestitel' nachal'nika mekhaniko-montazhnogo tsekha; MOLDAVSKIY, M., tekhnolog mekhaniko-montazhnogo tsekha.

Centrifugal lining of deadwood shaft bushings. Mor.i rech.flot 13 no.7:25-26 N '53. (MLRA 6:11)

(Bearings (Machinery))

APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135010019-0"

"APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135010019-0

MOLDAVSKIY, M.; RANDS, E.

Device for machining slots and key grooves. Mor. i rech.flot 14 no.5:29 My '54. (MLRA 7:7)
(Metal-working machinery)

APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135010019-0"

"APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135010019-0

MOLDAVSKIY, M., inzhener.

Drill draw-in chuck. Mor. i rech.flot 14 no.8:20 Ag '54.(MLRA 7:8)
(Chucks)

APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135010019-0"

"APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135010019-0

MOLDAVSKIY, M.

Universal damper for hydraulic testing of fittings and pipes. Mor. flot 15 no.2:27 F '55. (MIRA 8:5)
(Pipe fittings--Testing)

APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135010019-0"

"APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135010019-0

TRUFANOV, B.; MOLDAVSKIY, M., inzh.; KHATSKIN, K., inzh.

Acid cleaning of hot-water heating pipes. Mor. flot 18 no.12: 17-18 D '58. (MIRA 12:1)

1.Nachal'nik laboraterii Rizhskogo SRZ (for Trufanov). 2.Sudostroitel'nyy Rizhskiy zavod (for Moldavskiy, Khatskin).
(Heating pipes--Cleaning)

APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135010019-0"

"APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135010019-0

MOLDAVSKIY, M.

Let's shorten the period necessary for ship repair. Mor.flot 19 no.1: 28-30 Ja '59. (MIRA 12:3)

1. Starshiy tekhnolog tekhnicheskogo otdela Rizhskogo sudoremontnogo zavoda.

(Ships--Maintenance and repair)

APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135010019-0"

"APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135010019-0

MOLDAVSKIY, M.

Model maintenance record for standard-type ships. Mor.flot. 20 no.1:21-23 Ja '60. (MIRA 13:5)

1. Starshiy tekhnolog Rizhskogo sudoremontnogo zavoda.
(Ships--Maintenance and repair)

APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135010019-0"

"APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135010019-0

MOLDAVSKIY, M.

A handbook is indispensable for ship repair yard workers. Mor. flot 20 no.9:32-33 S '60. (MIRA 13:9)

1. Starshiy tekhnolog Tekhnicheskogo otdela Rizhskogo sudoremontnogo zavoda.

(Ships--Maintenance and repair)

APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135010019-0"

"APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135010019-0

MOLDAVSKIY, M.I.

Grinding internal straight-sided slots. Stan.i instr. 30 no.3:35 Mr '59. (MIRA 12:3)

(Grinding and polishing)

APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135010019-0"

"APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135010019-0

S/123/62/000/010/008/013
A004/A101

AUTHOR: Moldavskiy, M.I.

TITLE: Increasing the resistance to wear of some stainless steel grades by surface workhardening

PERIODICAL: Referativnyy zhurnal, Mashinostroyeniye, no. 10, 1962, 36, abstract 10B206. (V sb. "Povysheniye dolgovechnosti detaley mashin poverkhnostn. naklepom". Perm', 1961, 31 - 44)

TEXT: The author presents the result of experimental work to develop a method of surface workhardening of external and internal surfaces of spherical bushes to increase their resistance to wear. A workhardening of the external surface of bushes made of the stainless steel grades 1X 18H 9 (1Kh18N9) and X 17H 2 (Kh17N2) was effected by burnishing with an elastic roller with the aid of a device mounted on a lathe with a height of centers exceeding 100 mm. Nipple 5 (see fig. 1) is screwed into holder 3 of the device, the nipple bearing 4 being under the stress of spring 2 which can be adjusted by screw 1. Adapter 6 is inserted in nipple 5, two ball bearings 7 and yoke 8 are mounted on the adapter, while yoke 8 holds ball 9 which, during operation, rests on the ball bearings. Fig. 2 shows

Card 1/3

APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135010019-0"

"APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135010019-0

a device for the burnishing of internal surfaces. The device components are made of grade 45 steel, while bushes 5 and 8 are from ШХ 15 (ShKh15) grade steel with subsequent hardening to HRC 62-64. The workhardening process consists in pressing the hardened ball during the forward motion (actuated by the spring tension) into the surface of the rotating workpiece. Under the effect of the axial component and the friction force on the rotating workpiece the ball carries out reciprocating movements during which it copies the surface macrogeometry. It is pointed out that blanks of 1Kh18N9 steel subjected to surface workhardening showed a considerable increase in hardness which can be expressed by 80 $R_{15}N$ instead of 60 prior to burnishing. The Kh17N2 grade steel showed an increase in hardness from HV 208 to HV 257. The ball stress affects the surface finish, optimum results were obtained at P = 25 - 40 kg. Changing the peripheral speed of the component does not show any great effects. The best surface finish was obtained at V = 4 m/min and over 100 m/min. At a stress of 40 kg the workhardening depth amounts to 0.3 mm. The resistance to wear of workhardened specimens, tested on the Amsler machine is twice as low as that of non-workhardened steel. [Abstracter's note: Apparently it should read "twice as high"] The author recommends workhardening by an elastic ball to increase the wear resistance of components made of low-carbon and stainless steels. He presents technological data on the

APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135010019-0"

"APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135010019-0

S/123/62/000/010/008/013
A004/A101

Increasing the resistance.....

application of burnishing by elastic rollers. There are 10 figures.

E. Spivak

[Abstracter's note: Complete translation]

Fig. 1:

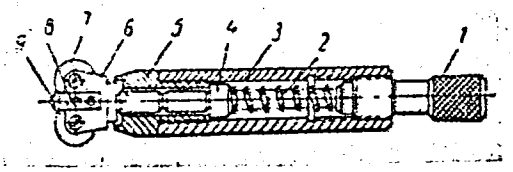
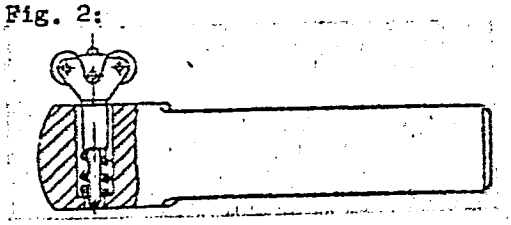


Fig. 2:



Card 3/3

APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135010019-0"

"APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135010019-0

28154

15.6600
11.9500

S/122/61/000/003/004/013
D241/D305

AUTHORS: Moldavskiy, M.I., and Avdeyev, B.M., Engineers

TITLE: Heat resisting lubricant for threaded connections

PERIODICAL: Vestnik mashinostroyeniya, no. 3, 1961, 30-32

TEXT: The authors investigated several lubricants up to 600° and discovered lubricant ЖС(ZhS) which completely eliminates the burns of threaded connections. (Ref.: Author's certificate no. 128093 of July 17, 1959). The lubricant is a mixture of cylinder oil no. 52("vapor") according to GOST 6411-52 and lead carbonate in the ratio of 2:3. The latter ingredient is ground with small additions of oil in order to obtain a homogeneous paste consistency. ZhS was checked in a large number of laboratory experiments at 1100° and in working conditions up to 600°, without traces of burns. The properties of the lubricant are: Specific weight at 20°C 1.64 g/cm³, temperature of inflammation according to Brenken - 300°C. The changes of its characteristics with the temperature are tabulated. The chemical analysis of the residue after heating

Card 1/3

APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135010019-0"

"APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135010019-0

Heat resisting lubricant ...

28154
S/122/61/000/003/004/013
D241/D305

at 600° during 1 hour indicates that it consists of 33.6% of metallic lead and 8.8% of lead oxide. The residue of lubricant after cooling represents a mass of small solidified drops of lead covered with oxide which prevents them from fusing. A large number of experiments were carried out at 600° with the ZhS as well as other lubricants, such as chalk paste made of mixture of MK oil and chalk powder, graphite paste no. 1 (mixture of MK oil and colloidal graphite), graphite paste no. 2 (mixture of cylinder oil no. 52 with colloidal graphite and finally - talcum paste - a mixture of cylinder oil no. 52 and talcum. ZhS proved to be the best and is recommended for practical applications. It is now being used in production. During the 2 years it has been used it has proved itself well. Investigations were made on the effect of thread clearances on the burns which proved to be slight. Experiments were also made on the diffusion of molten lead into the surface of components and its effect on the strength of the latter. A study was made on the effect of the lubricant as well as that of the pure lead on the heat resistance of steel ЭИ(EI)481, which is used for bolts working at high temperature. Lead oxide in the

Card 2/3

APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135010019-0"

"APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135010019-0

28154

Heat resisting lubricant ... S/122/61/000/003/004/013
D241/D305

exhaust causes burns of the valve due to the deposits of the former on its head. The molten oxide transfers oxygen from the exhaust gases onto the surface of metal and causes additional heating of the valve until the thermal reaction between steel and lead oxide, on account of continuous increase of the latter (heated to 800°). The conditions in threaded connections are different as the amount of the lubricant in the clearances is small and cannot be replenished. Experiments with the former were carried out at 600° and 900°. Specimens in steel EI481 were subject to various chemical heat treatments. The results of investigations show that there is a negligible effect of lead and its compounds on the tensile tests of specimens at the above temperatures. There was no trace of lead diffusion during metallographic research on components made in EI481. There are 1 figure, 3 tables and 4 references: 3 Soviet-bloc and 1 non-Soviet-bloc.

Card 3/3

APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135010019-0"

"APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135010019-0

MOLDAVSKIY, M.I.; TIMOFEYEV, Yu.L.; BELOKRYLOV, K.I.

Semiautomatic machine for applying glue and abrasive grains to polishing wheels. Stan. i instr. 36 no.6:28-30 Je '65. (MIRA 18:8)

APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135010019-0"

"APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135010019-0

ACC NR: AP7001197 (A,N) SOURCE CODE: UR/0407/65/000/05-/0066/0071

AUTHOR: Moldavskiy, M. I. (Perm')

ORG: none

TITLE: Temperature factors in electrochemical hole making

SOURCE: Elektronnaya obrabotka materialov, no. 5-6, 1965, 66-71

TOPIC TAGS: electrochemical machining, metal machining, electrochemistry

ABSTRACT: The electrolyte is heated by resistance loss and by high hydraulic pressures maintained in the system. Higher electrolyte temperatures cause quicker cation migration, lower hydrogen polarization and overvoltage, and higher (by 2—6% per 1C) conductivity. Heat balance in the electrochemical-machining process is theoretically considered. The effect of temperature (up to 60C) on the conditions of (8-mm) hole making in EI929 steel by means of 10% NaCl electrolyte

Card 1/2

APPROVED FOR RELEASE: 03/13/2001 CIA-RDP86-00513R001135010019-0"