

TUKH, I.I.

Cold repair of tank furnaces. Stek. i ker. 10 no.10:20-21 0 '53.

(MLRA 6:10)

(Furnaces)

PROCESSES AND PROPERTIES INDEX

6 50

C

Formation of bubbles by increasing the transparency of glass.
I. J. TURN. Steblo i Keram., 7 [9] 21 (1950).—A changeover to more transparent glass can be made during operation without changing the glassmelt and cleaning the tank. The charge was changed several times without draining the glass; Fe₂O₃ in sand was reduced from 0.25 to 0.10%, in dolomite from 0.56 to 0.32%, and from 0.32 to 0.05%, and in limestone from 0.2 to 0.00%, and Aral sulfate was replaced with thenardite. This resulted in a gradual increase of transparency from 78 to 84.7% (based on a 10-mm. layer) without increasing the number of bubbles. When changing the composition of the charge, one component was at once and completely replaced by another. Cullet from the same furnace, of a new composition, was used and was reduced to 10 to 12% because there was not enough. The temperature conditions were not changed until the lowest viscosity of the glass was observed on the machines; then the temperature was changed during 1-2 shifts (10 to 15 hr.) uniformly along the furnace length, without changing the temperature curve. The curve 1300-1300-1300-1250-1125° was gradually changed to the curve 1300-1350-1300-1220-1105°C. B.Z.K.

ASB-31A METALLURGICAL LITERATURE CLASSIFICATION

6-2

1951 AND 1952

CA

19

Addition of K_2O as potash to aluminomagnesia glass. I. I. Tukh and K. I. Tugushera. *Sbelle i Krasn. S.* No. 4, 7-8(1931).—Substitution of K_2O for Na_2O was in equiv. amts. so that the sum of R_2O was const. Addn. of K_2O was 0.5% every 5 days, reaching 1.5%. Final compn. of the glass, as calcd., was SiO_2 72.7, Al_2O_3 0.9, FeO 0.16, CaO 8.5, MgO 3.5, Na_2O 13.5, and K_2O 1.5%. The charge melted faster and easier. Glasszeit after the second burner was free of bubbles and boil. Prior to the use of potash there were 128 instances per month of the sheet being ruptured on the machines; after the addn. of potash, there were 106 instances. Water resistance, transparency in monochromatic light, and luster were improved. Color of the glass improved from greenish yellow to greenish blue. Annealing was better because of the drop in coeff. of thermal expansion. B. Z. K.

Bo. Abs.

ABJ 9 Glass, Ceramics, Ceram

Method for determination of nature of cords in glass. I. I. Tuhh
(*Stek. Revam.*, 1950, 7, No. 8, 9; *Brit. Ceram. Abstr.*, 1951, 107A). —
Classical methods for identifying cords are based on their optical
properties. The most simple technique depends on the use of
immersion liquids; a modification of this method is described.
BRIT. CERAM. RES. ASS. (C).

.....
C

Addition of K_2O through potash to aluminomagnesia glass.
I. I. TERK AND K. I. TIGUNOVA. *Seklo i Keram.*, 8 [4] 7-8 (1951). The substitution of K_2O for Na_2O was made on an equivalent basis (1% Na_2O by 1.52% K_2O by weight) so that the sum of R_2O , calculated as Na_2O , was constant. The addition of K_2O was 0.5% every 5 days, reaching 1.5%. The final composition of glass, as calculated, was SiO_2 72.7, Al_2O_3 0.0, Fe_2O_3 0.16, CaO 8.5, MgO 3.5, Na_2O 13.5, and K_2O 1.5%. The charge melted faster and easier. Samples of glassmelt taken beyond the second burner were free of bubbles and boil. Prior to the use of potash, there were 128 cases of sheet rupture on the machines per month; after the addition of potash, this was reduced to 108 cases. Water resistance, transparency in monochromatic light, and the luster were improved. In addition, the color of glass improved from green-yellow to green-blue. Annealing was also improved because of a decrease in the coefficient of thermal expansion.
B.Z.K.

CA

19

Method of determining nature of stones in glass. 1.1.
Fukh. *Steklo i Keram.* 7, No. 8, 9-10(1980).—Additivity
index: $n_D^{20} = 1.528$ for ordinary alumina-magnesia glass
and for glass satd. with SiO_2 or Al_2O_3 from the stone dissolv-
ing therein, $n < 1.53$ for glass + grog and n is not less than
1.46 for glass + Dinas. In making detns., place the 20 × 30-
mm. specimen in a small glass bath, project on a screen, and
add a mixt. of kerosene and benzene having n close to 1.5.
If glass has grog stone, the view will disappear from the screen
but a Dinas stone will not. To obtain a more distinct view,
color the liquid with carmine. The screen should be 10-15
cm. The detn. lasts 2-3 min. and can be done in a non-
darkened room. B. Z. Kamich

EA

19

Formation of bubbles by increasing transparency of glass.
I. I. Tykh. *Sbilo i Krasn* 7, No. 9, 21(1950).--Change-
overs to more transparent glass can be made without stopping
operations to clean the tank. The temp. should be lowered
uniformly along the length of the tank. At one plant, the
curve 1350-1350-1350-1250-1125° was gradually changed to
1380-1350-1350-1220-1100° and the compn. of the charge
was changed several times without draining the glass; Fe₂O₃
was reduced from 0.25 to 0.10% in sand, from 0.55 to 0.25%
and from 0.32 to 0.05% in dolomite, from 0.2 to 0.05% in
limestone and Aral sulfate was replaced with thesaurite.
Each component was at once and completely replaced with
another component of the charge. The transparency in-
creased gradually from 75 to 84.7% (calcd. on a 10-mm. layer)
without increasing the no. of bubbles. B. Z. Kamich

1957

BCS

*Ceramic Products
Glass*

1296. The occurrence of bubbles during the process of increasing the transparency of glass.—I. I. TUKH. (*Sib. Keram.*, 7, No. 9, 21, 1950). The present short article is a criticism of the editor's note on a former article of the same title (*ibid.*, No. 5, 1950). Agreeing with the original author, Tikh disagrees with the editor that in order to increase transparency a complete change of glass is necessary. After a brief description of experience with the successful changing of the batch comp. while the furnace is in operation, the author concludes that the change-over to a more transparent glass can be accomplished without emptying the tank. As the transparency of the glass increases, the temp. should be lowered uniformly along the whole length of the furnace.

BCS

*Ceramic Products
Glass*

1935. A method for the determination of the nature of cords in glass.—I. I. TURN (*Suk. Keram.*, 7, No. 8, 9, 1950). A cord is the dissolution product of a stone. Cords are more troublesome than stone in the manufacture of sheet glass. The classical methods for the identification of cords are based on their optical properties; the most simple technique depends on the use of immersion liquids, and a modification of this method is described: (2 figs.)

F

R

PURIFICATION OF REFRACTORY CLAYS BY ELECTRO-OSMOSIS. Tukh, I.I., Tugusheva, K.I.
and Karisma, N.E. (Steklo i Keram. (Glass and Ceram.), Aug. 1951, 10-12
v. 8 No. 4

PROCESSES AND PROPERTIES INDEX

(7, 103)

Method of determining the nature of stones in glass. 1. 1.
 TUKH. *Steklo i Keram.*, 7 [8] 9-10 (1950).—For ordinary
 alumina-magnesia glass $n = 1.529$, as calculated by the law of
 additivity; similar calculations for glass saturated with SiO_2 or
 Al_2O_3 from the stone dissolving in the glass give $n < 1.63$ for
 glass + grog and $n \geq 1.46$ for glass + Dinas. Determinations
 are made with an ordinary optical bench of the school type.
 The 20 x 30-mm. specimen is placed in a glass bath and pro-
 jected on a screen; then a liquid prepared from kerosene and
 benzol and having an n close to 1.5 is poured into the bath. The
 view of a grog stone will disappear on the screen, whereas that of a
 Dinas stone will not. To obtain a more distinct view, the liquid
 is colored with carmine. The screen should be 10 to 15 cm.
 The determination lasts 2 to 3 min. and may be made in a lighted
 room. 2 photos. B.Z.K.

A.S.B.-S.L.A. METALLURGICAL LITERATURE CLASSIFICATION

ALPHABETIC INDEX

MATERIALS INDEX

1ST AND 2ND CROSS

140 AND 6TH CROSS

COMMON ELEMENTS

COMMON VARIETIES INDEX

MATERIALS INDEX

ALPHABETIC INDEX

1ST AND 2ND CROSS

140 AND 6TH CROSS

One Material Beneficiations

B.F.R.

5068* Beneficiation of Refractory Clays by Electro-Osmosis. (In Russian.) I. I. Tukh. K. I. Tugusheva, and N. E. Karisma. *Steklo i Keramika*, v. 8, Aug. 1951, p. 10-12. The above is described and discussed. Analytical data are tabulated and charted; apparatus is illustrated.

*Winning Preparation
Shaping*

BCS

477. Purification of refractory clays by electro-osmosis.—I. I. TUKH, K. I. TUGUMIYA and N. E. KARIMA (*Stek. Arsen.*, 8, No. 8, 10, 1951). For floats used in glass tanks the quality of clay is a matter of first importance since on it depends maintenance of the correct slot size as well as the occurrence of so-called "float bubbles" in the glass. Because a lot of grog is used in making floats, the clay must be very plastic. Electro-osmosis produces such a clay. An expl. installation for clay purification by electro-osmosis is described. To determine the yield, 15 kg. of clay were treated by electro-osmosis for 6 hr. The output was 19.3 kg. of purified clay with a moisture content of 42.4%, = 11.2 kg. dry material, i.e. a 75% yield. Further treatment for 2 hr. gave no improvement. In works trials the results were not quite so good because the required

voltage and current density were not reached. The moisture content of the mix on leaving the plant installation was 80%; the output recalculated for dry material was 33 kg/hr. and the yield was 80%. The main demerit of the plant installation was a too high moisture content, leading to drying difficulties. It is assumed, however, that the moisture content could be reduced to 40% by increasing the current density. Although the output of the installation is low, it is sufficient to meet the plant requirements; in 10 hr. enough purified clay is obtained for 1 float, and only 4-5 floats are required per machine per year. Tests on the clay obtained showed that electro-osmosis does not affect chem. comp. or grading of the clay but increases its plasticity. An increased firing shrinkage necessitates higher additions of grog which accelerates the drying of the floats; the porosity of the latter is low—which prevents the occurrence of "float bubbles" and seeds in the glass. (5 figs., 3 tables.)

ACA

Refractories

Benehation of refractory clay by electroosmosis. I. I. TUKU, K. I. YUGOSHEVA, AND N. R. KARISMA. *Skhlo K'ram*, 8[8]10-12 (1951). Electroosmosis for 6 hr. of 45 kg. clay yielded 19.5 kg. clay having 12.4% moisture. An additional osmosis for 2 more hr. did not result in any improvement. On a commercial scale, yield was 80% but product contained 80% moisture. By increasing the current density, it should be possible to reduce the moisture to 40%. The best results were obtained without the addition of an electrolyte to the suspension; electrolytes diluted the suspension but caused electrolysis of the drum material and adulteration of the clay with PbO. Compared with ordinary clay, content of macrodisperse particles was less and change in plasticity was less sharp. Deltense made of clay and gong (15.55) treated by osmosis had a fire shrinkage of 15.0% and water absorption of 4.62-4.76% compared with 11.0% and 9.62-9.33% for ordinary deltense. B / K

{DECHSD}

TUKHACHEVSKIY, Mikhail Nikolayevich [deceased]; OS'KIN, G.I.,
kand. ist. nauk, polkovnik; CHERNUSHKOV, P.P., kand.
ist. nauk, polkovnik zapasa; SOLOV'YEV, N.I., red.

[Selected works] Izbrannye proizvedeniya [v dvukh to-
makh]. Moskva, Voenizdat, 1964. 2 v. (MIRA 17:9)

TUKHANOV, D.P., inzh.; DAGAYEV, V.B., tekhnik

Maintenance and repair of the bell of a hydromechanical reduction
gearing. Elek. i tepl.tiaga 6 no.8:23 Ag '62. (MIRA 17:3)

1. Depo Rtishchevo.

MITYUSHKIN, T.S., kand. ekon. nauk; SUBBOTIN, V.P.; DVOYRIN, E.Yu.;
TUKHANOVA, A.N., red.; CHIZHEVSKAYA, K.M., red.

[Accounting on collective farms] Bukhgalterskii uchet v
kolkhozakh. Moskva, Statistika, 1964. 446 p.
(MIRA 18:1)

ZYKOVA, Ye.G.; TUKHARELI, M.S.

Luminescent analysis of bituminous materials. Gaz. prom. 4 no.12:40-41
D '59. (MIRA 13:3)

(Bituminous materials--Analysis) (Luminescence)

ZYKOVA, Ye.G.; TUKHARELI, M.S.

Luminescence method of analyzing bituminous materials.
Bibl. tekhn. inform. 5 no.3:27 Mr '59. (MIRA 12:7)
(Bituminous materials) (Luminescence)

USSR / General Problems of Pathology. Immunity.

U-1

Abs Jour : Ref Zhur - Biol., No 17, 1958, No 80200

Author : ~~Tukhareli, T.~~

Inst : Not given

Title : Some Immuno-Biological Shifts During Treatment of Schizophrenia by Insulin Shock.

Orig Pub : Sb. tr. N.-i. in-ta parelivaniya krovi GruzSSR, 1957, 5, 339-348.

Abstract : No abstract.

Card 1/1

VOROB'YEV, N.K.; DIAROV, M.; TUKHFATOV, K.

Role of the gergoit horizon in correlating the geological sections of individual salt domes in the Caspian Sea region. Vest. AN Kazakh. SSR 18 no.10:82-85 0 '62.

(MIRA 17:9)

4/2001

CIA-RDP86-00513R001757410010-5

S/659/61/007/009/044
D217/D303

18.8200

AUTHORS:

Makogon, M.B., and Tukhfatulin, A.A.

TITLE:

Influence of the initial state of alloy ЭИ437 (EI437) on its mechanical properties under various temperature rate conditions of deformation

SOURCE:

Akademiya nauk SSSR. Institut metallurgii. Issledovaniya po zharoprochnym splavam, v. 7, 1961, 97 - 105

TEXT: The purpose of this investigation was to establish the nature of the influence of the rate of deformation on the mechanical resistance of alloy EI437 to high temperature compression, and to determine the influence of the original state of the alloy (degree of inhomogeneity) on the mechanical properties at various temperatures and rates of compression. The alloy was compressed in a specially constructed apparatus, in which testing could be carried out at temperatures of up to 1000°C in vacuo. In order to ensure different initial states, corresponding to different degrees of non-uniformity, the specimens were subjected to the following heat treat-

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D217/D303

Influence of the initial state of ...

ments: 1) Quenching in air from 1080°C after 8 hours soaking; 2) Quenching in air from 1080°C after 8 hours soaking, ageing at 700°C for 16 hours and cooling in air; 3) Quenching from 1080°C after 8 hours soaking, ageing at 800°C for 45 hours, followed by cooling in air. The average hardnesses of specimens of the above series were 200, 303 and 280 kg/mm², respectively. After quenching, the alloy acquired a structure characteristic of a solid solution with very thin grain boundaries. Ageing at 700°C for 16 hours led to finely dispersed precipitation of the α' -phase from the solid solution preferentially along the grain boundaries; this could be clearly observed due to the thickening of the latter. Ageing at 800°C for 45 hrs. caused very intense precipitation and coagulation of the α' -phase both along the grain boundaries and within the grain interiors. The heat treated specimens were deformed at 600, 700, 800, 850 and 900°C. It was found that specimens aged at 700°C for 16 hours were considerably stronger than quenched ones, if deformation was carried out at 600 or 700°C, i.e. at temperatures not exceeding the ageing temperature. At 800°C and above, preliminary ageing at 700°C for 16 hours has practically no effect on the mechanical properties. Such

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Influence of the initial state of ...

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D217/D303

a coincidence of properties is due to intense ageing of the quenched alloys at high temperatures during soaking prior to deformation and during deformation, as well as to the action of natural plastic deformation on the decomposition processes. Ageing the quenched alloy at 800°C for 45 hours leads to considerable softening, the mechanical properties of the alloy in such a state were lower than those of quenched alloys or alloys aged at 700°C for 16 hours at all temperatures and rates of deformation investigated, except in the initial stages of deformation (up to 6 - 7 %) at 700°C and at the rate of 0.05 mm/min., when the resistance to deformation was greater than that of the quenched alloy. The relatively low mechanical properties of severely aged alloys is due to an increased rate of decomposition of the solid solution and to considerable coagulation of the precipitated particles. In the entire temperature interval investigated, the flow curves had, on the whole, a similar shape: Marked increase in the resistance to deformation in the initial stages of plastic deformation, decrease of this effect and constant flow stress in later stages of deformation, fall in stress in the last stages. The constant flow stress sets in the sooner, the

Card 3/4

Influence of the initial state of ...

S/659/61/007/000/009/044
D217/D303

lower the rate of deformation, the higher the temperature of deformation and the more stable the state of the alloy. The drastic fall in stresses at high degrees of deformation is due to the destruction of the specimen, which is promoted by ageing during deformation. Two processes influence the magnitude of deformation stresses in quenched alloys: Ageing (decomposition, hardening the alloy) and physical softening. Both processes can be thermally activated, and depending on the specific conditions of deformation, either the first or the second will predominate. Therefore, for a quenched EI437 alloy, the influences of rate and temperature on the degree of deformation in certain temperature-rate intervals is anomalous. There are 3 figures, 1 table and 17 references: 15 Soviet-bloc and 2 non-Soviet-bloc. The reference to the English-language publication reads as follows: D.S. Fields, and W.A. Backofen, Trans. ASM., 51, 1959.

X

Card 4/4

s/123/62/000/015/004/013
A052/A101

AUTHORS: Makogon, M. B., Tukhfatulin, A. A.

TITLE: The effect of the initial state of 9M437 (EI437) alloy on its mechanical properties under different conditions of deformation as to temperature and rate

PERIODICAL: Referativnyy zhurnal, Mashinostroyeniye, no. 15, 1962, 25, abstract 15A145 (In collection: "Issled. po zharoprochn. splavam". T. 7, Moscow, AN SSSR, 1961, 97 - 105)

TEXT: The character of the effect of rates of deformation at compression ($v_1 = 0.005$, $v_2 = 0.05$ and $v_3 = 6$ mm/min.) on mechanical properties of EI437 alloy (yield curves) at 600, 700, 800 - 850 and 900°C in a vacuum (about 10^{-3} mm Hg) has been established on samples in a hardened and aged state. It is pointed out that the samples aged at 700°C prove to be more strengthened than the samples hardened at deformation temperatures not exceeding the aging temperature. At 800°C and over a preliminary aging at 700°C does not affect practically the mechanical properties, which is explained by an intensive aging of a hardened

Card 1/2

The effect of the initial state of...

S/123/62/000/015/004/013
A052/A:01

alloy at high temperatures in the process of deformation. After 45-hour aging at 800°C the mechanical properties decrease considerably, which is ascribed to the decomposition of the solid solution and coagulation.

[Abstracter's note: Complete translation]

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Card 2/2

L 4915-66 EWT(m)/T/EWP(t)/EWP(b)/EWA(c) IJP(c) JD

ACCESSION NR: AP5025321

UR/0126/65/020/003/0379/0383
539.22:661.846

47
44
B

AUTHOR: Tukhfatullin, A.A.; Makogon, M.B.; Kitayeva, L.P.

TITLE: Study of the character of order-disorder transformation in alloy Mg₃Cd

SOURCE: Fizika metallov i metallovedeniye, v. 20, no. 3, 1965, 379-383

TOPIC TAGS: metal heat treatment, metal analysis, x ray diffraction,
crystal structure, magnesium base alloy, cadmium containing alloy

ABSTRACT: X-ray diffraction studies of ordering in Mg₃Cd alloys (22-30 atom% Cd) during slow cooling from above-critical temperatures, made by A. Moore and G.V. Raynor (Acta met., 1957, 5, 10, 601), revealed the coexistence of ordered and disordered regions in the samples. The present study was made to determine if this coexistence was an equilibrium state or an effect of the unbalanced state of the alloy. The X-ray diffraction study of the Mg-Cd alloy (25.2 atom% Cd) was made after annealing at 350C for 1 hour, followed by ordering, consisting of annealing at 275C for 2 hours, slow cooling during 5 hours to 130 C, annealing for 72 hours at 130C, and subsequent cooling to room

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L 4915-66

ACCESSION NR: AP5025321

temperature at the rate of 5 degrees per hour. The changes in the width of the main (202) and superstructure (112) lines in the X-ray diffraction patterns, taken of the quenched samples, were measured and plotted in the graph as functions of the quenching temperatures. The equilibrium coexistence of 2 phases (ordered and disordered) was proven at the definite temperature interval (18..20C) after quenching from temperatures > 150C. At temperatures > 170C the Mg₃Cd alloy was entirely in the disordered state. The destruction of long-range order occurred by the formation of disordered regions in an ordered matrix. The volume of disordered regions increased with increased quenching temperature, and at temperatures > 170C the entire sample was converted into the disordered state. It was shown by Z. A. Matysina, A. I. Nosar, and A. A. Smirnov (Ukr. fiz. zhurnal, 1963, 8, 3, 339) that electric resistivity of alloys was directly proportional to the value of (1-S²), where S was the degree of long-range order. The degree of long-range order of the samples after quenching from temperature T was determined by the authors from the ratios of intensities (I_s : I_m) of the superstructure (112) and main (202) lines by taking the S of the ordered sample as S=1 and calculating the S of quenched samples by using the formula:

$$S_T = \sqrt{(I_s/I_m)_S = S_T} \quad (I_s/I_m)_S = 1$$

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L 4915-66

ACCESSION NR: AP5025321

The comparison of obtained data agreed well with the corresponding calculated and measured resistivities. Orig. art. has: 4 figures, 3 formulas, and 1 table.

ASSOCIATION: Sibirskiy fiziko-tekhnicheskii institut (Siberian Physicotechnical Institute)

SUBMITTED: 18 May 64 / -- Sep 65

ENCL: 00

SUB CODE: MM, 55

NO REF SOV: 004

OTHER: 005

CC
Card 3/3

FIG. 1. Investigation of the kinetics of the domain growth in the Mg_3Cd alloy.

the Mg_3Cd alloy by x-ray diffraction and by the measurement of electric conductivity. The experiments were conducted at 60, 80, and 100 °C after the diffusion of Cd into the alloy. The domain size was found to increase with time and the inverse of the domain size was found (the latter being larger than 100 Å).

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APPROVED FOR RELEASE: 03/14/2001

CIA-RDP86-00513R001757410010-5"

TUKHFATULLIN, A.A.; MAKOGON, M.B.; KITAYEVA, L.P.

Investigating the character of the order - disorder transition
in the Mg₃Cd alloy. Fiz. met. i metalloved, 20 no.3:379-383
S 165. (MIRA 18:11)

1. Sibirskiy fiziko-tekhnicheskiy institut.

the activation energy values are higher (37 and 35 kcal/mol respectively). Three
cases observed on the tempera-

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ALLEGORIC RE: RE JUDICIAL

APPROVED FOR RELEASE: 03/14/2001

CIA-RDP86-00513R001757410010-5"

KCROTAYEV, A.D. (Tomsk); KONEVA, N.A. (Tomsk); TUKHFATULLINA, R.M. (Tomsk)

Quenching excess vacancies in alloys deformed and subjected to
thermomechanical treatment. Izv. AN SSSR. Met. no.5:180-186
S.L.O '65.

(MIRA 18:10)

L 10877-66 EWT(m)/T/EWP(t)/EWP(k)/EWP(b)/EWA(c) JD/HW

ACC NR: AP5026368

SOURCE CODE: UR/0370/65/000/005/0180/0186

AUTHOR: Korotayev, A. D. (Tomsk); Koneva, N. A. (Tomsk); Tukhfatullina, R. M. (Tomsk) 56

44.55

44.55

44.55

2

ORG: none

TITLE: The quenching-in of excess vacancies in deformed and thermomechanically tested alloys [Paper presented at the 19th Scientific-Technical Session on Heat Resistant Materials held in Moscow in 1965] 41

SOURCE: AN SSSR. Izvestiya. Metally, no. 5, 1965, 180-186

TOPIC TAGS: nickel containing alloy, crystal vacancy, resistivity, mechanical heat treatment 27

ABSTRACT: The mechanism of vacancy efflux during annealing was studied for quenched specimens of both deformed and undeformed Ni₃(Fe + 3 at % Mn). Specifically, the ordering mechanism in this alloy was found to be vacancy assisted and by means of resistivity curves the processes of vacancy coalescence and/or removal by dislocation sinks could be followed. High temperature deformation was also investigated to check an American hypothesis concerning marked increase in diffusion coefficients with high temperature deformation tentatively due to several orders of magnitude difference in vacancy concentration. The Ni₃(Fe + 3 at % Mn) alloy exhibited an order-disorder 18

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UDC: 669-157.9

L 10877-66

ACC NR: AP5026368

transition at about 400°C and displayed almost a 50% change in resistivity upon annealing after a prior quench. This alloy was processed into the form of wires 1 mm in diameter. These wires were annealed in wet hydrogen at 1100°C following which some were deformed 2 to 15% in tension at 20°C grouped with the undeformed samples, held 2 to 5 min at various temperatures and finally quenched into water. A different set of samples was pulled in tension at 850°C up to 15% and were either quenched immediately or held at temperature for 1 min and then quenched. Quenching temperatures ranged from 570 to 750°C. The experimental data were presented in the form of % loss in resistivity as a function of time. The results were compared to a set of resistivity data obtained simply by quenching the alloy from the various temperatures and annealing at 390°C up to six hours. These curves showed a significant drop in resistivity with time whereas the deformed samples, irrespective of the temperature of deformation, exhibited very slight changes. The annealing time was as long as 80 hours in this case. The markedly different behavior of the thermomechanically treated samples when compared with standardly quenched and annealed samples was rationalized on the basis of the lack of dislocation sinks in the unstrained metal. Calculations were made on the number of vacancies produced by the respective treatments and the number of dislocations present. It was estimated that the number of vacancy jumps necessary to affect their disappearance was about 10^8 for the standard resistivity curves (heated and quenched) while for the thermomechanically treated samples this number was estimated at only 10^5 due to the increase in dislocation sinks. A formula was given for the number of jumps occurring during cooling from T_1 to T_2 :

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L 10877-66

ACC NR: AP5026368

$$\Delta n = \int_{T_1}^{T_2} A z v e^{\frac{-\Delta U_m}{kT}} dT = \int_{T_1}^{T_2} A z v e^{\frac{-\Delta U_m}{k(T-v\tau)}} dT$$

where v = jump velocity (10^{13} sec⁻¹); A = 1 to 10; z = 12; ΔU_m = activation energy for migration of vacancies--assumed to be 39 kcal/mol. Calculations based on this equation showed that for the thermomechanically treated specimens most of the vacancies were found to disappear during cooling. In this regard, a distinction was made between the relative efficiencies of 'old' versus 'new' dislocations as vacancy sinks. It was stated that freshly introduced dislocations would be stronger as sinks while the dislocations ordinarily present would be much less so. This was evidenced from the resistivity data which showed that the standard curve (heated and quenched) represented slow vacancy efflux when compared to the calculated values. Orig. art. has: 3 figures.

SUB CODE: 11/
20

SUBM DATE: 06May65/

ORIG REF: 006/

OTH REF: 030



Card 3/3

"APPROVED FOR RELEASE: 03/14/2001

CIA-RDP86-00513R001757410010-5

APPROVED FOR RELEASE: 03/14/2001

CIA-RDP86-00513R001757410010-5"

Handwritten: B.D.

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APPROVED FOR RELEASE: 03/14/2001

CIA-RDP86-00513R001757410010-5"

TUKHLOV, B.D.; FROLOV, S.S.; PAKSHVER, A.B.

Interaction of hydrocellulose fibers with cuprammonium reagents.
Zhur.prikl.khim. 27 no.8:907-914 Ag '54. (MLBA 7:9)

1. Laboratoriya iskusstvennogo volokna Ivanovskogo khimiko-
tehnologicheskogo instituta.
(Cellulose) (Copper compounds)

TUKHLOV, B. D.

TUKHLOV, B. D. - "Investigation in the field of mercurometry." Ivanovo, 1955. Min
Higher Education USSR. Ivanovo Chemico-technological Inst. (Dissertations for
degree of Candidate of Chemical Sciences.)

SO: Knizhnaya letopis', No 48. 26 November 1955. Moscow.

TUKHMAN, Ya.P.; FOKIN, V.G.

Use of high-speed motion-picture photography in determining
some parameters. Zhur. nauch. i prikl. fot. i kin. 8 no.6:
427-432 N-D '63. (MIRA 17:1)

1. Khar'kovskiy politekhnicheskij institut imeni V.I. Lenina.

TUKHMAN, Ya.P.;
TUKHMAN, Ya.P.; FOKIN, V.G.

Some inconveniences in work with the SKS-1 camera. Zhur.nauch.1
prikl.fot.1 kin. 2 no.6:474-475 N-D '57. (MIRA 10:12)
(Motion-picture cameras)

TUKHMAN, Ya.P.; FOKIN, V.G.

Determining parameters of flat joints of conic parts in making
boilers and models. Trudy KhPI 21 Ser.met. no.4:107-116 '59.
(MIRA 14:7)

(Mechanical drawing)

BADADZHANOV, S.N.; TUKHMANYANTS, A.A.

Obtaining and studying complete antigens of the liver fluke.
Uzb.biol.zhur. no.5:27-33 '58. (MIRA 12:1)

1. Institut zoologii i parazitologii AN UzSSR.
(LIVER FLUKE) (ANTIGENS AND ANTIBODIES)

TUKHMANYANTS, A.A.

Leucocytozoonosis in dogs in Tashkent, Uzb.biol.zhur. no.6:
75-83 ' 58. (MIRA 12:1)

1. Institut zoologii i parazitologii AN UzSSR.
(Tashkent--Sporozoa) (Parasites--Dogs)
(Ticks as carriers of disease)

TUKHMANYANTS, A.A.; SHAKHURINA, Ye.A.

Pathogen of the leishiasis of cattle and its intermediate host.
Uzb. biol. zhur. 6 no.1:40-44 '62. (MIRA 15:3)

1. Institut zoologii i parazitologii AN UzSSR.
(CATTLE---DISEASES AND PESTS)
(VETENARY HELMINTHOLOGY)

KOMPANTSEV, N.N.; BABADZHANOV, S.N.; KAMBULIN, N.A.; YEGOROVA, T.A.;
TUKHMANYAN, A.A.

Results of an investigation of the anthelmintic properties of
some plants of Uzbekistan. Med.zhur.Uzb. no.7:51-55 J1 '58.

(MIRA 13:6)

1. Iz kafedry farmakologii (zav. - prof. N.N. Kompantsev) i
kafedry obshchey gigiyeny (zav. - prof. S.N. Babadzhanov)
Tashkentskogo gosudarstvennogo meditsinskogo instituta.
(ANTHELMINTICS) (UZBEKISTAN—BOTANY, MEDICAL)

TUKHMANYANTS, A.A.; SHAKHURINA, Ye.A.; ESKINA, G.V.

Ecology of *Musca larvipara* (Fortach, 1910), intermediary host
of *Thelazia rhodesi* (Desmarest, 1827) occurring in cattle.
Uzb.biol.zhur. 7 no.2:57-62'63. (MIRA 16:8)

1. Institut zoologii i parazitologii AN UzSSR,
(TASHKENT PROVINCE--PARASITES--CATTLE)
(MEMATODA--HOST ANIMALS) (TASHKENT PROVINCE--FLIES)

TUKHOLKA, V.V.

Rostovskii glubokovodnyi kanal i Volga-Don. [Rostov deep-water canal and the Volga-Don]. (Vodnyi transport, 1928, v. 6, no. 6, p. 201-205). DLC: HE561.R8

SO: SOVIET TRANSPORTATION AND COMMUNICATIONS, A BIBLIOGRAPHY, Library of Congress Reference Department, Washington, 1952, Unclassified.

TUKHMAN, Ya.P.; FOKIN, V.G.

Homographic charts for making patterns. Lit.proizv. no.11:7-11
N '55. (Pattern making) (MLRA 9:2)

TUKHOVICH, T.M., veterinary fel'dsher.

Some problems in the work of veterinary feldshers. Veterinaria
33 no.11:10-11 N '56. (MLRA 9:11)

1. Kolkhoz "Krasnaya zvezda, "Ostrogzhskogo rayona, Voronezh-
skoy oblasti.
(Veterinary medicine)

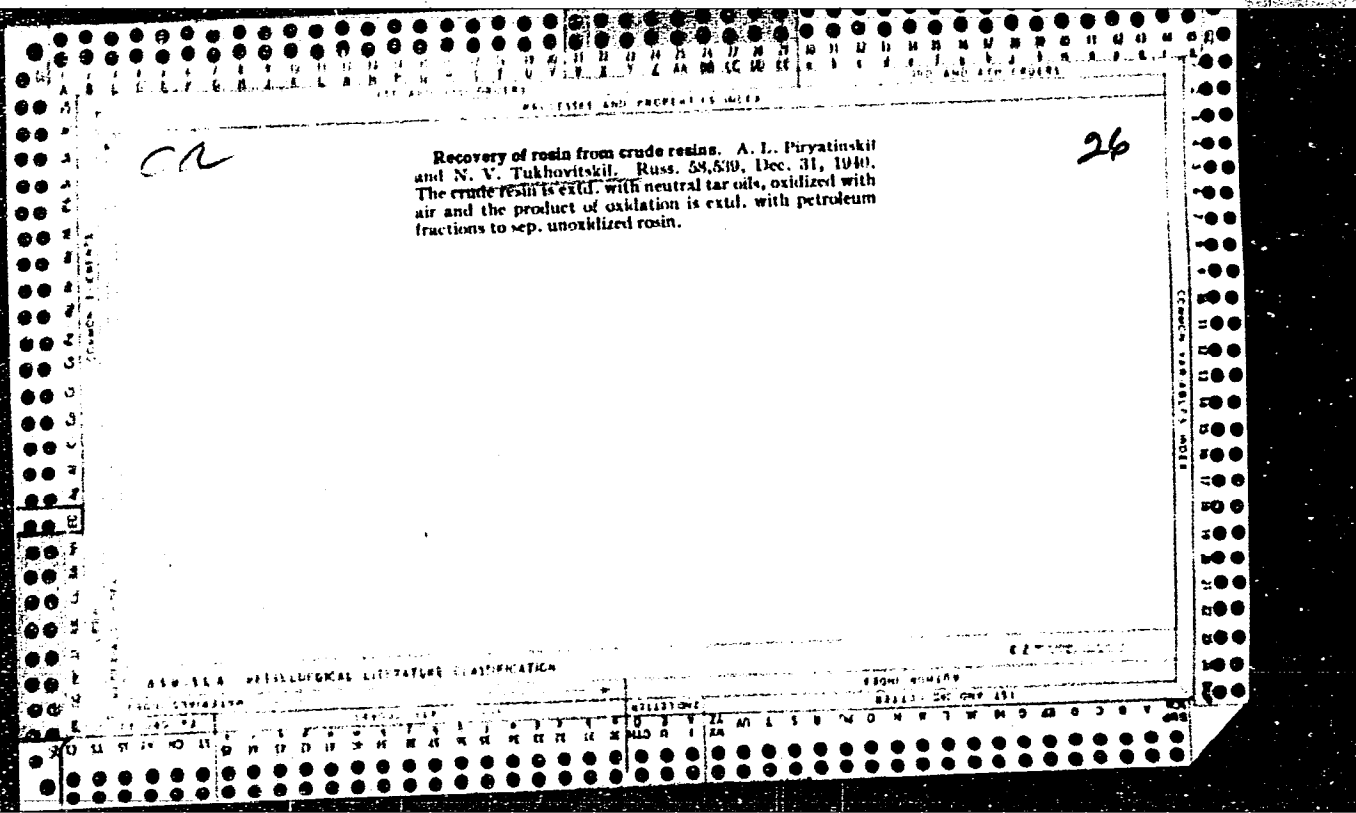
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PULSSES AND PROPERTIES -MEE																																																																																																			
A rapid analytical method for turpentine. N. V. Tukhovitiskii, A. L. Piryatinskii and G. D. Atamanchukov. <i>Chem. Abstr.</i> 1960, 54, 12099a. Description of a combined extr.-distn. lab. app. A. A. P.																																																																																																			
METALLURGICAL LITERATURE CLASSIFICATION																																																																																																			

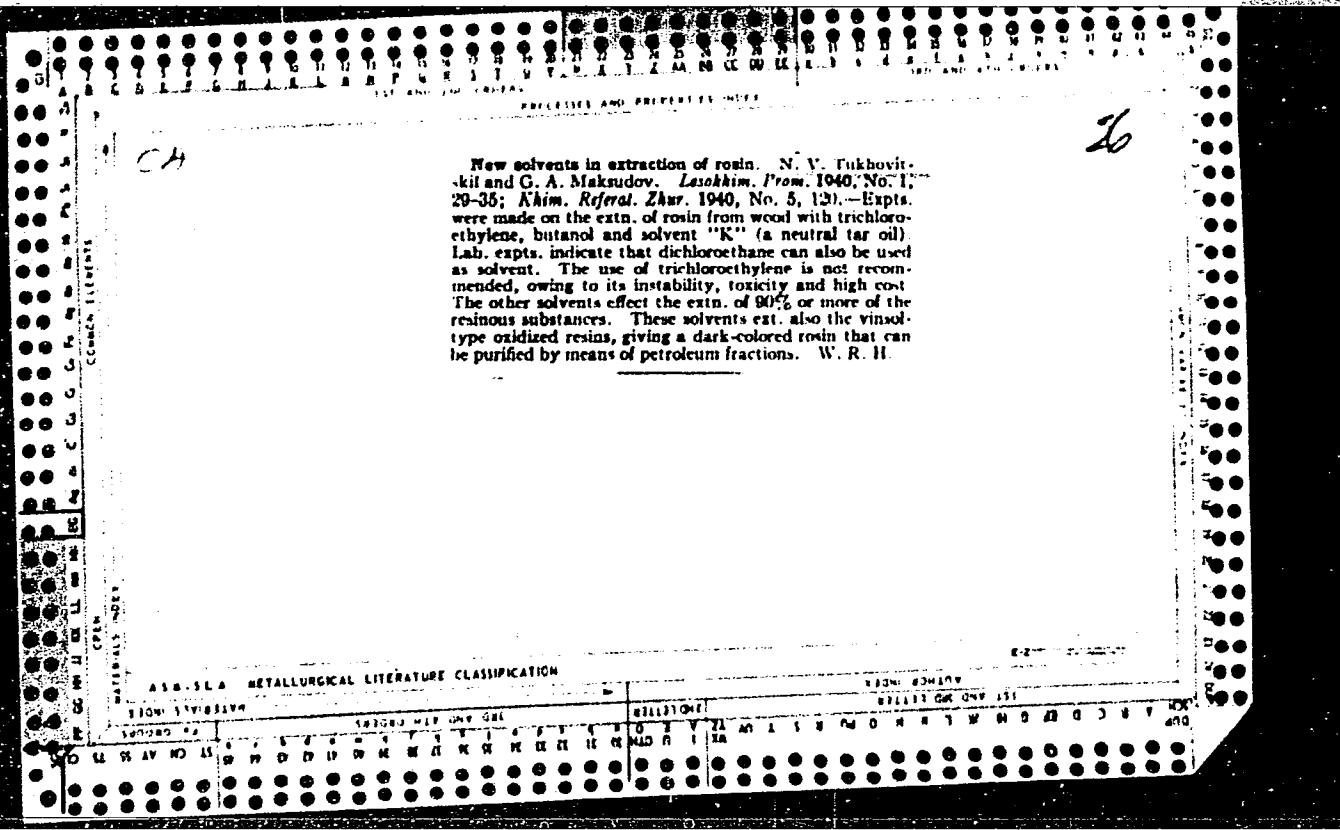
26

CP

A rapid analytical method for turpentine. N. V. Fokhtinskiy, A. I. Poryatnikov and G. D. Atamanchin. *Tr. Vsesoyuzn. Nauch. Issled. Inst. Khim. Przem.* 5, No. 2, p. 8 (1950). Description of a combined extr.-distn. lab. app. A. A. P.

ASB-55A METALLURGICAL LITERATURE CLASSIFICATION





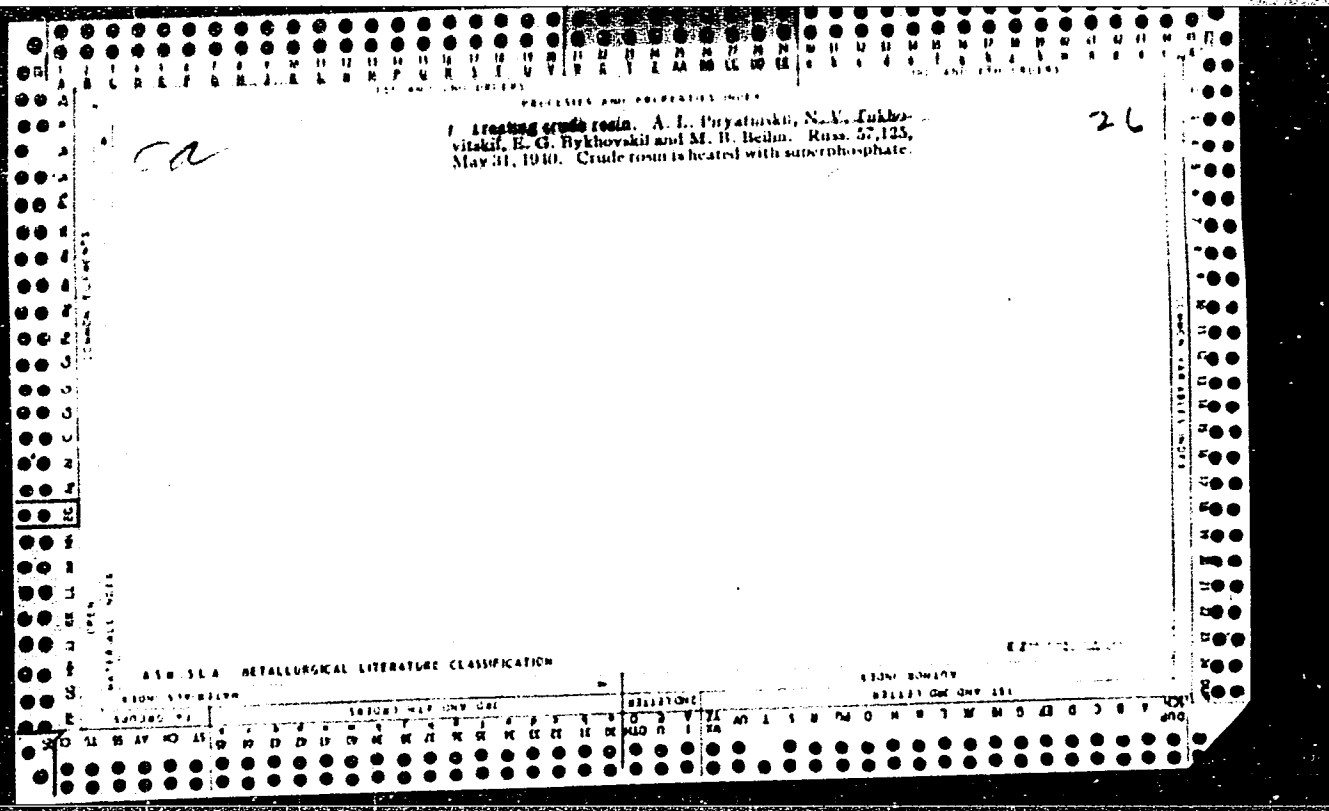
PROCESSES AND PROPERTIES INDEX

26

— Treating crude rosin. A. I. Poyatinski, N. V. Tukhovitski and E. G. Bykhovskii. Russ. 57,125, May 31, 1949. Abstr. to Russ. 57,125 (preceding abstract). The method of Russ. 57,125 is modified in that an aq. ext. of superphosphate is used.

ASD 55.4 METALLURGICAL LITERATURE CLASSIFICATION

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
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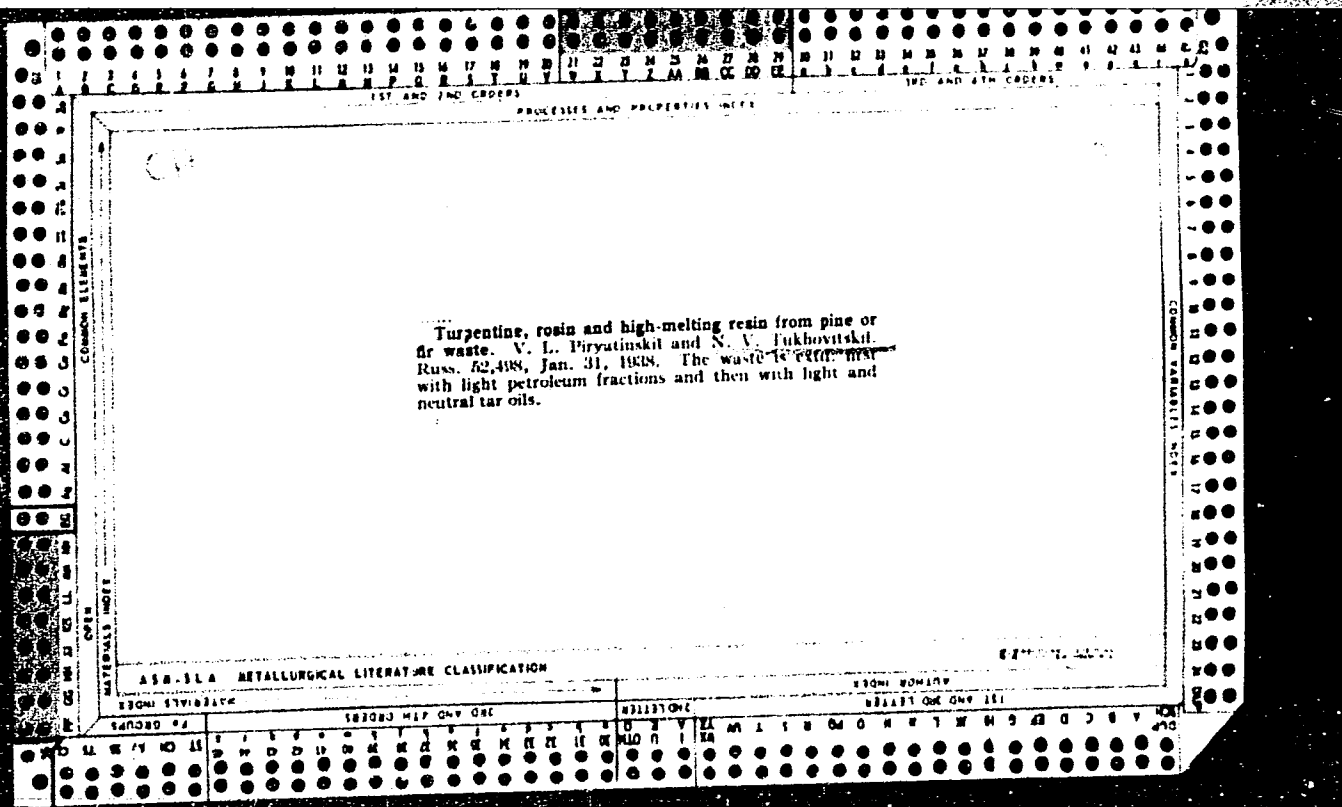


18 26

Resinous substances from spruce waste. A. L. Piryatinskii and N. V. Tikhovitskii. Russ. 42,280, March 31, 1935. The resinous substances are extd. by wood-tar distn. products obtained from deciduous trees.

AS 133.14 METALLURGICAL LITERATURE CLASSIFICATION

E-Z



72

CA

The influence of organic solvents on the extraction of rosin from stumps (az. I. V. Filipovich, N. V. Tukhovitskii and M. M. Sorokin. *Lesokhimicheskaya Prom. 1*, No. 5-6, 19-24 (1961).—The following solvents were used: (1) Grozny second-grade gasoline b. below 130°, d. 0.730; (2) gasoline "kalosha" (special gasoline used in the rubber industry); (3) Grozny second-grade naphtha b. 130-160°, d. 0.768; (4) naphtha of d. 0.762; (5) Calt. of d. 0.879; (6) xylene of d. 0.864 sp. gr.; (7) turpentine from live trees from the Kuskovo plant; (8) ether. The wood contained rosin 20.60, turpentine 2.78, H₂O 11.50 and dry pulp 63.12%. Resin at room temp. removed the rosin completely in 3 operations; it was most effective with petroleum solvents, then with aromatic compds. Turpentine extd. rosin more slowly, but also more uniformly. A. A. Bohtinsk

AS 56 A METALLURGICAL LITERATURE CLASSIFICATION

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
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1ST AND 2ND CODES
 3RD AND 4TH CODES

PROCESSES AND PROPERTIES INDEX

26

Contents of unsaponifiable matter and substances which can be salted out in rosin. N. V. Tukhovitskii, M. N. Sorokin and B. P. Verzhbitskaya. *Leishchinskaya Prom.* 2, No. 4, 8-11(1933).—Various known methods for the sepa. of rosin, from turpentine, H₂O and admixts. are discussed; it is concluded that the results of detns. depend on the nature of the ingredients and not on the method applied. A. A. Bochtlingk

COMMON ELEMENTS

COMMON VARIABLES

ABB-316 METALLURGICAL LITERATURE CLASSIFICATION

1ST AND 2ND CODES

3RD AND 4TH CODES

1ST AND 2ND CODES

3RD AND 4TH CODES

CA

22

The problems in connection with the utilization of solidified pine pitch. I. N. V. Tukhovitskii. *Lezhnitskaya Prom.* 2, No. 4, 30-2(1983).—The pitch contains an av. of 67.8% of rosin-like constituents. The rosin extd. from this pitch is widely different from that obtained in the regular way, being inferior in its softening point and color. II. Preparing rosin soap. I. G. Broshchinskii. *Ibid.* 3:1-7.—By sapon. of the above pitch there was formed a black, viscous mass contg. 4.94% NaOH and 31.8% incrustations composed of: (1) unsaponifiable substances 4.72%; (2) unsaponifiable acidic components 5.87%, (a) which cannot be salted out 19.36%, which are salted out 80.61%; (3) saponified components 21.21%, (a) which cannot be salted out 10.87%, (b) which are salted out 80.13%. The raw material (pitch) contained foreign admixtures 25.36, turpentine 4.31 and resinous components 70.33%. The latter contained unsaponifiable substances 18.03, components which could be salted out 45.37 and those which could not be salted out 37.41%. The operations are described.

A. A. Bochtlink

MATERIAL INDEX		METALLURGICAL LITERATURE CLASSIFICATION	
SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
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50	...	50	...

22

PROCESSES AND PROPERTIES INDEX

CA

The "fatty" acids contained in stump rosin. N. V. Tukhovitskii. *Lesokhimicheskaya Prom.* 3, No. 9-10, 10-13(1934).— The material investigated contained rosin 61.98, turpentine 21.12, dirt 0.43 and H₂O 14.47%. The quant. analysis showed unsaponifiable matter 10.1%, resinic acids (which can be salted out) 80.43, resinic and fatty acids which cannot be salted out 1.43 and "fatty acids" 0.90% = total 94.94%. The unsapon. components were vacuum-distd. and the following fractions sepd.: *n.* below 200° 5.2%, below 250° 18% and residue 65.2%. The residue dissolved in AcOH showed the phytoosterol reaction. The resinic acids had the following characteristics after recrystn. from alc.: *m.* 145-147°, *n._D* no. 181.2, sapon. no. 189.4 and mol. wt. 312. "Fatty acids" are all acidic products which form esters in the sepn. of resinic and fatty acids by esterification with ethylsulfonic acid under the conditions of the Wolff-Scholtze method. The mixt. of esters of the fatty acids is a light, transparent, brownish red liquid of pleasant odor, *d₄* 0.922, sapon. no. 163. The esters after sapon. had *d₄* 0.941, *n._D* 1.4874, acid no. 165, sapon. no. 169, mean mol. wt. 340, *I* no. 28. It is concluded that the basic difference of the rosin obtained from normal resins is the presence of the so-called fatty acids in the latter. Saturated "fatty acids" were not detected. The quality of the rosin may be improved by removing the "fatty acids" by vacuum distn. or by vacuum and superheated steam. A. A. Boehlingk

DETALLURGICAL LITERATURE CLASSIFICATION

E-2

BABELYAN, V.B.; VINNICHENKO, N.G., kand. ekon. nauk; GNEDASH, G.N.;
GRIGOR'YEV, A.N.; DANILOV, N.K.; IVANOV, A.P.; IVLIYEV, Ivan
Vasil'yevich; POTAPOV, I.A.; TRUBIKHIN, M.G., kand. ekon. nauk;
TUKHOVITSKAYA, L.K., inzh.; TYVAN'CHUK, D.P., inzh.; SHERMAN,
A.Ya.; SHCHERBAKOV, P.D., inzh.; EVENTOV, G.S.; KRISHTAL', L.I.,
red.; MAKUNI, Ye.V., tekhn. red.

[Financing in railway transportation; manual] Finansirovanie na
zheleznodorozhnom transporte; spravochnik. Pod obshchei red. I.V.
Ivlieva. Moskva, Vses. izdatel'sko-poligr. ob"edinenie M-ya
putei soobshchenia, 1962. 422 p. (MIRA 15:4)
(Railroads--Finance)

TUKHSANOV, E.; NABIYEV, M.N.

Reaction of ammonium humate with $(\text{H}_3\text{PO}_4)_2$. Uzb.khim.zhur. 9
no.1:5-7 '65. (MIRA 18:6)

1. Institut khimii AN Uzbekskoy SSR.

TUKHSANOV, E.; VISHNYAKOVA, A.A.; NABIYEV, M.N., akademik

Effect of oxidized coals on the process of chamber superphosphate maturing. Uzb.khim.zhur. 8 no.4:12-17 '64.

(MIRA 18:12)

1. Institut khimii AN UzSSR. Submitted July 24, 1963.
2. AN UzSSR (for Nabiyeu).

TUKHSHNAYD, O.B.

TUKHSHNAYD, O.B.; LOGASHEV, V.G., redaktor; ZUBAREV, G.K., redaktor
izdatel'stva; FLAUM, M.Ya., tekhnicheskiy redaktor.

[Servicing sectional-type steering gear with electric controls of the
dynamo system] Obalushivanie rulevykh privodov sektornogo tipa s
elektropravleniem po sisteme generator-dvigatel'. Moskva, Izd-vo
Ministerstva morskogo i rechnogo flota, 1953. 43 p. (MIRA 7:7)
(Steering gear)

FAYNLEYB, B.N.; GOLUBKOV, I.G.; KOCHER, L.A.; BALAKIN, V.I.,
kand. tekhn. nauk, retsenzent; TUKHSHNAYD, A.M., inzh.
red.

[Methods for testing and investigating the fuel systems
of motor-vehicle and tractor diesel engines] Metody is-
pytani i issledovani toplivnoi apparatury avtotraktor-
nykh dizelei. Moskva, Mashinostroenie, 1965. 174 p.
(MIRA 18:9)

TURKISHMAYD, O. P.

Obsluzhivanie rulyykh privodov sektornogo tipa /Servicing sectional-type steering gear/. Moskva, Vodtransizdat, 1953. 45 p.

SO: Monthly List of Russian Accessions, Vol. 6 No 10 January 1954

TUKHTAKHANOVA, Dil'bar, pryadil'shchitsa, delegat XIII s"yezda
professional'nykh soyuzov

The jug should not break. Sov. profsoiuzy 19 no.19:25-27 0 '63.
(MIRA 16:11)

1. Ordena Trudovogo Krasnogo Znameni tekstil'nyy kombinat,
Tashkent.

FREYDLIN, I.Kh.; SHARF, V.Z.; TOKHTAMIRADOV, Z.T.

Catalytic dehydration of a mixture of isopentanol and concomitant conversions of formed isopentenes. Izv. AN SSSR. Ser. khim. no.3: 531-534 '65. (MIRA 18:5)

1. Institut organicheskoy khimii Im. N.D.Zelinskogo AN SSSR.

SHARF, V.Z.; FREYDLIN, L.Kh.; TUKHTAMURADOV, Z.T.

Effect of the treatment of aluminum oxide by acetic acid on its activity in the dehydration of 1-pentanol and isomerization of 1-pentene. Izv. AN SSSR Ser. khim. no.2:385-387 '65. (MIRA 18:2)

1. Institut organicheskoy khimii im. N.D. Zelinskogo AN SSSR.

PREYDLIN, L. Kh.; SHARP, V. V.; TUKHTAMUROV, I. T.

Investigation of the direction of the dehydration of 2-methyl-
butanol-2 in the presence of an acid catalyst. Neftekhimiya
4: 137-42 Ja-F'64 (MIRA 17:6)

1. Institut organicheskoy khimii AN SSSR imeni N.D. Zelinskogo.

FREYDLIN, L.Kh.; SHARF, V.Z.; TUKHTAMURADOV, Z.T.

Effect of the temperature of boron phosphate preparation
on its specific surface, acidity, and catalytic activity in
the dehydration of alcohols. *Kin. i kat.* 5 no.2:347-350
Mr-Ap '64. (MIRA 17:8)

1. Institut organicheskoy khimii imeni Zelinskogo AN SSSR.

FREYDLIN, L.Kh.; SHARF, V.Z.; LITVIN, Ye.F.; TUKHTAMURADOV, Z.T.

Dehydration of primary n-amy1 alcohol and the accompanying
isomeric conversions of pentenes on a calcium phosphate
catalyst. Neftekhimii 1 no.4:548-554 J1-Ag '61.

(MIRA 16:11)

1. Institut organicheskoy khimii AN SSSR imeni N.D.
Zelinskogo.

FEYDLIN, L.Kh.; SHARF, V.Z.; TUKHTAMURADOV, Z.T.; LITVIN, Ye.F.

Dehydration of primary n.amyl alcohol and isomerization of 1-pentene
on aluminosilicate catalysts. Kin.i kat. 3 no.1:114-117 '62.
(MIRA 15:3)

1. Institut organicheskoy khimii imeni N.D.Zelinskogo AN SSSR.
(Amyl alcohol) (Pentene) (Aluminosilicates)

FREYDLIN, L.Kh.; SHARF, V.Z.; TUKHTAMURADOV, Z.T.

Stereospecificity of the dehydration of 3-pentanol on acid-type catalysts. Neftekhimiia 2 no.5:730-734 S-0 '62. (MIRA 16:1)

1. Institut organicheskoy khimii AN SSSR imeni Zelinskogo.
(Pentanol) (Dehydration (Chemistry)) (Stereochemistry)

S/204/63/003/001/002/C13
E075/E436

AUTHORS: Freydlin, L.Kh., Sharif, V.Z., Litvin, Ye.F.,
Tukhtamuradov, Z.T.

TITLE: Preparation of C₈-C₁₂ α-olefins by the catalytic
dehydration of primary alcohols

PERIODICAL: Neftekhimiya, v.3, no.1, 1963, 10-12

TEXT: The authors investigated the catalytic dehydration of C₈,
C₁₀ and C₁₂ n-alcohols after previous successful preparation of
98% pure α-olefins from n-C₈-C₁₂ alcohols using trisubstituted
calcium phosphate as catalyst (Neftekhimiya, v.1, no.5, 1961, 749).
The catalyst was prepared by treating the phosphate with 0.27 g
NaOH/g catalyst and baking at 400 to 450°C for 1 to 3 hours.
It preserved its activity without regeneration. The products of
the dehydration were 92 to 94% pure α-olefins (97 to 98% after
distillation) obtained with the yields of 58 to 88%. The purity
of the alcohols is of the same order as that obtained after the
pyrolysis of the acetates and is much better than that of the
alcohols produced with alumina as the dehydration catalyst. In
the latter case the products contain only 39 to 66% α-olefins and
Card 1/2

Preparation of C₈ - C₁₂ ...

S/204/03/003/001/002/013
E075/E436

the remainder - isomers with the double bond in different positions.
There are 1 figure and 1 table..

ASSOCIATION: Institut organicheskoy khimii AN SSSR im.
H.D.Zelinskogo (Institute of Organic Chemistry AS USSR
imeni N.D.Zelinskoy)

SUBMITTED: July 26, 1962

Card 2/2

FREYDLIN, L.Kh.; SHARF, V.Z.; LITVIN, Ye.F.; TUKHTAMURADOV, Z.T.

Preparation of C₈ - C₁₂-olefins by catalytic dehydration
of primary alcohols. Neftekhimiia 3 no.1:10-12 Ja-F '63.
(MIRA 16:2)

1. Institut organicheskoy khimii AN SSSR imeni
Zelinskogo.

(Olefins)

(Alcohols)

(Dehydration (Chemistry))

TUKHTAROVA, Yu. N., khudozhnik-iskusstvoved

Artistic finishing of modern printed fabrics for clothing.
Tekst. prom. 23 no.3:13-15 Mr '63. (MIRA 16:4)

1. Vsesoyuznyy institut assortimenta izdeliy legkoy promysh-
lennosti i kul'tury odeszhy (VIALEGProm).

(Textile printing)

TUKHTAROVA, Yu.N.

Basic trends in the artistic and coloristic finishing of textile fabrics in 1966. Tekst. prom. 25 no.9:20-26 S '65.

(MIRA 18:10)

1. Starshiy iskusstvoved Vsesoyuznogo instituta...
assortimenta izdeliy legkoy promyshlennosti i kul'tury odesndy.

TUKHVATULLIN, A.K., inzh.

Testing part of the Penza-Michurinsk petroleum products line
with natural gas. Stroil. truboprov. 6 no.5:19-20 My '61.
(MIRA 14:7)

1. Stroitel'no-montazhnoye upravleniye No.6 tresta
Nefteprovodmontazh, g. Chelyabinsk.
(Petroleum--Pipelines)

TUKHVATULLIN, F.Kh.; VUKS, M.F.

Rotational mobility and form of molecules. Ukr.fiz.zhurn. 7
no.7:760-762 J1 '62. (MIRA 15:12)

1. Leningradskiy universitet.
(Molecular rotation)

"APPROVED FOR RELEASE: 03/14/2001

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TUKIVATULLIN, F.Kh.; VUKS, M.F.

Orientational interaction and rotation of molecules in liquids
at high temperatures. Ukr. fiz. zhur. 9 no.5:537-540 May '64.
(MIRA 17:9)

1. Leningradskiy gosudarstvennyy universitet.

ATAKHODZHAYEV, A.K.; TUKVATULLIN, F.Kh.; ROZHDESTVENSKIY, M.I.; EGAIKULOV, A.;
YARLUKHAISTOV, U.D.

Rotary mobility and rigidity of certain molecules with two benzene
rings. Ukr. fiz. zhur. 9 no.5:552-555 My '64. (MIRA 17:9)

1. Samarkhanskiy gosudarstvennyy univorsitet.

TUKHVATULLJH, F.Kh.

Width and shape of the Raman scattering line in benzene, acetone,
and other liquids. Vest. LGU 19 no.16:18-21 '64.

(MIRA 17:11)

ATAKHODZHAYEV, A.K.; TUKHVATULLIN, F.Kh.

Intercollegiate Conference on Optical Studies of Molecular
Motions and Molecular Interaction in Liquids and Solutions.
Izv.AN UzSSR. Ser.fiz.-mat.nauk 9 no.3:75-77 '65. (MIRA 19:1)

1. Samarkandskiy gosudarstvennyy universitet imeni A.Navoi.
Submitted December 30, 1964.

L 3395-66 EWT(m)/EPF(c)/EWP(j)/T RM
ACCESSION NR: AP5015457

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AUTHOR: Atakhodzhayev, A. K.; Tuhvatullin, F. Kh.

TITLE: Inter-university conference on optical investigations of molecular motion and intermolecular interaction in liquids and solutions

SOURCE: AN UzSSR. Izvestiya. Seriya fiziko-matematicheskikh nauk, no. 3, 1965, 75-77

TOPIC TAGS: optic conference, scientific conference, molecular structure, molecular theory

ABSTRACT: The ^{44.55 III}conference was held in Samarkand on 24-29 September 1964, and was organized by a commission coordinating the research on liquid-state physics at NTO MVO SSSR, the Ministry of Higher and Secondary Special Education of UzSSR, and the ⁴⁴Samarkand State University. Approximately 150 persons were in attendance. ⁴⁴Five plenary and more than 50 sectional papers were delivered.

The plenary papers were: "Rayleigh Scattering of Light and Molecular Theory of Non-electrolytes" (M. I. Shakhparonov, Moscow), "Phenomenological Theory of Electrooptical Phenomena. The Kerr Phenomenon in Liquids" (V. A. Zamkov, Moscow), "On the Theory of the Kerr Phenomenon in Liquids" (M. F. Vuks, Leningrad), "Rotational Motion of Molecules in Liquids and Solutions" (A. K. Atakhodzhayev, Samar-^{44.55}

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kand), and "Influence of Interaction of a Polymer Solvent on the Optical Behavior of Macromolecules in a Solution" (E. V. Frisman and A. K. Dadiyanyan, Leningrad).

Eight papers were delivered on optical research on polymer solutions by N. P. Zakudrayeva, M. I. Shakhparonov, and K. K. Podgoretskiy (Moscow), L. A. Petrova and A. P. Grishin; V. N. Tsvetkov and A. Ye. Grishchenko (Leningrad); I. A. Chernyavskaya and G. P. Koshchina (Kiev); V. E. Eskin and A. Ye. Nesterov (Leningrad); V. N. Tsvetkov and I. N. Shteninkova; S. I. Volkov; V. G. Baranov; and S. Ya. Frenkel (Leningrad); Birshteyn (Leningrad); and V. Aslanyan (Yerevan).

Twenty papers were delivered on molecular motion in liquids and solutions by A. I. Sidorova, I. N. Kochnev, and E. N. Shermatov (Leningrad); A. K. Atakhodzhaev, F. Kh. Tukhvatullin, E. V. Sagitova, and L. Sabirov (Samarkand University); V. G. Artamonov (Moscow); B. I. Nosenko and A. A. Ayvazova (Tashkent); P. G. Nikolayenko and A. I. Prorvin (Kemerovo); R. I. Podgayetskaya and A. A. Kolovskiy (Physics Institute SO AN SSSR); A. V. Korshunov; V. Ye. Volkov; and V. S. Korobkov.

Papers devoted to optical studies of intermolecular interaction in liquids were delivered by L. V. Levshin and D. M. Akbarova (Moscow); V. S. Korobkov, L. P. Zubanova, and L. N. Zvegintseva (Krasnoyarsk); P. A. Shakhverdov, A. N. Terenin, and Zelinskiy (Leningrad); M. N. Rakhmatov and G. Gafurov (Bukhara); L. I. Al'.

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ACCESSION NR: AP5015457

^{44.55}perovich; ^{44.55}N. G. Bakhshiyev; ^{44.55}V. M. Korovina (Dushanbe); ^{44.55}A. V. Sechkarev and ^{44.55}N. I. Dvorenko; ^{44.55}A. K. Atokhodzhayev; ^{44.55}Ye. L. Zhikova; ^{44.55}M. I. Shman'ko; ^{44.55}I. S. Perelygin (Kazan); and ^{44.55}N. G. Bakhshiyev, ^{44.55}O. N. Girin, and ^{44.55}V. S. Libov (Leningrad).

Papers on the use of light scattering in the study of the structure of liquids and solutions were delivered by ^{44.55}M. F. Vuks, ^{44.55}L. I. Lisnyanskiy, and ^{44.55}S. A. Osmanov; ^{44.55}G. P. Roshchina, ^{44.55}A. S. Kaurova, and ^{44.55}I. A. Chernyavskaya; ^{44.55}L. V. Ianshina, ^{44.55}M. I. Shakhparonov, and ^{44.55}I. A. Merzhanov; ^{44.55}I. A. Bogdanov, ^{44.55}M. F. Vuks, and ^{44.55}N. B. Rozhdestvenskiy; and ^{44.55}V. L. Skripov and ^{44.55}Yu. D. Kolpakov (Sverdlovsk).

The section on optical constants of liquids and intermolecular interaction included papers by ^{44.55}A. S. Botin, ^{44.55}Yu. F. Novikov, and ^{44.55}A. F. Stepanov (Samarkand); and by ^{44.55}V. A. Kizel' and ^{44.55}A. F. Stepanov (Ryazan').

Papers on the theory of liquids were delivered by ^{44.55}A. K. Abas-Zade (Baku); ^{44.55}I. G. Mikhaylov and ^{44.55}V. L. Shutilov (Leningrad); ^{44.55}N. D. Kosov and ^{44.55}I. N. Korzun (Alma Ata); and ^{44.55}F. Gaybullayev (Namangan).

ASSOCIATION: ^{44.55}Samarkandskiy gosuniversitet im. A. Navoi (Samarkand State University)

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VUKS, M.F.; TUKHVATULLIN, F.Kh.

Studying the shape and internal mobility of molecules from the
broadening of the scattering line. Zhur. prikl. spekt. 2 no.3:
277-279 Mr '65. (MIRA 18:6)

TUKHVATULIN, I., burovoy master

We undertake to drill 12 500 meters in a year's time. Neftianik
5 no. 12:10-11 D '60. (MIRA 13:12)

1. Neftepromyslovoye upravleniye Baychunas.
(Baychunas region--Oil well drilling)

TOKHVATULLIN, G., inzh. (Omsk)

Hanging railroad yard communication equipment on contact network poles. Zhel.dor transp.36 no.5:89 My '55.(MIRA 12:5)
(Electric railroads--Communication systems)
(Electric lines--Poles)