

USSR/General and Systematic Zoology. Insects. Harmful
Insects and Acarids. Forest Pests

P

Abs Jour : Ref Zhur - Biol., No 3, 1959, No 11648

incidence of M from linden into oak plantations
is facilitated, thereby causing an increase in
the numbers of M. Six tables. -- A.P. Adiranov

Card : 3/3

P

[REDACTED] /General and Specialized Zoology - Insects. Harmful
Insects and Acarids. Forest Pests.

Abs Jour : Ref Zhur Biol., No 6, 1959, 25494

Author : Likventov, A.V.

Inst : -
Title : An Experiment in the Control of the Gypsy Moth.

Orig Pub : Vestn. s.-kh. nauki, 1958, No 4, 109-110

Abstract : The gypsy moth nidus (in Belgorodskaya Oblast') having a density of 2.1 ovipositions (O) per tree (325 eggs in one oviposition) was treated with petroleum in autumn of 1955 and in spring of 1956. In May, when the caterpillars had transferred to the tree branches, 222 hectares were sprayed with DDT dust, and in fall only a few O were recorded here. On a parcel of 60 acres under control, the O numbers were decreased (by petrolization) to 0.2 per tree, but in August they were increased to 1.5-4.5. In spring of 1957, petrolization of O (about 20 hectares)

Card 1/2

USSR/General and Specialized Zoology - Insects. Harmful
Insects and Acarids. Forest Pests.

P

Abs Jour : Ref Zhur Biol., No 6, 1959, 25494

and dusting of the forest borders (less than 2 hectares) were conducted. Notwithstanding the incomplete treatment of 60 hectares, the caterpillar numbers decreased by 70 times owing to their infestation by the Apanteles and their destruction by birds. It appeared that towards autumn the nidus on 282 hectares was liquidated. -- A.P. Adrianov

Card 2/2

- 40 -

LIKVENTOV, A.V., kand.sel'skokhozyaystvennykh nauk(Leningrad)

Honoring Professor Starka. Zashch.rast.ot vred.i bol. 4 no.3:59
My-Je '59. (MIRA 13:4)
(Starka, Vladimir Nikolaevich, 1899-)

LIKVENTOV, A.V., kand.sel'skokhozyaystvennykh nauk

The restraining influence of mixed oak-linden stands on the
multiplication of the gypsy moth. Trudy VIZR no.15:33-40 '60.
(MIRA 14:3)

(Gypsy moth—Host plants) (Linden)

LIKVENTOV, A.V.

Use of preferred temperatures in studying insect behavior.
Zool.zhur. 39 no.1:53-62 Ja '60. (MIRA 13:5)

1. All-Union Research Institute of Plant Protection,
Leningrad.

(Insects--Habits and behavior)
(Temperature--Physiological effect)

YELIN, I.; FONAREV, G.; LIKVER, L. A.

Repair of engine blocks by epoxy resin. Mor. flot 20
no. 12:30 D '60. (MIRA 13:12)

1. Nachal'nik laboratorii Tsentral'nogo nauchno-issledovatel'-
skogo instituta morskogo flota (for Yelin). 2. Nachal'nik
otdela flota Antarkticheskikh kitoboynykh flotiliy (for
Fonarev). 3. Starshiy inzhener Odesskoy nauchno-issledovatel'-
koy stantsii Tsentral'nogo nauchno-issledovatel'-
instituta morskogo flota (for Likver).
(Marine engines--Maintenance and repair)
(Epoxy resin)

S/081/61/000/020/061/089
B102/B147

AUTHORS: Yelin, I. A., Zhur, N. V., Likver, L. A., Nunuparov, S. M.

TITLE: Protection of propeller shafts against corrosion by glass plastics based on epoxy resin

PERIODICAL: Referativnyy zhurnal. Khimiya, no. 20, 1961, 264, abstract 20I196 (Byul tekhn.-ekon. inform. M-vo morsk. flota SSSR, no. 1 (40), 1961, 32 - 45)

TEXT: The application of reinforced-glass-fabric coatings produced on the basis of epoxy resins is much cheaper than rubberizing, and reliably protects propeller-shaft surfaces against corrosive destruction.

[Abstracter's note: Complete translation.]

Card 1/1

NUNUPAROV, S.; LIKVER, L.

Experience of the Black Sea Ship Line in the use of epoxy resins.
Mor.flot 21 no.2:28-30 F '61. (MIRA 14:6)

1. Nachal'nik tekhnicheskogo otdela Chernomorskogo parokhodstva
(for Nunuparov). 2. Starshiy inzhener Odesskoy nauchno-issledo-
vatel'skoy stantsii Tsentral'nogo nauchno-issledovatel'skogo
instituta morskogo flota (for Likver).

(Ships--Maintenance and repair)
(Epoxy resins)

LIKVERMAN, A.I., inzh.; GOL'DIN, G.B., inzh.

Covering deformation seams in large-span bridges. Avt.dor.
28 no.10:21-22 0 '65.

(MIRA 18:11)

LIKVERMAN, A.I., inzh.; GOL'DIN, G.B., inzh.

Efficient design of the supporting parts of suspended span
structures. Avt.dor. 27 no.12:23-24 D '64.

(MIRA 18:2)

124-57-1-1210

Translation from: Referativnyy zhurnal, Mekhanika, 1957, Nr 1, p 166 (USSR)

AUTHORS: Pochtovik, G. Ya. , Lyubimov, G. D. , Likverman, A. I.

TITLE: Investigation of the Strength, Rigidity, and Crack Resistance of Reinforced-concrete Structures Based on "Keramzit" Clayey Filler Gravel (Issledovaniye prochnosti, zhestkosti i treshchinoustoychivosti zhelezobetonnykh konstruktsiy na keramzitovom gravii)

PERIODICAL: Tr. Mosk. avtomob.-dor. in-ta, 1956, Nr 18, pp 231-240

ABSTRACT: Bibliographic entry

1. Box beams--Stresses--Test results 2. Box beams--Vibration
--Mathematical analysis

Card 1/1

SECRET. M.M. 1930; GREEN, S.S., LIKUMMAN, A.L., 1920.

Building a multispan bridge across the Irtys. Transp. Dept.
15 n. 3118-22 F 165. (MIRA 18:9)

ARTSIMOVICH, L.A.; ANDRIANOV, A.M.; DOBROKHOTOV, Ye.I.; LIK'YANOV, S.Yu.;
PODGORNIY, I.M.; SINITSYN, V.I.; FILIPPOV, N.V.

Hard radiation emitted by pulse discharges. Atom.energ. no.3:84-87
'56. (Electric discharges through gases) (MIRA 9:9)

ZHAROVA, T.N., inzh. po ratsionalizatsii; PAKHOMOV, I.; ILL'CHISKIY, E., inzh.
po tekhnicheskoy informatsii

Readers' letters. Inform.biuL.VDNKH no.5:14 My '64.

(MIRA 13:5)

1. Glavnyy inzh. Odesskogo ordena Trudovogo Krasnogo Znameni
zavoda tyazhelogo kranostroyeniya imeni Yanvarskogo vosstaniya
(for Pakhomov). 2. Odesskiy ordena Trudovogo Krasnogo Znameni
zavod tyazhelogo kranostroyeniya imeni Yanvarskogo vosstaniya
(for Ill'chitskiy).

LIL'CHITSKIY, E.I.; TASHLITSKIY, A.I.; FISHBERG, A.Ya.

New machine for expanding tubes. Mashinostroenie no.1:113
Ja-F '63. (MIRA 16:7)

(Machine tools)

LILENKO, S.I.

LIL-LIN

Effectiveness of Rauwolfia serpentina preparations in hypertension.
Vop. pat. krovi i krovoobr. no.5:179-188 '59. (MIA 15:4)
(RAUWOLFIA--THERAPEUTIC USE) (HYPERTENSION)

Lilenko, S.I.

MOLCHANOV, N.S., professor, redaktor; DEMBO, A.G., doktor meditsinskikh nauk, dotsent, redaktor; LILENKO, S.I., redaktor; KHARASH, G.A., tekhnicheskii redaktor

[Problems in the prophylaxis of rheumatism, ulcers, hypertension, and the dispensary treatment of large groups of population; stenographic report] Voprosy profilaktiki revmatizma, iazvennoi i gipertonicheskoi boleznei i dispanserizatsii osnovnykh grupp naseleniia; stenograficheskii otchet. [Leningrad] Gos.izd-vo meditsinskoi lit-ry, Leningradskoe otd-nie, 1955. 276 p. (MIRA 9:3)

1. Vsesoyuznaya konferentsiya terapevtov. 2. Chlen-korrespondent AMN SSSR (for Molchanov)
(RHEUMATISM) (HYPERTENSION) (PUBLIC HEALTH)

Lilento, S. T.

SMORODINTSEV, A.A., redaktor; LILENKO, S.I. redaktor; KHARASH, G.A.
tekhnicheskiy redaktor.

[Problems in the pathogenesis and immunology of virus infections.]
Voprosy patogenez a i immunologii virusnykh infektsii. (Leningrad)
Gos. izd-vo meditsinskoi lit-ry, Leningradskoe otd-nie, 1955. 479 p.
(MLRA 8:8)

1. Chlen-korrespondent AMN SSSR (for Smorodintsev).
(Virus diseases)

L.I. LILLENKO, S.I.
ALEKSEYEVA, Yelizaveta Ivanovna; BOGDANOVA, Mariya Semenovna; LILENKO,
S.I., redaktor; RUBLEVA, M.S., tekhnicheskiiy redaktor.

[Work therapy in hospitals; knitting] Trudoterapia v lechebnykh
uchrezhdeniakh ; viazanie na spitsakh. [Leningrad] Gos.izd-vo
med.lit-ry, Leningr.otd-nie, 1956. 44 p. (MIRA 10:6)
(Knitting)

SHAFIR, Avraam Isaakovich; professor; LILENKO, S.I., redaktor; KHARASH, G.A.
tekhnicheskiy redaktor.

[Sanitation for dwellings] Gigiena zhilishcha. Leningrad. Gos.izd-vo
med.lit-ry, Leningradskoe otd-nie, 1956. 57 p. (MIRA 9:6)
(Sanitation, Household)

MOLCHANOV, N.S., professor, otvetstvennyy redaktor; DEMBO, A.G., doktor meditsinskikh nauk, dotsent, otvetstvennyy redaktor; LILENKO, S.I., redaktor; KHARASH, G.A., tekhnicheskii redaktor

[Problems in the employment of antibiotics in clinical treatment of internal disease; a stenographic report] Voprosy primeneniia antibiotikov v klinike vnutrennikh zabolevani; stenograficheskiy otchet. Otv.red. N.S.Molchanov i A.G.Dembo. [Leningrad] Gos.izd-vo med. lit-ry, Leningradskoe otd-nie, 1956. 230 p. (MLRA 10:2)

1. Vsesoyuznaya konferentsiya terapevtov, 8th, Leningrad, 1955.
2. Chlen-korrespondent Akademii meditsinskikh nauk SSSR (for Molchanov)
(ANTIBIOTICS)

SHUPINSKAYA, Mariya Dmitriyevna; LILENKO, S.I., redaktor; RULEVA, M.S.,
tekhnicheskiiy redaktor

[Textbook of pharmacognosy] Uchebnik farmakognozii. Izd. 2-oe,
perer. i dop. [Leningrad] Gos. izd-vo med. lit-ry, Leningradskoe
otd-nie, 1956. 455 p. (MIRA 10:1)
(PHARMACOGNOSY)

LILENKO S.I.
LIBOV, Aleksandr Leonidovich, prof.; LILENKO, S.I., red.; RULEVA, M.S.,
tekhn.red.

[How to guard against dysentery] Kak uberech'sia ot dizenterii.
Izd. 2-o. [Leningrad] Gos.izd-vo med.lit-ry, 1957. 14 p.
(DYSENTERY) (MIRA 11:4)

S.I. LIL'ENKO, S.I.

SEREBROV, Aleksandr Ivanovich; LIL'ENKO, S.I., redaktor; RUBLEVA, M.S.
tekhnicheskiy redaktor

[Cancer of the uterus] Rak matki. Leningrad, Gos. izd-vo med.
lit-ry, Leningradskoe otd-nie, 1957. 295 p. (MLBA 10:4)
(UTERUS--CANCER)

CHERVYAKOVSKIY, Nikolay Yakovlevich; LILKENKO, S.I., red.; RAYVID, V.V., red.;
HULEVA, M.S., tekhn. red.

[Short manual on emergency diagnosis and treatment of internal
diseases] Kratkoe rukovodstvo po neotlozhnoi diagnostike i terapii
vnutrennikh zabolevani. Izd. 4., perer. [Leningrad] Gos. izd-vo
med. lit-ry, Leningr. otd-nie, 1958. 209 p. (MIRA 11:9)
(MEDICINE, EXTERNAL)

VAL'DMAN, Viktor Aleksandrovich, zasl. deyatel' nauki RSFSR; LILENKO,
S.I., red.; BUKHAROV, A.D., red.; SHEVCHENKO, F.Ya., tekhn. red.

[Arterial dystonia and dystrophy] Arterial'nye distonii i di-
strofii. Leningrad, Medgiz, 1961. 319 p. (MIRA 15:1)
(ARTERIES--DISEASES)

LILENKO, S.I.

Latent endotheliosis in chronic tonsillitis. Vop.pat.krovi i
krovoobr. no.6:106-108 '61. (MIRA 16:3)
(MEDICAL TESTS) (TONSILS--DISEASES) (RHEUMATIC FEVER)

LILENKO, S.I.

Antistreptohyaluronidase in the blood in rheumatic fever and
nonrheumatic myocarditis. Vop.pat.krovi i krovoobr. no.6:109-
112 '61. (MIRA 16:3)
(RHEUMATIC FEVER) (HEART--DISEASES) (HYALURONIDASE)

KEDROV, Aleksey Alekseyevich; LILENKO, S.I., red.; KHARASH, G.A.,
tekhn. red.

[Diseases of the myocardium] Bolezni myshtsy serdtsa. Lenin-
grad, Medgiz, 1963. 197 p. (MIRA 16:7)
(HEART--DISEASES)

VYSHEGORODTSEVA, Valentina Dmitriyevna; LILENKO, S.I., red.;
LEBEDEVA, Z.V., tekhn. red.

[Diseases of the blood system] Zabolevaniia sistemy krovi;
klinicheskie lektsii. Leningrad, Medgiz, 1963. 221 p.

(MIRA 16:7)

(BLOOD--DISEASES)

(HEMOPOIETIC SYSTEM--DISEASES)

ISTAMANOVA, Tat'yana Sergeevna; LILENKO, S.I., red.; BUGROVA, T.I.,
tekhn. red.

[Outline of functional hematology] Ocherki funktsional'noi gema-
tologii. Leningrad, Medgiz, 1963. 229 p. (MIRA 16:5)
(HEMATOLOGY)

GUREVICH, Yevsey Savel'yevich, prof.; LILENKO, S.I., red.; ONOSKO,
N.G., tekhn.red.

[Toxic dystrophy of the liver] Toksicheskaya distrofiya
pecheni., Leningrad, Medgiz, 1963. 270 p. (MIRA 17:2)



LILENKO, S.I.

Treatment during the active phase of rheumatic fever and the clinical importance of determining antistreptohyaluronidase and the indices of the diphenylamine reaction. Trudy IPMI 31 no.2:123-127 '63.

(MIRA 17:10)

1. Iz I terapevticheskogo otdeleniya Ob'yedinennoy bol'nitsy imeni Kuybysheva, Leningrad i fakul'tetskoy terapevticheskoy kliniki Leningradskogo pediatricheskogo meditsinskogo instituta.

DYGIN, Viktor Petrovich; LILENKO, S.I., red.

[Autoimmune diseases of the blood system; serology,
clinical aspects and treatment] Autoimmunnye zabolevaniia
sistemy krovi; serologiya, klinika i lechenie. Leningrad,
Meditsina, 1964. 221 p. (MIRA 17:6)

TEYTEL'BAUM, Grigoriy Nischnovich; LILENKO, S.I., red.

[Hemodynamic disorders in some infectious diseases] Naru-
sheniia gemodinamiki pri nekotorykh infektsionnykh zabo-
vaniakh. Leningrad, Meditsina, 1964. 187 p.

(MIRA 17:8)

TSYGANKOV, Grigoriy Mineyevich; VLASOV, Vladimir Kuz'mich;
LILENKO, S.I., red.

[Experience in the treatment of acute pneumonias at home]
Opyt lecheniia ostrykh pnevmonii v domashnikh usloviakh.
Leningrad, Meditsina, 1964. 126 p. (MIRA 17:10)

USSR/Medicine - Deficiency Diseases
Medicine - Vitamins
Aug 1947

"Avitaminosis of Dogs in the North," I. P. Lilenkov,
Vetbiolaboratory Pecheretrov, 1 p
"Veterinariya" No 8 Vol. 24, p. 44

In this experiment German sheep dogs were gathered from all parts of the Soviet Union and shipped to the north. Their winter diet consisted of fish, salt meat, and dried vegetables. In spring a great change was noticed. They were insipid, ill-tempered, lacked appetite, and were unable to work efficiently. As a result of long study this was attributed to a lack of vitamins. It was also found that to prevent avita-

36946

IG
USSR/Medicine - Deficiency Diseases (Contd) Aug 1947
minosis it was necessary to supply dogs with a mini-
mum daily ration of 10 - 15 grams of dry yeast, and
to add dried nettle or a good quality of hay flour or
the soup fed to dogs. A daily dose of a few drops of
concentrated vitamin A was also found to be necessary

36946

LILENKOV, I. P.

LILENKOV, I. P., Lect.
Sverdlov Vet. Experimental Station
"Paratyphous infection of grown cattle."
SO: Vet. 26 (7) 1949, p. 11

LILENKOV, I.P. (Candidate of Veterinary Science)

Lilenkov, IP and M.F. Pronyayeva - "The Appearance of Clinical Indications
in Horses in Natural and Experimentally Induced Brucellosis Infection,"

of
SO: Veterinariya, Vol 27, No 6, 1950.

LILENKOV, I. P. and KOSTIGINA, R. F.

"Some notes about the use of hay, needle and silage juice infusions."

Veterinariya, Vol. 37, No. 1, 1960, p. 59

Lilenkov - Caud Vet Sci - Vet-Bacteriol. Lab., Argamas

LILENKOV, I. P. (Candidate of Veterinary Sciences, Arzamassk Inter-District
Veterinary Bacteriological Laboratory, Gor'ki Oblast'). (Abstracted by
V. A. ALIKAYEV)

"The carotene content in the blood sera of cows."
Veterinariya, vol. 39, no. 2, February 1962 pp. 80

LILENKOV, I.P., kand.veterinarykh nauk; KOSTYGINA, R.F., veterinarnyy vrach

Remarks on the problem of using infusions of hay, conifer needles,
and silage juice. Veterinariia 37 no.1:59-60 Ja '60. (MIRA 16:6)

1. Veterinarno-bakteriologicheskaya laboratoriya, g. Arzamas.

(Hay--Therapeutic use)
(Coniferae--Therapeutic use)
(Ensilage--Therapeutic use)

POLYAKOV, A.A., prof.; TARANOV, M.T., kand. biolog. nauk; POLOZNOV, N.A.,
veterin. vrach; CHEREZOVA, T.Ye., veterin. vrach; KRYUCHKOV, I.I.;
LILENKOV, I.P., kand. veterin. nauk; PETUKHOVA, Ye.A., kand. sel'-
skokhoz. nauk; KHALENEVA, L.D., kand. sel'skokhoz. nauk; BOCHAROV,
D.A., kand. sel'skokhoz. nauk

Sanitation and veterinary hygiene. Veterinariia 41 no.2:
84-99 F '64. (MIRA 17:12)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut veterinarnoy
sanitarii (for Polyakov). 2. Vsesoyuznyy nauchno-issledovatel'-
skiy institut fiziologii i biokhimi sel'skokhozyaystvennykh
zhivotnykh (for Taranov). 3. Kalininskaya nauchno-proizvodstvennaya
veterinarnaya laboratoriya (for Poloznov, Cherezova). 4. Zaveduyushchiy
Rzhevskoy veterinarnoy laboratoriyey, Kalininskaya oblast (for
Kryuchkov). 5. Arzamasskaya veterinarnaya laboratoriya, Gor'kovskoy
oblasti (for Lilenkov). 6. Moskovskaya veterinarnaya akademiya (for
Petukhova, Khaleneva). 7. Moskovskiy tekhnologicheskii institut
myasnoy i molochnoy promyshlennosti (for Bocharov).

LILENKOV, I. I., kand. veterinarnykh nauk

Evaluating the methods for the administration of vitamin A.
Veterinariia 41 no.4:66-67 Ap '65. (MIRA 18:6)

1. Arzamasskaya veterinarnaya laboratoriya.

LILER, M.

Tutundzic, P.; Liler, M. "Electrical conductivity, viscosity, and density of sulfuric acid fluid systems with lower sebacic acids." p. 521. (Priroda. Vol. 18, no. 9, 1953. Zagreb)

SO: Monthly List of East European Accessions, Vol. 3, no. 3, Library of Congress. March 1954.

MILITS, MILITSA

7
5

→ The properties of solutions of dicarboxylic acids in sulfuric acid and their structural diagram. *Pavla S. Tucundzhin, Militsa Ilić, and Bura Kozarović. Glasnik hem. drustva, Beograd 19, No. 9, 643-65 (1954). Referat. Zhar., Khim. (1956), No. 435. — Continuing their work (Glasnik hem. drustva, Beograd 18, 521, 541 (1953). — T. L., and K. investigated the interaction of malonic (I), succinic (II), adipic, (III), o-phthalic (IV), and benzoic (V) acids and phthalic anhydride (VI) with H₂SO₄ (VII). Diagrams are derived for the double systems A-VII, where A is I, II, III, and the systems VI-VII. It is established that 3 dicarboxylic acids form with VII compds. of the type 2H₂SO₄ · 1, reacting as dibasic compds. VI forms only mech. mixts. with VII. The following properties of the solns. were studied: viscosity, elec. cond., n, and d. The basicity of dicarboxylic acids toward VII increases in the order I, IV, II, and III. This agrees with the view of interrelation of the electronic δ_o of the carboxylic group with their distance and the structure of the mol. V exhibits weaker basicity than that of the dicarboxylic acids. VI behaves as a very weak base toward VII. n of the solns. also indicates formation of compds. of the acids with VII, but in this property, themol. structure of the acid has predominant effect.*

N. Vasileff

felj

||

M
NT

LILER, MILITSA

Yugoslavia/Physical Chemistry - Thermodynamics. Thermochemistry. Equilibrium.
Physicochemical Analysis. Phase Transitions, B-8

Abst Journal: Referat Zhur - Khimiya, No 19, 1956, 61032

Author: Tutundzhich, Pante S.; Liler, Militsa; Kosanovich, Bura

Institution: None

Title: Viscosity, Electric Conductivity, Refractive Index and Density
of Liquid Systems of Acetamide with Orthophosphoric and with Di-
chloroacetic Acids

Original

Periodical: Glasnik khem. drushtva, 1955, 20, No 2, 73-83; Serbian; English
resumé

Abstract: Investigated were the viscosity (η), electric conductivity (χ),
refractive index (n), and density (d) of binary systems acetamide
(I)-orthophosphoric acid (II) and I-dichloroacetic acid (III) at 25°
over the concentration interval 0-70 mol % I. In the system I-II
 η was measured only at 40°. Also investigated was the diagram of
equilibrium of system I-II; there has been found a compound of the

Card 1/2

Yugoslavia/Physical Chemistry - Thermodynamics. Thermochemistry. Equilibrium.
Physicochemical Analysis. Phase Transitions, B-8

Abst Journal: Referat Zhur - Khimiya, No 19, 1956, 61032

Abstract: composition 1:1 having the melting point 46.5° . Formation of this compound is confirmed by the nature of isotherms η , n and d while χ decreases uniformly on transition from II to I. In the system I-III there is a maximum at 40 mol % I which the authors explain by the possibility of formation of compounds 1:1 and 1:2. This conclusion is confirmed by the nature of isotherms n , d and χ .

Card 2/2

LILER, MILICA
 YUGOSLAVIA/Physical Chemistry. Thermodynamics, Thermochem- B-8
 istry, Equilibria, Physical-Chemical Analysis, Phase
 Transitions.

Abs Jour: Ref Zhur-Khimiya, No 5, 1957, 14715

Author : Panta Tutundjic, Milica Liler, Djura Kosanovic
 Inst : Chemical Society
 Title : Viscosity, Electrical Conductivity, Refraction Index
 and Density of Binary Liquid Systems: Sulfuric Acid -
 Ethyl Ester, Sulfuric Acid - Amyl Ester and Phosphoric
 Acid - Ethyl Ester.

Orig Pub: Glasnik hem. drustva, 1955, 20, No 6, 349-361

Abstract: The viscosity, electrical conductivity and density of
 liquid systems H₂SO₄- ethyl ester, H₂SO₄ - amyl ester
 and H₃PO₄ - ethyl ester at 25 and 40°, as well as the
 refraction indices of the binary systems of H₂SO₄ and
 H₃PO₄ with ethyl ester at 25° were measured. The vis-
 cosity curves of these systems possess a maximum owing
 to the formation of molecular compounds. The positive

Card Card 1/3

in the ester
system

LILER, M.

Distr: 4E2c(j)/4E3b/4E3d

Hydrogen bonding of nitro compounds with sulfuric acid. 1

I. Equilibrium diagrams of binary systems of nitromethane and *o*-, *m*-, and *p*-nitrotoluene with sulfuric acid. M. Liler (Inst. Chemistry, Belgrade, Yugoslavia). Hydrogen Bonding, Papers Symposium Ljubljana 1957, 519-27 (Pub. 1959).—The equil. diagrams of the binary systems of H₂SO₄ and *o*-, *m*-, and *p*-nitrotoluene were investigated. The formation of a 1:1 addn. compd. is due to H bonding between components, rather than proton transfer. The stability in the cryst. phase seems to be contradictory to the known basicities of mononitro compds. because of the effect of temp. on the equil. in the liquid phase. II. Viscosities, electrical conductivities, refractive indexes and densities of binary liquid systems of sulfuric acid with nitromethane, nitrobenzene, and *o*-, *m*-, and *p*-nitrotoluene. M. Liler and Dj. Kusanovic (Institute of Chemistry, Belgrade). Ibid. 529-43.—The studies were made at 25° and 40°. The formation of addn. compds. according to the equation: $RNO_2 + H_2SO_4 \rightleftharpoons RNO_2 \cdots HOSO_3H \rightleftharpoons RNO_2H^+ + HSO_4^-$ that were obtained in the cryst. phase (part I), affects these liquid-phase properties to various degrees.

according to the stability of the addn. compds., which is the result of the basicity of the mononitro compds. In order to explain some peculiarities, the disruption of the H-bonded structure of H₂SO₄ by the presence of the molts. of the nitro compds. in the mixt. must be taken into account. Kenneth M. Sancier

6
 18W(BV)
 2-40g(NB)(may)
 3

TUTUNDZIC, Panta S., prof. dr. inz.; LIJER, Milica; KOSANOVIC, Dura

Properties of the solutions of dicarboxylic acids in sulfuric acid, and diagrams of equilibrium. Glas Hem dr 19 no.9:549-565 '54.

1. Srpska akademija nauka, Hemijski institut; Teholoski fakultet, Zavod za fizicku hemiju i elektrohemiju, Beograd. 2. Urednik i član Uredivackog odobora, "Glas Hemijskog drustva, Beograd" (for Tutundzic).

TUTUNZIC, Panta S., prof. dr. inz.; LIJER, Milica; KOSANOVIC, Dura

Viscosity, electric conductivity, refraction index, and density of the liquid systems of the orthophosphoric acid with the sulfuric, acetic, valeric, and isovaleric acids respectively. ~~Glasnik Hem~~-dr 20 no.1:1-21 '55.

1. Hemijski institut, Beograd, Zavod za fizicku hemiju i elektrohemiju, Beograd. 2. Urednik i clan Uredivackog odbora, "Glasnik Hemijskog drustva, Beograd" (for Tutundzic).

LILEYEV, A.F.

New types of horizontal welded tanks for agricultural uses.

Stroi.prom.32 no.1:10-14 Ja '54.

(MLRA 7:2)

(Tanks)

LILEYEV, A.F.

7
0
0

✓ Steel parts of a standard 23,000-cubic foot blast furnace.
 A. F. Lileyev, V. Ya. Miller, and A. G. Sokolov. Soviet
From: IS, No. 12, 03 2 (1954). A detailed description is
 given of the steel parts of a blast furnace, hot stoves, and aux-
 iliary equipment of a blast furnace to be operated at 3.2 atm-
 top pressure. It is intended as a standard for all furnaces to
 be built. The charging equipment does not rest on the shell
 but is supported by independent framework, while the skip
 hoist is designed as a cantilever truss not resting on the
 furnace. Their total weight is 3830 tons, excluding tower
 trusses, or 2.51 tons for each cu. m. of furnace vol.
 J. D. Lee

(2)

2/22

LESSIG, Yevgeniy Nikolayevich; ~~LILYEV~~ Aleksandr Fedorovich; SOKOLOV, Aleksandr Georgiyevich; ZELYATROV, V.N., nauchnyy redaktor; ROSTOVTSHEVA, M.P., redaktor izdatel'stva; TOKER, A.M., tekhnicheskii redaktor

[Sheet steel structural elements] Stal'nye listovye konstruktsii.
Moskva, Gos. izd-vo lit-ry po stroit. i arkhitekture, 1956. 479 p.
(Sheet steel) (MLBA 9:12)

LILEYEV, A. F.

Present-day standards and immediate objectives in designing steel
construction elements of blast-furnace plants. Mat. po stal'.
konstr. no.4:3-31 '59. (MIRA 13:8)

(Steel, Structural)
(Blast furnaces)

LILEYEV, A.F., inzh.

General solution and the calculation of elastic strings on
elastic supports. Mat. po met. konstr. no.7:55-73 '62.
(MIRA 17:1)

KOROBOV, V.M., inzh.; LIETEV, A.F., inzh.

Design of masts for resonance under wind pressure. Mat. po
met. konstr. no.9:162-181 '65. (MIRA 18:11)

STRELETSKIY, Nikolay Stanislavovich, doktor tekhn. nauk, prof.;
BLENYA, Yevgeniy Ivanovich, prof.; VEDENIKOV, Georgiy
Stanislavovich, dots.; MUKHANOV, Konstantin Konstantinovich,
dots.; LESSIG, Yevgeniy Nikolayevich, dots.; POPOV, S.A.,
kand. tekhn. nauk, nauchn. red.; LILEYEV, A.F., inzh.,
nauchn. red.

[Metal elements; a special course] Metallicheskie kon-
struktsii; spetsial'nyi kurs. Pod red. N.S.Streletskogo.
Moskva, Stroizdat, 1965. 366 p. (MIRA 19:1)

1. Chlen-korrespondent AN SSSR (for Streletskiy).

117 AND 119 CADERE PROCESSES AND PROPERTIES INDEX 120 AND 118 CADERE

3c K-77

Preparation of pure alumina from Tikhvin bauxites. J. LUSKY (Trans. State Inst. Appl. Chem., Moscow, 1937, No. 8, 14-38).—Packard's process gave good results with bauxite containing SiO₂ 17.4, Al₂O₃ 40.6, and Fe₂O₃ 23.5%, but was inapplicable to samples containing, respectively, 7.6, 63.5, 14.0%, or 5.0, 74.5, 5.7%, since the reactions taking place are: Na₂CO₃ + Al₂O₃ = 2NaAlO₂ + CO₂ and Fe₂O₃ + Na₂CO₃ = 2NaFeO₂ + CO₂. It is necessary to use equimolecular ratios of sodium carbonate and alumina and ferric oxide, respectively, to adjust the ratio Na₂CO₃ : CaCO₃ to 1.5 : 2, to calcine in an oxidising atmosphere at 875-925°, and to wash with water at 90°. Under the conditions employed 85-90% of the alumina is extracted.

CHEMICAL ABSTRACTS.

ASSOCIATED METALLURGICAL LITERATURE CLASSIFICATION

FROM SYNDICATE FROM SCHWAB FROM LITTON

117 AND 119 CADERE 120 AND 118 CADERE

1ST AND 2ND CROSS
PROCESSING AND PROPERTIES INDEX
3RD AND 4TH CROSS

BC

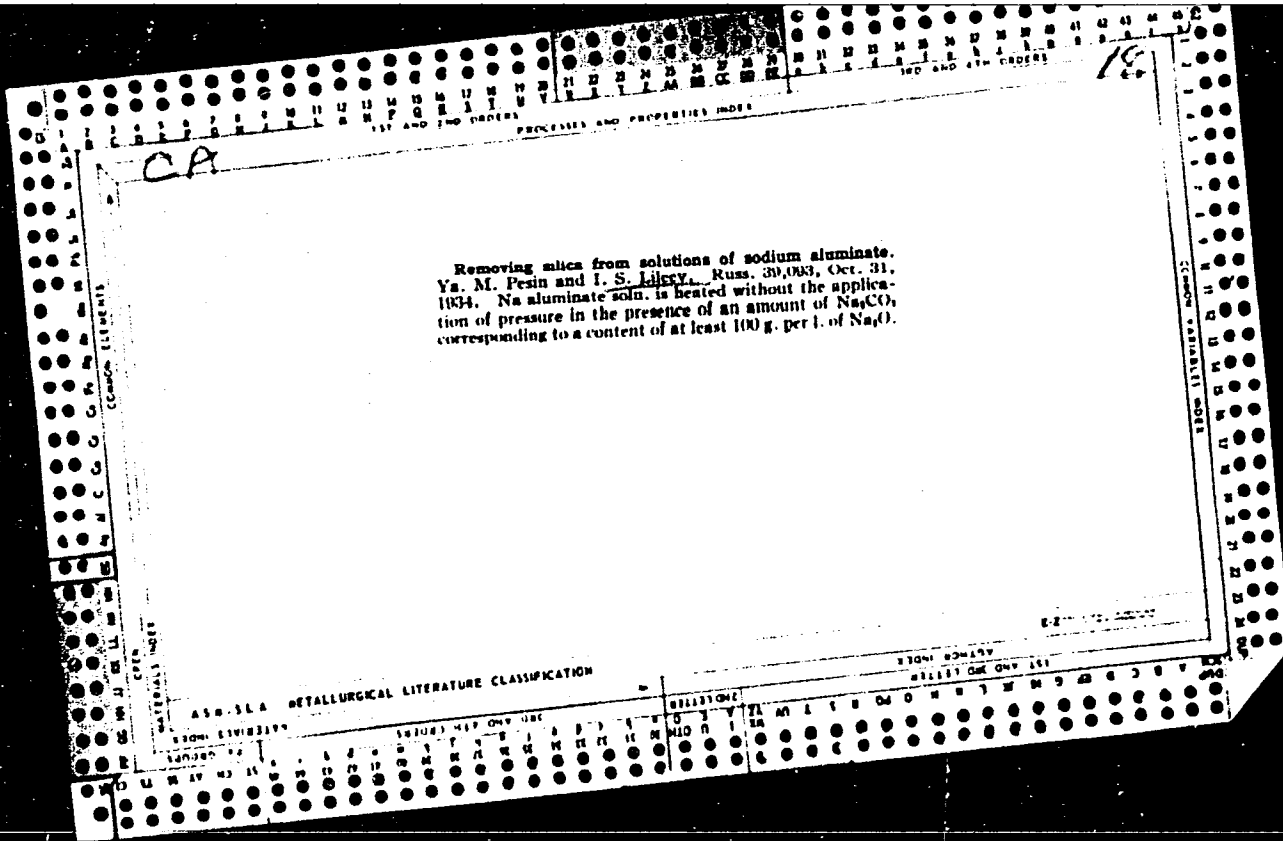
A2

Common Elements
Common Variables Index

ASB-55A METALLURGICAL LITERATURE CLASSIFICATION

FROM SOURCE
SEARCH ONE ONE 111

SOURCE		SEARCH ONE ONE 111																	
1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0



Microfilm frame containing a document page. The page is titled "ALUMINUM OXIDE" and contains a detailed chemical process description. The text is surrounded by a perforated border with labels such as "AUTHOR INDEX", "INDUSTRIES", "100 AND 200 ORDERS", "MATERIALS INDEX", "COMMON VARIABLES INDEX", and "COMMON ELEMENTS".

ALUMINUM OXIDE

Liliev, I. S., Pesin, Ya. M., and Markov, S. S. *Alumini-um Oxide*. Gosudarst. Inst. Prikladnoi Khim., Sbornik Statei, 1910-30, 42-47 (1939). The first commercial production of Al_2O_3 from Tikhvin bauxites containing 13 to 15% SiO_2 is described. The steps are as follows: fuse fine ground bauxite with water and limestone, lixiviate, purify the $Al(OH)_3$ obtained, evaporate, and return the soda solution to the circuit. Of greater interest is the new method producing Al_2O_3 from nepheline containing up to 20% bases and 30% Al_2O_3 , the remainder being SiO_2 . Nepheline is a waste product from the flotation of apatite. The method consists in heating flotation nepheline with limestone in a rotary furnace, lixiviating with a soda solution, removing the limestone- SiO_2 slime (used to produce cement), freeing the Na and K aluminates from SiO_2 , treating with CO_2 , and separating $Al(OH)_3$ from the solution containing Na_2CO_3 and K_2CO_3 . Nepheline thus gives Al_2O_3 , Na_2CO_3 , K_2CO_3 , and cement. Al alums are obtained by treating nepheline with 75% H_2SO_4 and an alkali metal salt. Treating with KCl produces K alums in a 90% yield based on Al_2O_3 . The slime has bleaching properties and can be used to refine petroleum products or to make water glass. Al_2O_3 can be obtained by heating clay at 600° to 800°, treating with HNO_3 , freeing the $Al(NO_3)_3$ from Fe by activated MnO_2 , partly saturating with NH_3 , evaporating, and treating with NH_4OH . The $Al(OH)_3$ residue is calcined, and the NH_4NO_3 solution is evaporated and crystallized.

18

A

Rationalization of the process of obtaining Cr_2O_3 . I. S. Lileev, L. I. Shtalova and S. I. Reznikova. *J. Chem. Ind. (U. S. S. R.)* 18, No. 11, 23-6(1941).—A soln. of 100-200 g. per l. $Na_2Cr_2O_7 \cdot Na_2S$ = 8:7. Since the pptd. $Cr(OH)_3$ is hard to filter, it is only partly washed with 20 times its wt. of H_2O . $NaOH$ and $Na_2S_2O_8$ can be recovered from the filtrate. The residue is ignited at 800-900°. Residual alkali in the 1st washings of the some of it to $Na_2Cr_2O_7$, and therefore the cycle. The Cr_2O_3 is dried at 800-800° and is 99% pure. The overall loss of Cr in the process is 5.5%.
H. M. Leicester

19D AND 4TH COLDS

1ST AND 2ND COLDS

PROCESSES AND PROPERTIES INDEX

COMMON VARIANTS INDEX

ASM-51A METALLURGICAL LITERATURE CLASSIFICATION

1ST AND 2ND COLDS

1ST AND 2ND COLDS

1ST AND 2ND COLDS

Reaction between alumina and sodium sulfate and sodium sulfide. L. S. Liley and R. V. Rozentreyer. *Trudy Khim.-Met. Inst. Akad. Nauk S.S.S.R., Zapadno-Sibirskii Filial* 1949, No. 3, 3-13. --The following were sintered: (1) Al_2O_3 and Na_2SO_4 (1:1) at 1200-1300° in air and in N_2 , (2) Al_2O_3 and Na_2S (1:1) at 900-1000° in N_2 , and (3) Al_2O_3 and Na_2S (1:1) at 1000-1100° in the presence of carbon and in air. In (1), only 1.3-2.6% of Al_2O_3 became sol. In (2) and (3) the processes are rather complex owing to the presence of admixts. of Na_2SO_4 , Na_2SO_3 , and H_2O in

the Na_2S . These admixts. tend to react, directly or indirectly with Al_2O_3 to form Na aluminate. Most of Na_2S remained unchanged. No soln. of Al_2O_3 is attributed to the formation of Na aluminate as a result of secondary reactions in which water and Na_2SO_3 participate.

B. Z. K.
11-5-54
mlj

③

Reaction between alumina and sodium sulfite. I. S. Lilcey and R. G. Rozenreter. *Trudy Khim.-Biol. Inst. Akad. Nauk S.S.S.R., Zapadno-Sibirskii Filial* 1940, No. 3, 15-25.—The dissozn. of Na_2SO_3 was studied at 700-1200°. The reaction products are Na_2SO_4 , Na_2S , and SO_2 . In all cases, about 4-6% Na_2SO_3 remains; this indicates reversibility of the reaction. Thiosulfate was not detected. At 700-800°, the only reaction was $4\text{Na}_2\text{SO}_3 \rightleftharpoons 3\text{Na}_2\text{SO}_4 + \text{Na}_2\text{S}$. At 900° and above, this reaction proceeds simultaneously with $\text{Na}_2\text{SO}_3 \rightleftharpoons \text{Na}_2\text{O} + \text{SO}_2$. At 900 and 1000°, the dissozn. of the sulfite is very small, since less than 1% of SO_2 was detd. At 1100°, the SO_2 was 3.1% and at 1200° it was 18.3%. Reaction between Al_2O_3 and Na_2SO_3 (1:1) was studied at 800-1200°. Reaction products were SO_2 and S in the gas phase and Na aluminate, sulfate, sulfite, thiosulfate, and sulfide in the cake. Formation of SO_2 starts even at 800°, indicating formation of Na aluminate, although the rate of reaction is very small. The rate increases with temp. At 900°, the reaction requires 4 hrs.; at 1000° 30 min.; at 1100°, 20 min.; and at 1200°, less than 10 min. Formation of Na aluminate proceeds according to $\text{Na}_2\text{SO}_3 + \text{Al}_2\text{O}_3 = \text{Na}_2\text{O} \cdot \text{Al}_2\text{O}_3 + \text{SO}_2$. Formation of S proceeds according to $\text{Na}_2\text{S} + 2\text{SO}_2 = \text{Na}_2\text{SO}_4 + 2\text{S}$. B. Z. Kamich

LILEYEV, I. S.

Journal of the American
Ceramic Society
July 1954
Chemistry and Physics

(3)
Method of determining SO_2 in the gas phase. I. S. LILEYEV
AND O. G. EVTERVA. *Akad. Nauk S.S.S.R., Zapadno-Sibirskii
Filial, Trudy Khim.-Met. Inst.*, No. 3, 27-30 (1949).—The gas
stream containing the SO_2 passes through a Drechsel flask contain-
ing water with a few drops of starch solution and one drop of
titrated I_2 solution. As the solution becomes discolored, titrated
 I_2 solution is added dropwise from a burette mounted on the flask
to maintain the violet coloration. Any I_2 carried away by the
gas stream is absorbed by hyposulfite solution. Unreacted SO_2
is absorbed in a flask containing titrated I_2 solution. The method
is particularly suitable for studying the kinetics of reactions tak-
ing place during the sintering of alumina-sulfate mixtures.

B.Z.K.
m

LILEYEV, I.S.

③
7
Reaction between silica and sodium sulfate. I. S. LILEYEV AND
T. I. AVDEYVA. *Uchenye Zapiski S.S.S.R. Zapadno-Sibirskii Filial,
Trudy Khim.-Met. Inst.*, No. 3, 31-34 (1949).—Five parts of
silica gel and marshallite were heated with one part of Na₂SO₄ at
900° to 1200°C. The extent of reaction was determined from the
content of SO₂ in gases and SO₄²⁻ in the cake. Reaction occurred
even at 900° but the rate was very slow. The rate increased with
the temperature; at 1200°, the SO₂ reached 34.6%. The extent
of reaction was about the same for both modifications of silica.
B.Z.K.

LILYEV, I.S.

Journal of the American
Ceramic Society
July 1954
Chemistry and Physics

3

(3)

Reaction between sodium sulfide and silica. I. S. LILYEV AND T. I. AVDEYVA. *Akad. Nauk S.S.S.R., Zapadno-Sibirskii Filial, Trudy Khim.-Met. Inst.*, No. 3, 35-43 (1949).— Na_2S and marshallite (1:5, 1:2, 1:1) were heated at 500°, 700°, and 900°C. for 30 min., and silica gel with Na_2S (5:1) was heated at 700° and 900°. Gases and cakes were analyzed. For a mixture of 1 part Na_2S and 5 parts marshallite, practically all the silica remained insoluble; in addition, a considerable portion of the Na_2S became insoluble in cold water. As the content of Na_2S in the mixture increased, the amounts of sulfide and of silica passing into solution also increased. The value of $\text{Na}_2\text{S}/\text{SiO}_2$ in the solutions obtained from the cakes remained fairly steady (1.7, 1.6, 1.5, 1.3). The silica reacts with the Na_2S to form thiosilicates of the type $n\text{Na}_2\text{S} \cdot n\text{SiO}_2$. One of these, $n\text{Na}_2\text{S} \cdot \text{SiO}_2$, is soluble; the other, $\text{Na}_2\text{S} \cdot n\text{SiO}_2$, is insoluble. Along with the chief reaction, there was a whole series of side reactions, resulting in the formation of H_2S , SO_2 , and S. These reactions are determined by the moisture and sulfate and sulfite present in the Na_2S ; they are particularly pronounced when amorphous silica is used. B.Z.K.

hr

LILEYEV, I.S.

Journal of the American
Ceramic Society
July 1954
Chemistry and Physics

(3)

Reaction between silica and sodium sulfite at the sintering temperature. I.S. LILEYEV AND T.I. AVDEYVA. *Akad. Nauk S.S.S.R., Zapadno-Sibirskii Filial, Trudy Khim.-Met. Inst.*, No. 3, 45-54 (1949).—Mixtures of Na_2SO_3 and SiO_2 (1:1, 1:2, 1:5) were heated at 500° to 1000°C. In the case of the 1:5 mixture, there was little sintering of the particles; the 1:1 mixture was fused at 700°. At 900°, the mixtures were all molten. Liberation of SO_2 increased with $\text{Na}_2\text{SO}_3/\text{SiO}_2$. For mixtures rich in silica, liberation of SO_2 was intensive during the first 5 to 10 min. and then dropped rapidly. For mixtures rich in Na_2SO_3 , liberation of SO_2 proceeded uniformly and over a longer period of time. The formation of S increased with $\text{Na}_2\text{SO}_3/\text{SiO}_2$, but the totals of SO_2 and S were close for the different mixtures. The percentages of reacted Na_2SO_3 were about the same for the different mixtures. Reaction started at 500° and was slow (3% Na_2SO_3), but it increased with temperature. At 900°, 43 to 46% Na_2SO_3 reacted and at 100°, 62 to 65%. The difference between reacted Na_2SO_3 in the case of silica gel and marshallite was not great. More SO_2 and less S were obtained with silica gel, however, than with marshallite.
B.Z.K.

my

LILEYEV, I. S.

SOV/137 59-2-2829

Translation from: Referativnyy zhurnal. Metallurgiya, 1959, Nr 2, p 75 (USSR)

AUTHORS: Maslova, Ye. I., Lileyev, I. S.

TITLE: On the Reaction Between Li_2O , Al_2O_3 , SiO_2 , and CaO at Sintering Temperatures. Communication I. Formation of Lithium Aluminate in the Sintering of Lithium Carbonate and Aluminum Oxide (O zai modeystvii mezhdu Li_2O , Al_2O_3 , SiO_2 i CaO pri temperaturakh spekaniya. Soobshcheniye I. Obrazovaniye alyuminata litiya pri spekaniy karbonata litiya i okisi alyuminiya)

PERIODICAL: Izv. Sibirsk. otd. AN SSSR, 1958, Nr 1, pp 63-70

ABSTRACT: The reaction between Li_2CO_3 and Al_2O_3 begins in the 450-500°C temperature range. It is established that the most intensive reaction takes place at 1000-1100°C. The constants of the rate of the reaction of formation of Li aluminate are the following: $K_{600^\circ} = 0.01667 \cdot 10^{-3}$, $K_{700} = 0.344 \cdot 10^{-3}$, and $K_{750} = 0.777 \cdot 10^{-3}$. The activation energy $E = 47,580$ cal/mole.

P B

Card 1/1

AVDEYEVA, T.I.; LILEYEV, I.S.

Interaction of sodium sulfide with silica. Izv. Sib. otd. AN SSSR
no.2:43-50 '58. (MIRA 11:9)

1. Zapadno-Sibirskiy filial AN SSSR:
(Sodium sulfide) (Silica)

LILEYEV, I. S.

SOV/137-59 2 2828

Translation from: Referativnyy zhurnal. Metallurgiya, 1959 Nr 2, p 75 (USSR)

AUTHORS: Maslova, Ye. I., Lileyev, I. S.

TITLE: On the Reaction Between Lithium, Aluminum, Silicon, and Calcium Oxides at Sintering Temperatures (O vzaimodeystvii mezhd u oksidami litiya, alyuminiya, kremniya i kal'tsiya pri temperaturakh spekaniya)

PERIODICAL: Izv. Sibirsk. otd. AN SSSR, 1958, Nr 4, pp 67-73

ABSTRACT: The authors investigate the reaction between the oxides of Li, Al, Si, and Ca and study the effect of CaO on the formation of $\text{Li}_2\text{O} \cdot \text{Al}_2\text{O}_3$. The study of the reactions by thermal and microscopic analysis shows that Li_2O_3 does not react with CaO up to a temperature of 1230°C . beyond which temperature the eutectic melting of the mixture begins. During sintering Li_2O displaces CaO from $\text{CaO} \cdot \text{Al}_2\text{O}_3$. The reaction begins at $540 - 600^\circ$. The decomposition of $\text{CaO} \cdot \text{Al}_2\text{O}_3$ is fully completed at 1000° . The cake resulting from the sintering of the Al_2O_3 , CaO, and Li_2O mixtures contains $\text{Li}_2\text{O} \cdot \text{Al}_2\text{O}_3$ and CaO. This proves that Li aluminate is the most stable compound here and that CaO does not impede its formation.

V. V.

Card 1/1

BARKOVA, F.F.; LILEYEV, I.S.

Kinetics of the interaction of solid lithium carbonate and ammonium chloride. Izv. Sib. otd. AN SSSR no.7:36-39 '58. (MIRA 11:9)

1. Zapadno-Sibirskiy filial AN SSSR.
(Lithium carbonate) (Ammonium chloride)

BERGER, A.S.; LILEYEV, I.S.

Kinetics of the reaction of β -dicalcium silicate with caustic
soda solutions. Izv.Sib.otd.AN SSSR no.2:46-53 '59.
(MIRA 12:7)

1. Zapadno-Sibirskiy filial Sibirskogo otdeleniya AN SSSR.
(Calcium silicates) (Sodium hydroxide)

YAKOVLEV, L.K.; LILEYEV, I.S.

Chemistry of processes taking place in the system $\text{Na}_2\text{O} - \text{Al}_2\text{O}_3 - \text{SiO}_2$ at sintering temperatures. Report No.1: Reaction of kyanite and soda. Izv.Sib.otd.AN SSSR no.5:64-74 '59.
(MIRA 12:10)

1. Khimiko-metallurgicheskiy institut Sibirskogo otdeleniya
Akademii nauk SSSR.
(Kyanite) (Soda)

MASLOVA, Ye.I.; LILEYEV, I.S.

Reaction between Li_2O , Al_2O_3 , SiO_2 and CaO at sintering temperatures.

Report No.4: Reaction of lithium silicate with calcium oxide at sintering temperatures. Izv. Sib. otd. AN SSSR no.6:78-82 '59.
(MIRA 12:12)

1. Khimiko-metallurgicheskiy institut Sibirskogo otdeleniya AN SSSR.
(Lithium silicate) (Calcium oxide)

YAKOVLEV, L.K.; LILEYEV, I.S.

Studying the chemistry of processes taking place in the system
 $\text{Na}_2\text{O} - \text{Al}_2\text{O}_3 - \text{SiO}_2$ at sintering temperatures. Izv. Sib. otd. AN
SSSR no.8:62-75 '59. (MIRA 13:2)

L.Khimiko-metallurgicheskiy institut Sibirskogo otdeleniya AN SSSR.
(Sintering)

LILEYEV, I.S.; ROZENTRETER, R.G.; AVDEYEVA, T.I.

Chemism of the sintering process of sulfate-containing aluminum
charges. Trudy Khim.-met.inst.Sib.otd.AN SSSR no.15:11-25 '60.
(MIRA 14:6)

(Aluminum--Metallurgy) (Chemistry, Metallurgic)

ROZENTRETER, R.G.; TKACHEVA, Z.S.; PAVLYCHEVA, A.I.; LILEYEV, I.S.

Sintering of sulfate-limestone charges. Trudy Khim.-met.inst.Sib.
otd.AN SSSR no.15:27-39 '60. (MIRA 14:6)
(Aluminum--Metallurgy) (Sintering)

ROZENTRETER, R.G.; TKACHEVA, Z.Š.; GORYUNOVA, A.A.; LILEYEV, I.S.

Sintering of soda-sulfate-limestone charges. Trudy Khim.-met.inst.
Sib.otd.AN SSSR no.15:41-54 '60. (MIRA 14:6)
(Aluminum—Metallurgy) (Sintering)

AVDEYEVA, T.I.; KOLOSOV, A.S.; LILEYEV, I.S.

Optima conditions for the leaching of sulfate^u limestone sinters. Trudy
Khim.-met.inst.Sib.otd.AN SSSR no.15:61-73 '60. (MIRA 14:6)
(Leaching) (Alumina)

AVDEYEVA, T.I.; LILEYEV, I.S.

Desiliconization of aluminate solutions with preparation of alumina
by the sulfate-limestone method. Trudy Khim.-met.inst.Sib.otd.AN
SSSR no.15:75-80 '60. (MIRA 14:6)

(Aluminate) (Silicon)

LILEYEV, I.S.; ROZENTRETER, R.G.; AVDEYEVA, T.I.; TKACHEVA, Z.S.; MOROZOV, G.S.

Pilot-plant testing of the sulfate-limestone method of preparing
alumina from Salair bauxites. Trudy Khim.-met.inst.Sib.otd.AN SSSR.
no.15:81-89 '60. (MIRA 14:6)
(Salair Ridge—Bauxite) (Alumina)

SOV/78-5-1-16/45

5: (2)

AUTHORS:

Permyakova, T. V., Lileyev, I. S.

TITLE:

Conditions for the Formation of Sodium Gallocarbonate

PERIODICAL:

Zhurnal neorganicheskoy khimii, 1960, Vol 5, Nr 1, pp 91 - 94
(USSR)

ABSTRACT:

The authors refer to data contained in publications concerning the aluminocarbonates. Together with the aluminosilicates, aluminogermanates, and gallocarbonates they constitute the large category of the widely spread compounds of the type $R_2O \cdot R_2O_3$. There are no data available in publications as to the sodium gallocarbonate. The authors therefore investigated the formation of this compound by adding sodium bicarbonate to sodium gallate at room temperature and by analyzing the precipitates thus obtained. They established the influence of the pH and of the caustic modulus M_c (ratio of Na_2O to Ga_2O_3 in g-mol) on the composition of the precipitate (Table 1). Pure $Na_2O \cdot Ga_2O_3 \cdot CO_2 \cdot nH_2O$ was obtained with

Card 1/2

Conditions for the Formation of Sodium Gallocarbonate SOV/78-5-1-16/45

pH 9.50 - 9.90, whereas mixtures of gallium hydroxide and sodium gallocarbonate were obtained at lower pH-values. No precipitation occurs with Na_2CO_3 (pH > 10) (Table 2). The same experiments were conducted at 90°, without any sodium gallo-carbonate precipitating. By plotting the ionization radiograms and the heating curves of sodium gallocarbonate (Figs 1,2), sodium bicarbonate, and gallium hydroxide, the authors were able to prove that sodium gallocarbonate is no mixture of the components but is an individual compound. There are 2 figures, 2 tables, and 9 references, 4 of which are Soviet.

SUBMITTED: October 16, 1958

Card 2/2

5.2620

65929 69629

AUTHORS:

Permyakova, T. V., Lileyev, I. S.

S/078/60/005/05/02/037
B004/B016

TITLE:

Some Physicochemical Properties of Sodium Gallium Carbonate¹⁷

PERIODICAL:

Zhurnal neorganicheskoy khimii, 1960, Vol. 5, No. 5,
pp. 999-1002

TEXT: In Ref. 1 the authors reported on the preparation of the compound $\text{Na}_2\text{O} \cdot \text{Ga}_2\text{O}_3 \cdot 2\text{CO}_2 \cdot n\text{H}_2\text{O}$ and on its detection by means of thermal and X-ray analysis.

It is the purpose of the present paper to compare sodium gallium carbonate with sodium aluminum carbonate. Sodium gallium carbonate is a white microcrystalline powder with weak birefringence. Fig. 1 shows an electron microscopic photograph of this compound the crystal structure of which was confirmed also by the X-ray picture depicted in Fig. 2. The heating and cooling curves given in Fig. 3 show three irreversible thermal effects. To study these effects, samples of sodium gallium carbonate were heated isothermally at different temperatures and tested afterwards for their Na, Ga, CO_2 , and H_2O contents according to Ref. 1. Fig. 4 shows the results. At 200°CO_2

Card 1/3

Some Physicochemical Properties of Sodium
Gallium Carbonate

65929 69529

S/078/60/005/05/02/037
B004/B016

begins to escape. This process is completed at 500° . The water is rapidly removed between $300-400^{\circ}$. It may be seen from the X-ray pictures shown in Fig. 2 that NaGaO_2 forms at 500° . The nature of the third, small thermal effect is still unclear. The results of the reaction of sodium gallium carbonate with water are presented in a table. The dissolved medium was determined spectrophotometrically. Water exerts a decomposing effect on sodium gallium carbonate (like acid and lye). Decomposition is completed after boiling for 5 min. The authors studied the ion-exchange properties of sodium gallium carbonate by means of a reaction with AgNO_3 . They obtained the silver gallium carbonate $\text{Ag}_2\text{O} \cdot \text{Ga}_2\text{O}_3 \cdot 2\text{CO}_2 \cdot n\text{H}_2\text{O}$ which was confirmed by means of the X-ray pictures illustrated in Fig. 5. Fig. 6 shows the X-ray picture of sodium aluminum carbonate, and Fig. 7 compares the heating curves of sodium gallium carbonate and sodium aluminum carbonate. The experimental results prove that these two compounds and sodium aluminosilicate (as an ion exchanger) behave similarly due to the fact that they belong to the same type of compounds having the composition

Card 2/3

~~65929~~ 69629

Some Physicochemical Properties of Sodium
Gallium Carbonate

S/078/60/005/05/02/037
B004/B016

$R_2^I O \cdot R_2^{III} O_3 \cdot R^{IV} O_2 \cdot nH_2O$. There are 7 figures, 1 table, and 4 Soviet references.

ASSOCIATION: Institut khimii silikatov Akademii nauk SSSR (Institute of
Silicate Chemistry of the Academy of Sciences of the USSR) ✓

SUBMITTED: February 9, 1959

Card 3/3

PERMYAKOVA, T.V.; LILEYEV, I.S.

Carbonization of sodium aluminate solutions containing a small amount of sodium gallate. *Zhur.neorg.khim.* 5 no.9:1999-2006 S '60. (MIRA 13:11)

1. Institut khimii silikatov Akademii nauk SSSR, Laboratoriya khimii kremniya.
(Sodium aluminate) (Sodium gallate)

U2007
S/080/60/033/007/002/020
A003/A001

152120

AUTHORS: Dubrovo, S. K., Lileyev, I. S.

TITLE: Glass-Like Gallo-Silicates and Their Properties

PERIODICAL: Zhurnal prikladnoy khimii, 1960, Vol. 33, No. 7, pp. 1471-1476

TEXT: The possibility of obtaining glasses⁵ in simple gallosilicate systems was investigated and the dependence of their physico-chemical properties on the content of gallium oxide in them was studied. Three-component glasses were prepared: $\text{Na}_2\text{O-Ga}_2\text{O}_3\text{-SiO}_2$, $\text{Li}_2\text{O-Ga}_2\text{O}_3\text{-SiO}_2$ and $\text{CaO-Ga}_2\text{O}_3\text{-SiO}_2$. The melting was carried out in a platinum crucible at 1,460-1,500°C. The glasses containing gallosilicates are less inclined to crystallization than the corresponding alumosilicate glasses. It was shown that the density of the glasses increases if the molar percentage of gallium oxide in it is increased at the expense of silicon dioxide or sodium oxide. The density of gallosilicate glasses is considerably higher than that of alumosilicate glasses. The refractive index depends mainly on the ratio between silica and gallium oxide. The refractive index increases with the content of gallium oxide. The average dispersion attains its highest value at the ratio $\text{SiO}_2:\text{Ga}_2\text{O}_3 = 3$. The highest refractive

Card 1/2

82665

Glass-Like Gallo-Silicates and Their Properties

S/080/60/033/007/002/020

A003/A001

index is obtained in gallosilicate glasses containing lithium oxide. The linear thermal expansion was studied with the aid of a dilatometer of the ГИКИ³(GIKI) type within the range of 20-400°C. The addition of gallium oxide to sodium-silicate glasses decreases their expansion coefficient. The micro-hardness increases with the content of gallium oxide and aluminum oxide. Gallosilicate glasses, however, have a microhardness which is by 17-23% lower than that of alumosilicate glasses. There are 5 tables, 4 graphs and 5 references: 1 Soviet, 3 English and 1 American.

SUBMITTED: February 17, 1960

Card 2/2

GUSEVA, I.V.;PRIKHID'KO, N.Ye.;LILEYEV, I.S.

Synthesis of lithium silicates from aqueous solutions. Zhur.
neorg.khim. 6 no.5:1028-1034 My '61.

(MIRA 14:4)

1. Institut khimii silikatov AN SSSR.

(Lithium silicate)

S/080/62/035/003/020/024
D204/D302

1512120
AUTHORS: Dubrovo, S. K., Lilevay, I. S., Mozheyko, V. I. and
shmidt, Yu. A.

TITLE: Glasses with increased heat stability for chemical
laboratory ware and apparatus

PERIODICAL: Zhurnal prikladnoy khimii, v. 35, no. 3, 1962, 669-671

TEXT: The object of the present work was to prepare low-borate
glasses with increased thermal shock resistance, applicable to
the above uses. The range of compositions tried was (wt.%): SiO₂
72.5 - 75.0, Al₂O₃ 6.0 - 7.8, B₂O₃ 3.2 - 4.0, BaO 5.0, CaO 0 - 1.7,
Na₂O 5.0 - 7.8, Li₂O 0.5 - 1.0, CaF₂ 0 - 2.5. BaO may be replaced
by SrO. The glasses were fused at 1500 - 1520°C and their coeffi-
cients of linear thermal expansion (α), softening temperature,
tendency towards crystallization and chemical stability were mea-
sured. Two of these glasses, AT-24 (SiO₂ 75.0, Al₂O₃ 8.0, B₂O₃ 3.2,

Card 1/3

Glasses with increased ...

S/080/62/035/003/020/024
D204/D302

BaO 4.8, CaF₂ 1.7, Na₂O 6.8 and Li₂O 0.5) and BT-24 (VT-24) (SiO₂ 72.6, Al₂O₃ 6.8, B₂O₃ 4.0, BaO 5.0, CaO 0.5, CaF₂ 2.5, Na₂O 7.8, Li₂O 0.75) were prepared on a larger scale in the Druzhnaya Gorka glassworks and were there shaped into articles. It was found that $\alpha_{20-400^{\circ}\text{C}}$ was $53-60 \times 10^{-7}/^{\circ}\text{C}$ [Abstracter's note: $\text{cm}/^{\circ}\text{C}?$ 7], the softening temperatures were $\sim 570^{\circ}\text{C}$ and there was no tendency towards devitrification. The glasses were stable to distilled water and 1N H₂SO₂ on prolonged boiling, but less so to 2N NaOH. All At-24 ware withstood quenching through 170^oC, whilst VT-24 was only slightly less shock resistant. Thermal shock resistance was thus superior to that of glass no. 23 and 29 produced at the D.G. works and to 4-32 (Ts-32) glass. The same physico-chemical tests were carried out on commercial glasses for comparison. The results are briefly discussed and it is concluded that the glasses developed are suitable for production of chemical glass ware and appa-

Card 2/3

Glasses with increased ...

S/080/62/035/003/020/024
D204/D302

ratus. There is 1 table and 2 Soviet-bloc references.

SUBMITTED: May 30, 1961

Card 3/3

DUBROVO, S.K.; LILEYEV, I.S.; MOZHEYKO, V.I.; SHMIDT, Yu.A.

Glasses with high thermal resistance for chemical laboratory wares
and apparatus. Zhur.prikl.khim. 35 no.3:669-671 Mr '62.
(MIRA 15:4)

(Glass) (Chemical laboratories--Equipment and supplies)

L 59551-65 EWG(j)/EWT(m)/EPF(c)/EPR/EWP(t)/EWP(b) Pr-4/Ps-4 LJP(c) JD/JG

ACCESSION NR: AR5012846

UR/0137/65/000/003/G028/G028

SOURCE: Ref. zh. Metallurgiya, Abs. 3G175

31

AUTHOR: Permyakova, T. V.; Lileyev, I. S.

B

TITLE: Chemical mechanism of the process of carbonization of aluminate solutions containing small additions of sodium gallate

CITED SOURCE: Tr. 3-go Vses. soveshchaniya po khimii i tekhnol. glinozema. Yerevan, 1964, 399-410

TOPIC TAGS: carbonization, aluminate, sodium gallate, sodium allummate, gallium-72, radioactive isotope, aluminum oxide, sodium monoxide, gallium, chemical separation, chemical precipitation, chemical mechanism, chemical analysis, chemical tracer, sodium hydroxide, gallium oxide monohydrate, sodium gallocarbonate

TRANSLATION: The process of carbonization of sodium aluminate solutions containing small additions of sodium gallate was studied by use of the radioactive

Card 1/2