KOROS, E.

Thermoreaction of alkali compounds and boric acid. E. Schulek and E. Koros (L. Eötvös Univ., Budapest). *Acta Chim. Acad. Sci. Hung.* 3, 301-3(1953)(in German).—Complete conversion to borate was obtained on 10-min. ignition of a mixt. contg. 8 parts H_3BO_3 to 1 part salt as follows: KNO_3 600°, LiCl 300°, CsCl or RbCl 400°, NaCl or KCl 800-850°, K_2SO_4 1000°. The temps. required parallel the m.ps. for the halides. Investigation of the $KCl-H_3BO_3$ reaction by chem. analysis, x-ray analysis, and microscopic analysis confirmed that the transformation starts at 450° and is complete at 900°. At lower temps. the product consists of hexagonal crystals; a glass is formed at the higher temps. B. P. Block

11-5-54

KOROS, ENDRE

Jan 10, 1954
Analytical Chemistry

Chemistry

Significance of the formation of chelate complexes in analytical chemistry. I. Complexometric titrations. Endre Koros (Eötvös-Univ., Budapest). *Magyar Kem Lapja* 8, 103-8(1953).—A review with 25 references in which analytical methods with complexon I, II, and III are described.
István Finály

MF
2-14-54

Körös, E.

②

14. Reduction of alkaline perchlorates and their transformation into borates. — *Az alkáliperklorátok redukciójáról és boráttá alakításáról* — E. Schulek and E. Körös. (Hungarian Journal of Chemistry — *Magyar Kémiai Folyóirat* — Vol. 59, 1953, No. 4, pp. 107—111, 6 tabs.)

Experiments were carried out to reduce the alkaline perchlorates in an aqueous solution and in a solid state. The reduction of the alkaline perchlorates in an aqueous solution using glucose-nitric acid, hydroxylamine, hydrazine, ascorbic acid, concentrated hydrogen chloride, hydrogen bromide or hydrogen iodide as reducing agents was unsuccessful. In the solid state the reduction of the perchlorates fused with oxalic acid, sodium carbonate, ammonium halide etc. was incomplete and glow losses occurred. Alkaline perchlorates heated with solid boric acid in an adequate quantity for 8 to 10 minutes were transformed quantitatively into the corresponding borates. Quantitative determination of the borates thus obtained can be realized by known methods.

D. F.

AF
10-12-54

Körös, E.

(2) 5

14. **Investigations on the thermoreaction of alkaline compounds with boric acid** — *Az alkálivegyület k és bórsav termoreakciójának tanulmányozása* — E. Schulek and E. Körös. (Hungarian Journal of Chemistry — *Magyar Kémiai Folyóirat* — Vol. 59, 1953, No. 4, pp. 111 11, 1 tab.)

The temperatures for the conversion of alkaline compounds into the corresponding borates were determined. It was found that potassium nitrate was transformed into borate at 500° C, potassium chloride and potassium chlorate at 800° C and potassium sulfate at 1000° C. The temperatures of the complete transformations of the alkaline chlorides into the corresponding borates increase parallel with the melting points of the alkaline chlorides: lithium chloride (mp 614° C) is transformed at 300° C, caesium chloride (mp 642° C) and rubidium chloride (mp 717° C) at 490° C, potassium chloride (mp 770° C) and sodium chloride (mp 800° C) between 800—850° C only. By x-ray and microscopic investigations of the thermochemical reaction between potassium chloride and boric acid it was established that in the melt heated at 350° C optically negative, hexagonal crystals of potassium borate were formed.

D. V.

AF
10-12-54

KOROS, E.

Determination of calcium and magnesium in the presence of each other with the aid of disodium-dihydrogen-ethylenediamine-tetraacetate (with complexon III). p. 137. (Magyar Kemiai Folyoirat, Budapest, Vol. 59, no. 5, May 1953)

SO: Monthly list of East European Accessions (EEAL), LC Vol 4, No. 6, June 1955, Uncl

KOROS, ENDRE

3

Reaction of sulfur with water and formation of polysulfides. Elemér Schulek, Endre Kerös, and László Maros (Eötvös Loránd Tudományegyetem, Budapest). *Magyar Tudományos Akad. Kém. Tudományok Osztályának Közleményei* 7, 91-100(1955).—Sulfur reacts with boiling H_2O according to $2S + 2H_2O = H_2S + H_2SO_2$. H_2SO_2 decomp. instantaneously in acid soln. to SO_2 and S, and in alk. soln. to $S_2O_3^{--}$ and H^+. In aq. medium S reacts with OH^- upon warming according to $12S + 6\,OH^- = 2(S.S_4)^{--} + S_2O_3^{--} + 3H_2O$. The polysulfide hydrolyzes slowly when boiled forming $S_2O_3^{--}$ and H_2S. In the reaction between S and OH^-, the polysulfide is only an intermediate product. S_4^{--} is the largest stable polysulfide in aq. soln. D. F.

7

KOROS, E.

East Germany/Inorganic Chemistry. Complex Compounds. C

Abs Jour : Referat. Zhurnal Khimiya, No 6, 1957, 18326

Author : E. Schulek, E. Koros, L. Maros.
Inst : Academy of Sciences of Hungary
Title : Sulphur Hydrolysis and Chemistry of Polysulfides.

Orig Pub : Acta Chim. Acad. Sci. Hung., 1956, 10, No 1 - 3

Abstract : When fine sulphur powder is boiled in water, hydrolysis is taking place in accordance with the reaction $2S + 2H_2O = H_2S + H_2SO_2$. The forming H_2SO_2 decomposes immediately according to one of the schemes: $2H_2SO_2 = SO_2 + S + 2H_2O$ (at pH < 7), or $2H_2SO_2 = S_2O_3^{2-} + H_2O + 2H^+$ (at pH > 7). The attempts to isolate H_2SO_2 or its salts proved to be unsuccessful. The correctness of the above equations was confirmed only by the ratio of the hydrolysis products. In the discussed solution of $AgClO_4$, the hydrolysis by sulphur proceeds according to the equation $4S + 4H_2O + 6Ag^+ = 3Ag_2S + SO_4^{2-} + 8H^+$. If sulphur is

Card 1/2

KOROS, E.

Hydrolysis of sulfur and the chemistry of polysulfanes

E. Schulek, [illegible]

Budapest.

reaction between [illegible] and H [illegible]

[illegible]

(are an intermediate product [illegible]

RM

19 5

Investigation of exchange reactions with the radioactive sulfur isotope (S^{35}). I. Endre Koros, László Maros, István Fehér, and Elemér Schulek. *Magyar Kém. Folyóirat* 63, 213-16(1956).—Various authors have investigated the exchange reaction with polysulfide (I) contg. S^{35} in hot soln. during decompn. with acid. Since in this case S also is pptd., the authors attempted the production of I in an O_2-free atm. without prolonged boiling, transforming the polysulfidic S into thiocyanate by means of KCN, or liberating H_2S by boiling with H_3BO_3, and prepd. $BaSO_4$ from this, after which the activity of the latter was measured. S^{35} was produced from methionine by way of $BaSO_4$. In the microapp. described I was formed within a few min. from Na_2S and S^{35} at low heat, and this was decompd. with KCN and H_3BO_3. The H_2S was boiled out, transformed into $BaSO_4$ by NH_4OH and H_2O_2, the thiocyanate was oxidized in the remaining soln. with Br_2, and $BaSO_4$ was formed. The activity was measured with consideration of the autoabsorption of $BaSO_4$. The S of I was completely exchanged. In addnl. expts. S was dissolved in abs. toluene and put into the test tube together with Na_2S. The Na_2S and the I formed are insol. in toluene; the decompn. showed that the exchange took place also in the solid phase. In the expts. sulfide and thiocyanate were in the soln. simultaneously, and an investigation was therefore made to discover whether a S exchange took place between them. This was not the case. Since in the presence of O_2 the sulfide forms thiosulfate easily, an investigation was made also to discover whether an exchange took place between the thiocyanate and the thiosulfate. These expts. also remained neg. From *C.Z.* 1958, 7057-8. F. X. G.

KOROS, ENDRE

HUNGARY/Analytical Chemistry - Analysis of Inorganic Substances E-2

Abs Jour : Ref Zhur - Khimiya, No 3, 1958, No 7628

Author : Koros Endre
Inst : Not Given
Title : A New Method for the Titrimetric Determination of Fluorides.

Orig Pub : Acta. pharmac. hung., 1957, 27, No 1-2, 10-11

Abstract : A method is described which is based on the titration of F^- with a solution of $Th(NO_3)_4$ using pyrocatechol violet as the indicator. The solution to be analyzed, containing 0.05-2 mg.-equiv. of F^- is diluted to 2-60 ml. and the pH is adjusted to 5-6.5. From 1-3 drops of a 0.1% indicator solution is added and the sample titrated with 0.1N $Th(NO_3)_4$ solution until the color changes from yellow to blue. The halides and nitrates of the alkali metals and ammonia as well as CH_3COONH_4 and H_3BO_3 do not interfere with the determination. The accuracy of the determination is ±0.5%.

Card : 1/1

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KOKOS, E.

7/2

Distr: 4E2c/4E4j

7 27

✓ Ethylenediaminetetraacetate (EDTA) titration of zinc in
brass and bronze, and of cobalt in the presence of copper. 27
E. Koros and Z. Remport-Horvath (L. Eötvös Univ., Buda-
pest). *Chemist Analyst* 46, 91-2(1957).—Procedures for
the EDTA titration of Zn in Cu soln., Zn and Cu in brass,
Zn in bronze, and Co and Cu in a single sample with Xylenol
Orange (I) as indicator at pH 4.5 to 6.0 are described. Use
of I avoids the usual cyanide masking and demasking of the
heavy metals. Cu interference is obviated by reduction
with ascorbic acid and pptn. of Cu(I) iodide or thiocyanate,
which need not be filtered off. Both Cu and Zn can be
detd. successively by addn. of iodide and titration of the
free I with thiosulfate followed by EDTA titration of Zn.
For brass, prior soln. in HNO_3 is followed by EDTA titra-
tion. For bronze, Sn and Pb are sepd. as metastannic acid
and $PbSO_4$, resp., prior to titration. Co and Cu in a single
1/1 sample are detd. by iodometric titration of the Cu and EDTA
titration of Co on a 2nd aliquot of the soln. B. M. B.

HUNGARY / Physical Chemistry. Kinetics. Combustion. B
Explosions. Topochemistry. Catalysis.

Abs Jour: Ref Zhur-Khimiya, No 24, 80725.

Author : Koros E., Maros L., Feher I., Schulek E.
Inst : Not given.
Title : Investigation of the Exchange Reactions Involving Radioactive Sulfur. I. Information Pertaining to Exchange of Sulfur Atoms in Polysulfides.

Orig Pub: Magyar kem. folyoirat, 1957, 63, No 8, 213-216.

Abstract: Previously published works on the atom exchange in polysulfides were thoroughly reviewed. A method of separation of sulfides from polysulfide ions is proposed. The components involved were converted into $BaSO_4$. Activities were determined with the use of G.-M. counters. An

Card 1/2 21

Koros, Endre

Dist: 4E4j

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Data on the determination of some cyano-complex-forming metals by means of cyanogen bromide. Elemér Schulek, Endre Koros, and József Kéthelyi (Eötvös Lorand Univ., Budapest). *Magyar Kém. Folyóirat* 63, 229-32(1957). — Cyano complexes of Cd, Zn, Ni, and Cu can be completely decompd. by boiling with boric acid. Cupro-complexes can be only partially decompd. and the degree of decompn. is dependent on the exptl. conditions. Cd and Zn complexes can be completely decompd by HCHO, whereas Ni complexes give $(Ni(CN)_4)^{--}$ and Cu complexes $(Cu(CN)_3)^{-}$. Under suitable conditions, by measuring the amt. of CN- bond to the metal, Cu and Ni could be detd with a deviation of 1-2%.

Sam Pats.

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Koros, E.

Distr: 4E2c

29

32. **Microdetermination of thorium (by E. D. T. A. titration).** R. Pribil, E. Koros. *Magyar Kémiai Folyóirat.* Vol. 64, 1958, No. 2, pp. 55—57, 3 tabs.

3/1

A critical survey of known methods for the complexometric determination of thorium is given and a new micro-method elaborated by the author is described. Titrations are carried out by means of a 0.01 or 0.001-*M* solution of E. D. T. A. (complexon III) in the presence of Xylenol Orange indicator. Alkali and alkali-earth metals, ammonium ions, sulphate, acetate and halogens (except fluoride) do not interfere. There is no interference at *p*H 2 in the presence of small amounts (5—10 mg) of zinc, aluminium and lanthanum or by manganese (100 mg) and uranium (50 mg). Copper may be masked by KSCN + ascorbic acid and lead by KI. Iron, cobalt and nickel must be removed before carrying out the determination.

LB
1/1

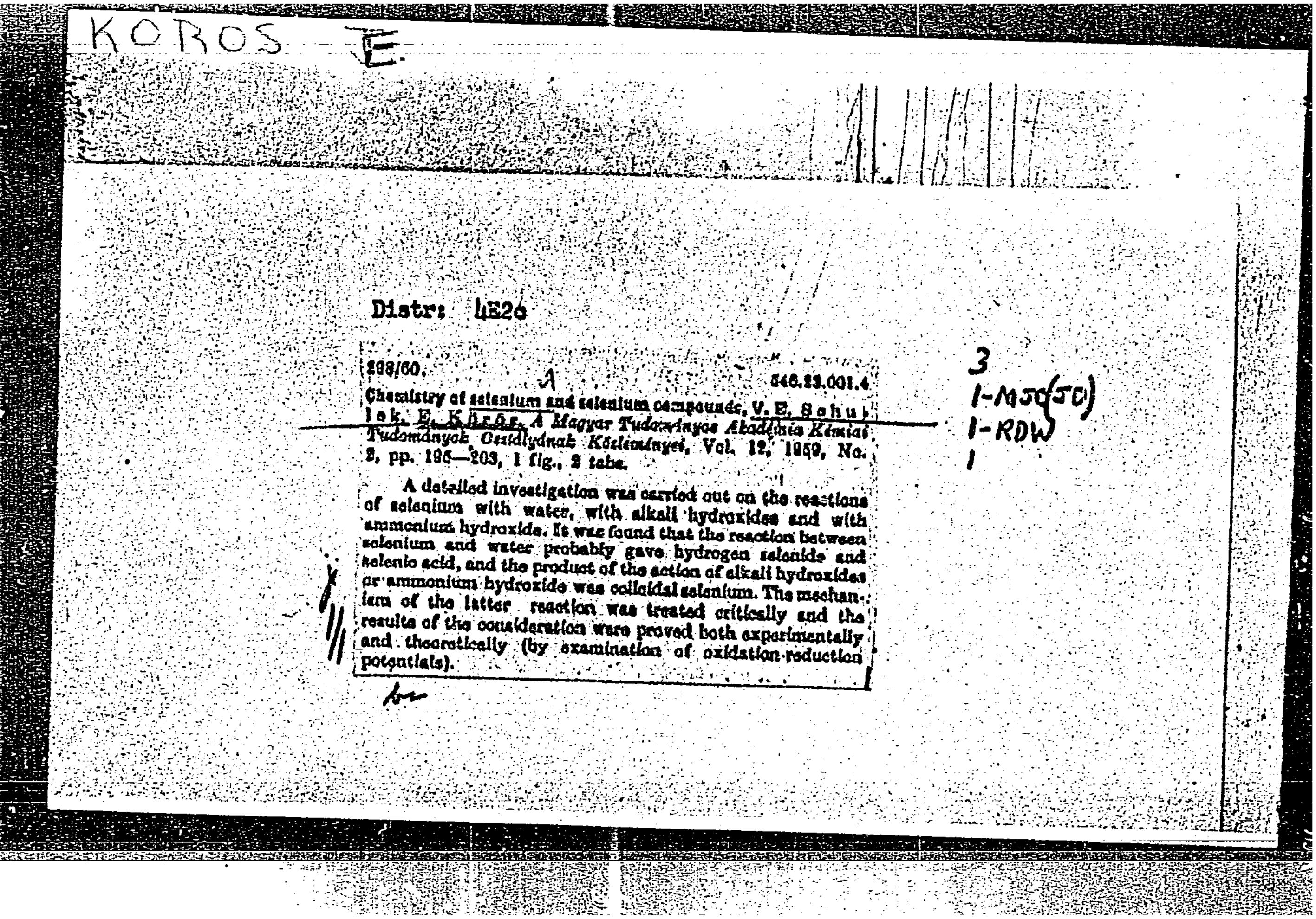
KOROS, E.

SCIENCE

PERIODICALS. ~~ACTA ZOOLOGICA. Vol. 64, No. 7/8 July/Aug. 1958~~
MAGYAR KEMIAI FOLYOIRAT. Vol. 64, No. 7/8 July/Aug. 1958

Koros, E. Application of complexon IV (1,2- diaminocyclohexanetetraacetic acid). p. 250.

Monthly list of East European Accessions (EEAI) LC, Vol. 8, No. 2, February 1959, Unclass.



KOROS E.

Distr: 4E2c

298/60. A 546.23.001.4

Chemistry of selenium and selenium compounds. V. E. Schulek, E. Körös. *A Magyar Tudományos Akadémia Kémiai Tudományok Osztályának Közleményei*, Vol. 12, 1959, No. 2, pp. 195—203, 1 fig., 2 tabs.

A detailed investigation was carried out on the reactions of selenium with water, with alkali hydroxides and with ammonium hydroxide. It was found that the reaction between selenium and water probably gave hydrogen selenide and selenic acid, and the product of the action of alkali hydroxides or ammonium hydroxide was colloidal selenium. The mechanism of the latter reaction was treated critically and the results of the consideration were proved both experimentally and theoretically (by examination of oxidation-reduction potentials).

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The use of isotope Br^{82} to explain the structure of tribromophenol-bromine. E. Schulek, K. Burger, and E. Koros (L. Eötvös Univ., Budapest). *Acta. Chim. Acad. Sci. Hung.* 21, No. 1, 67-70(1959)(in English); cf. *ibid.* 17, 211(1958).—Previous investigations indicated that tribromophenol-bromine (I) possesses aromatic and quinonoid structures in equil. On the basis of various exchange and conversion reactions using Br^{82} ($t_{1/2}$ = 30 hrs.), all 4 Br atoms of I are equiv. This phenomenon may be due to an equil. of different structures or to an exchange between the Br atoms of I and elementary Br, or bromide ions and I. Therefore, Br^{82} appears unsuitable owing to ambiguous results.

Walter Ding

bH

COUNTRY : Hungary C
CATEGORY :

ABS. JOUR. : RZKhim., No. 1959, No. 85671

AUTHOR : Maros, L.; Koros, E.; Feher, I.; Schulek, E.
INST. :
TITLE : Study of Exchange Reactions with Radioactive Isotope of Sulfur S^{35}. II. Investigation of the Structure of Dithionite.
ORIG. PUB. : Magyar kem. folyoirat, 1959, 65, No 2, 58-62

ABSTRACT : By means of radioactive isotope S^{35} a study is made of the question concerning disparity of S atoms in dithionite-ion. The reaction $2HS^*O_3^- + CH_2OHSO_2^- \longrightarrow S^*SO_4^{2-} + CH_2OHSO_3^- + H_2O$ was used to obtain $S^*SO_4^{2-}$ ions which were decomposed by heating to HSO_3^- and $S_2O_3^{2-}$. Then, activity of sulfur was determined in HSO_3^- and Ag_2S, obtained by precipitation with silver from solution containing $S_2^*O_3^{2-}$ ions. Since specific activity of sulfur in sulfite and sulfide is the same, it is concluded that in dithionite-ion both sulfur atoms are equivalent. Communication I see RZhKhim, 1958, No 24, 80725.

Yu. Kharitonov.

CARD:

KOROS, Endre; SCHULEK, Elemer; PATAKI, Laszlo

Effect of the solvent on the exchange reaction of isotopes; a preliminary communication. Magy kem folyoir 66 no.9:372-374 S '60.

1. Eotvos Lorand Tudomanyegyetem Szervetlen es Analitikai Kemiai Intezete, Budapest.

KOROS, Endre; SCHULEK, Elemer; PATAKI, Laszlo

Examination of the effect of solvents in the isotope exchange reactions.I. Magy kem folyoir 68 no.12:547-549 D '62.

1. Eotvos Lorand Tudomanyegyetem Szervetlen es Analitikai Kemiai Tanszeke, Budapest.

KOROS, Endre, a kemiai tudomanyok kandidatusa

An account of my study trip to the United Kigdom.
Kem tud kozl MTA 20 no.1:93-98 '63.

1. Eotvos Lorand Tudomanyegyetem Szervetlen es Analitikai
Kemiai Tanszeke, Budapest.

KOROS, Endre, dr. (Budapest, VIII., Muzeum korut 4/b); PATAKI, Laszlo, dr. (Budapest, VIII., Muzeum korut 4/b); LADANYI, Laszlo, dr. (Budapest, VIII., Muzeum korut 4/b); ORBAN, Miklos (Budapest, VIII., Muzeum korut 4/b); KERESZTES-HAMAR, Viktoria (Mrs) (Budapest, VIII., Muzeum korut 4/b)

On some factors affecting the isotopic exchange of iodine atoms. Acta chimica Hung 41 no.1/2:171-186 '64.

1. Department of Inorganic and Analytical Chemistry of Lorand Eotvos University, Budapest.

KOROS, Endre; PAULIK, Ferenc; ERDEY, Laszlo; RUFF, Ferenc

Thermal decomposition of some cobalt (II)-pyrazine mixed complexes. Magy kem folyoir 70 no.11:468-474 N '64.

1. Chair of Inorganic and Analytic Chemistry, Lorand Eotvos University, Budapest, Chair of General Chemistry, Budapest Technical University, and Chair of Organic Chemistry, Lorand Eotvos University, Budapest. 2. Editorial board member, "Magyar Komiai Folyoirat" (for Erdey).

L 63184-65

ACCESSION NR: AT5021754 HU/2502/64/041/01-/0171/0186

AUTHOR: Koros, Endre(Keresh, E.)(Doctor)(Budapest); Pataki, Laszlo(Doctor) (Budapest); Ladanyi, Laszlo(Ladani, L.)(Doctor)(Budapest); Orban, Miklos(Budapest); Keresztes-Hamar, Viktoria (Kerestesh-Khamar, V.)(Budapest)

TITLE: Some factors affecting the isotopic exchange of iodine atoms

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B+1

SOURCE: Academia scientiarum hungaricae. Acta chimica, v. 41, no.1-2,1964,171-186

TOPIC TAGS: iodine, atom, isotope

ABSTRACT: Further to the studies on the rate of isotopic exchange of iodine atoms between I_2 and 4-iodoantipyrine (KOROS, E., SCHULEK, E., and PATAKI, L.;"Magyar Kemiai Folyoirat", Vol 68, 1962, p 547), the role of the nitro group and of the azine-nitrogen was investigate. The following factors were considered: temperature, nitro group, and azine nitrogen. The effects of these factors were described and discussed. Orig. art. has: 11 tables, 25 formulas, 9 graphs.

ASSOCIATION: Institute of General Chemistry, Technical University, Budapest

Card 1/2

L 33627-66 EWP(j) RM

ACC NR: AP6025010

SOURCE CODE: HU/0005/65/071/011/0463/0468

AUTHOR: Koros, Endre; Orban, Miklos; Ladanyi, Laszlo; Pataki, Laszlo

44
B

ORG: Department of Inorganic and Analytical Chemistry, Eotvos Lorand University of Sciences, Budapest (Eotvos Lorand Tudomanyegyetem Szervetlen- es Analitikai-Kemiai Tanszeke)

TITLE: Solvent effect in isotope exchange 19 reactions, III. Influence of the dielectric constant of the media on the rate of exchange of iodine atoms

SOURCE: Magyar kemiai folyoirat, v. 71, no. 11, 1965, 463-468

TOPIC TAGS: dielectric constant, iodinated organic compound, nitrobenzene, chloroform

ABSTRACT: The influence of the dielectric constant of the media on the iodine exchange reaction between elementary iodine and 1-phenyl-2,3-dimethyl-4-iodopyrazolone was studied. The variation of log $t_{1/2}$ with (D - 1)(2D + 1) was plotted for mixtures of benzene and nitro compounds (CH_3NO_2, $C_3H_7NO_2$, o-, m- and p-$NO_2C_6H_4CH_3$), and of chloroform and nitrobenzene. The expression $d\ln t_{1/2} / d[(D - 1)/(2D + 1)]$ may be regarded as a measure of the increase in polarity during the exchange reaction. The deviation from the linearity observed in the case of benzene and nitrobenzene mixtures is attributed to the difference between the microscopic dielectric constant and the measured macroscopic value, while in the case of ethanol-water and dioxane-water mixtures, the deviation is due to kinetic factors introduced by the increase in the water content. Orig. art. has: 10 figures, 4 formulas, and 10 tables. [Based on authors' Eng. abst.] [JPRS: 33,906]

SUB CODE: 07 / SUBM DATE: 16Feb65 / ORIG REF: 002 / OTH REF: 010

Card 1/1 LS

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L 47421-66 EWP(j)/EWP(t)/ETI IJP(c) JD/RM
ACC NR: AT6034995

SOURCE CODE: HU/0005/65/071/012/0546/0550

KOROS, Endre, LADANYI, Laszlo, ORBAN, Miklos, PATAKI, Laszlo; Eotvos Lorand University, Department of Inorganic and Analytical Chemistry (Eotvos Lorand Tudomanyegyetem, Szervetlen- es Analitikai-Kemiai Tanszek), Budapest.

38

B

"Solvent Effects in Isotope Exchange Reactions IV. Effect of Nitro Compounds on the Rate of Iodine Exchange."

21

Budapest, Magyar Kemiai Folyoirat, Vol 71, No 12, Dec 65, pages 546-550.

Abstract: [Authors' English summary modified] Nitro compounds accelerate the exchange of iodine between elementary iodine and 1-phenyl-2,3-dimethyl-4-iodopyrazolone. The logarithms of the half times of the exchange reactions plotted against the concentration of the nitro compounds dissolved in various solvents (C_6H_6, $CHCl_3$, CCl_4, C_2H_5OH) gave straight lines. A new term: (ϑ) = "accelerating coefficient" has been introduced to describe the accelerating effect of various nitro compounds. The weaker the interaction between iodine and the solvent, the greater is ϑ for a given nitro compound. An additional correlation was noted between the extent of acceleration and the dipole moment of the nitro compound. Orig. art. has: 6 figures and 6 tables. [JPRS: 34,518]

TOPIC TAGS: exchange reaction, isotope, organic nitro compound, iodine compound

SUB CODE: 07, 18 / SUBM DATE: 08May65 / ORIG REF: 003 / OTH REF: 004

Card 1/1 vlr

L 47237-66 EWP(j) RM

ACC NR: AP6034306 SOURCE CODE: HU/0005/66/000/006/0260/0267

AUTHOR: Koros, Endre; Orban, Miklos; Ladanyi, Laszlo; Buxbaum, Piroska 35 B

ORG: Department of Inorganic and Analytical Chemistry, Eotvos Lorand University, Budapest (Eotvos Lorand Tudomanyegyetem, Szervetlen- es Analitikai-Kemiai Tanszek)

TITLE: Solvent effects in isotope exchange reactions 19 VI. Effect of aza-aromatics on the rate of iodine exchange between elementary iodine and 1-phenyl-2,3-dimethyl-4-iodopyrazolone

SOURCE: Magyar kemiai folyoirat, no. 6, 1966, 260-267

TOPIC TAGS: activation energy, iodated organic compound

ABSTRACT: [Authors' English summary modified] The influence of some aza-aromatics (pyridine, α-picoline, gamma-collidine, quinoline, isoquinoline) on the iodine exchange was investigated in benzene, chloroform and ethanol. A linear relationship could be established between the rate-inhibiting effect -characterized by the "retardation" coefficient- and the stability of the iodine-aza-aromatic donor-acceptor complex. The kinetics of the reaction were measured in benzene which contained pyridine. The enthalpy entropy and the free energy of activation were calculated and the thermodynamic data were analyzed. Orig. art. has: 9 figures, 25 formulas and 10 tables. [JPRS: 36,862]

SUB CODE: 07 / SUBM DATE: 20Sep65 / ORIG REF: 005 / OTH REF: 009

Card 1/1 hs

ACC NR: AP6034693

SOURCE CODE: HU/0005/66/000/003/0130/0135

KOROS, Endre; PATAKI, Laszlo; LADANYI, Laszlo, and ORBAN, Miklos, of the Department of Inorganic and Analytical Chemistry (Szervetlen es Analitikai Kemiai Tanszek) of Eotvos Lorand University of Sciences (Eotvos Lorand Tudomanyegyetem), Budapest.

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B

"Solvent Effect on Isotope Exchange Reactions. V. Kinetics and Mechanism of Iodine Exchange Between Elementary Iodine and 1-Phenyl-2,3-Dimethyl-4-Iodopyrazolone."

19

Budapest, Magyar Kemiai Folyoirat, Vol 72, No 3, Mar 66; pp 130-135.

Abstract [Authors' English abstract]: The kinetics of iodine exchange was studied in carbon disulfide, benzene, ethanol and water. In the organic media the rate equations may be described by the expression $v = k[I_2]^a[IA_p]$, where a has a value of between 2.3 and 2.8; in water, however, $v = k_1 [I_2] + k2[I_2]^2$. From the temperature dependence of the rate constant the enthalpy and entropy of activation have been calculated. A probable mechanism for the exchange is suggested. Orig. art. has: 7 figures and 7 tables. [JPRS: 36,002]

TOPIC TAGS: isotope, exchange reaction, iodine, entropy, enthalpy, iodinated organic compound

SUB CODE: 07,20, / SUBM DATE: 09 Jul 65 / ORIG REF: 005/OTH REF: 021

Card 1/1

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#248

Korobochkin I.V.

to

Koros, E.

End