

Investigations in the Field of Conjugated
Systems. LXXV. The Interaction of
Propargylvromide with Aliphatic Alde-
hydes under the Conditions of the Reform-
atskiy Reaction, by A. A. Petrov, Yu. I.
Porfiriyeva and G. I. Selenov, 4 pp.

RUSSIAN, per, Zhur Obsch Khim, Vol XXVII,
No 5, 1957, pp 1175-1178.

Consultants Bureau

Sci - Chem
Sep 58

72,848

Investigations in the Field of Conjugated Systems,
LXXVI. The Order of Bromine Addition to Alkyl-
and Isoalkenylacetylenes, by A. A. Petrov and Yu.
I. Porokireva, 8 pp.

RUSSIAN, per, Zhur Obshch Khim, Vol XXVII, No 7,
1957, pp 1805-1813.

Consultants Bureau

Sci - Chem

Oct 1958

74, 134

Investigations in the Field of Conjugated Systems. LXXVII. The Order of Addition of Hydrogen Halides to Propenylacetylene, by A. A. Petrov, Yu. I. Porfiryeva, 6 pp.

RUSSIAN, per, Zhur Obshch Khim, Vol XXVII, No 4, 1957, pp 2076-2080.

Consultants Bureau

Sci - Chem
Oct 58

74, 189

Investigation of Conjugated Systems. LXXVII.
Combination Scattering Spectra and Reactivity
of Vinylacetylene Hydrocarbons, by A. A. Petrov,
V. A. Kolosova, Yu. I. Porfiryeva, 6 pp.

RUSSIAN,
XIXE PMR, Zhur Obshch Khim, Vol XXVII, No 8,
1957, pp 2088-2098.

1-2087.

Consultants Bureau

Sci - Chem
Oct 51

74, 184

The Investigation of Conjugated Systems. LXXXI.
The Order of Bromine Addition to Dialkylvinylethynyl-
carbinols, by A. A. Petrov, K. B. Rall, 4 pp.

RUSSIAN, per, Zhur Obshch Khim, Vol XXVII, No 9,
1957, pp 2402-2405.

Consultants Bureau

Sci - Chem
Oct 58

75,139

Investigations on Conjugated Systems. LXXXI. Infra-
red Spectra of Some α -Unsaturated Acetylenic
Aldehydes and Ketones, by A. A. Petrov, G. I.
Semenov, 4 pp.

RUSSIAN, per, Zhur Obshch Khim, Vol XXVII, No 11,
1957, pp 2947-2950.

Consultants Bureau

Sci. + Chem

Jan 59

78,789

Investigations on Conjugated Systems. LXXXIII.
The Structure and Reactivity of the Methyl
Ester of Vinylacetylene Carboxylic Acid, by
A. A. Petrov, K. S. Nall, and G. I. Semenov,
p. 57.

KHIMIA, par, Zhur Obshch Khim, Vol XXVIII,
No 2, 1958, pp 424-427.

Consultants Bureau

Sci. Chem

85,676

Apr 58

Investigations in the Field of Conjugated ~~Sp~~
Systems LXXIV: Diacetyne Compounds. I. Synthesis
and Properties of β -Alkoxydivinylacetylenes
(Enol Ethers of Methylvinylethynyl Ketone). by
A. A. IETROV, 3 PP.

RUSSIAN, per, Zhur Obshch Khim, Vol XXVIII, No 3,
1958, pp 638-640.

Consultants Bureau

Sci - Chem

87,360

May 59

Studies in the Field of Conjugated Systems. Part 85.
Condensation of Halodienes with Acetylenedicarboxylic
Ester, by V. S. Miklashevskaya, A. A. Petrov.

RUSSIAN, per Zhur Obshchei Khim, Vol XXVIII, No 5,
1958, pp 1125-1127.

ATS RJ-1661

Sci - Chem

Jul 59

90,844

Studies in the Field of Conjugated Systems.
LXXVII. The Combination of Piperylene Hydro-
chloride with Isoprene, by A. A. Petrov, N. A.
Razumkova, M. L. Genusov, 5 pp.

RUSSIAN, per. Zhur Obshch Khim, Vol XXVIII,
No 5, 1958, pp 1128-1131.

C
Consultants Bureau

Sci - Chem
Jul 59

93, 258

Investigations on Conjugated Systems. LXXX. Infra-
red Spectra of Some Acetylenic and Vinylacetylenic
Alcohols, by A. A. Petrov, G. I. Semenov, 6 pp.

RUSSIAN, per, Zhur Obshch Khim, Vol XXVII, No 11,
1957, pp 2941-2946.

Consultants Bureau

Sci - Chem

Jan 59

78,787

Investigations of Conjugated Systems, XCII,
Sequence of Addition of Iodine to Vinylacetylenic
Hydrocarbons, by A. A. Petrov, Yu. I. Porfir'eva,
T. V. Yakovleva, K. S. Mingaleva, 5 pp.

RUSSIAN, per, Zhur Oshch Khim, Vol XXVIII, No 9,
1958, pp 2320-2324.

CB

Sci - Chem
Oct 59

129,068

Investigations of Conjugated Systems. XCIII. The
Sequence of Addition of Alkyl Hypobromites to
Vinylalkylacetylene, by A. A. Petrov, Yu. I.
Porfir'eva, G. I. Semanov, 4 pp.

RUSSIAN, per, Zhur Obshch Khim, Vol XXVIII, No 9,
1958, pp 2325-2327.

CB

Sci - Chem
Oct 59

100,066

Investigations of Conjugated Systems. CXX. Addition
of Alkylolithiums to Vinylisopropenylacetylene,
by A. A. Petrov, V. A. Kormer, T. V. Yakovleva, 5 pp.

RUSSIAN, per, Zhur Obshch Khim, Vol XXX, No 7, 1960,
pp 2238-2242.

569
CB 166, ~~307~~

Sci

Aug 61

Investigations of Conjugated Systems. CXXI. Addition
of Alkylolithiums to Trialkylvinylethynylsilanes,
by A. A. Petrov, V. A. Korner, M. D. Stadnichuk,
P. M.

RUSSIAN, per, Zhur Obshch Khim, Vol XXX, No 7, 1960,
pp 2243-2247.

CB

571
166, ~~309~~

Sci

Aug 61

A. P. M. R. Study of the Energy Transfer Processes
Occurring During the Radiolysis of Certain Frozen
Hydrocarbons, by Yu. N. Molin, I. I. Chkheydze,
Al. A. Petrov, 4 pp.

RUSSIAN, per, Dok Ak Nauk SSSR, Vol CXXXI, No 1,
1960, pp 125-128.

CB

149,758

Sci

Apr 61

Petrov, A. A., Korner, V. A., and Savich, I. G.
MECHANISM OF LITHIUM-ALKYL ADDITION TO
ENYNE-HYDROCARBONS. [1961] 2p. 6 refs.
Order from O'S or SLA \$1.10 61-18584

Trans. of Zhurnal Obshchei Khimii (USSR) 1960,
v. 30 [no. 12] p. 3845-3846.

DESCRIPTORS: *Lithium compounds, Alkyl radicals,
*Hydrocarbon, Chemical reactions, Infrared
spectroscopy.

(Chemistry--Organic, TT, v. 6, no. 9)

61-18584

I. Petrov, A. A.
II. Korner, V. A.
III. Savich, I. G.

Office of Technical Services

10-1-24
HQ FTD (TEBDR-1)

BT66-17-511T

Dup check for info only

Strain of a cylindrical blade ~~under~~ under the action
of shock loading

Petrov, A. A.

Russian collection: Trudy. Leningr. Korabelstroit.
in-ta, part 43, 137-151-, 1964

Synthesis and Properties of C_{12} - C_{16} Monomethyl-
alkanes, by Al. A. Petrov, et al.

RUSSIAN, FBR, Iz Ak Nauk SSSR: Otdel Khim Nauk,
1949, pp 1053-1059.

Dept of Interior
Tr No 226

Sci

Jan 63

<p><u>Petrov, A. B.</u> THE EFFECT OF THE IMPURITIES IN ARGON ON THE QUALITY OF ARGON-ARC WELDS. [1962] [18]p. Order from CTS or SLA \$1.60 62-20159</p> <p>Trans. of Avtogennoe Delo (USSR) 1952, v. 23, no. 9, p. 5-8.</p> <p>DESCRIPTOR: *Argon, Impurities, *Arc welds, Aluminum alloys, Quality control</p> <p>(Metallurgy, T, v. 9, no. 11)</p>	<p>62-20159</p> <p>I. Petrov, A. B.</p> <p>62-20159</p> <p>Office of Technical Services</p>
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Petrov, A. D., Ponomarenko, V. A., Mkhitar'yan,
L. L., and Snegova, A. D.

THE SYNTHESIS AND PROPERTIES OF MONOCHLORO
DERIVATIVES OF ETHYL SILANE CHLORIDES. [1964]

8p (figs omitted) 10 refs

Order from OTS, SLA, or ETC \$1.10 TT-64-14914

Trans. of Akademiya Nauk SSSR. Doklady, 1955, v. 100
no. 6, p. 1107-1110.

TT-64-14914

- I. Petrov, A. D.
- II. Ponomarenko, V. A.
- III. Mkhitar'yan, L. L.
- IV. Snegova, A. D.

(Chemistry--Organic, TT, v. 11, no. 11)

Office of Technical Services

<p>Petrov, A. D. ANTI-KNOCK PROPERTIES AND FOUR POINTS OF INDIVIDUAL HYDROCARBONS OF THE DIESEL FUEL RANGE. I. [1962] 6p refs Order from OTS or SLA \$1.10</p>	<p>62-14126 I. Petrov, A. D.</p>
<p>Trans. of Akademiya Nauk SSSR. Otdelensk Khimicheskikh Nauk. Izvestiya, 1941, no. 1, p. 145-155. Also available from OTS or SLA \$2.60 in 61-20795 [1961] 25p.</p>	<p>1252507</p>
<p>DESCRIPTORS: *Fuel oil, *Anti-knock, *Hydrocarbons, Methanes, Ethylenes, Naphthenes, Benzenes, Toluenes, Cyclohexanes, Heptanes, Decanes.</p>	<p>Office of Technical Services</p>
<p>(Materials--Fuels, TT, v. 10, no. 10)</p>	

Petrov, A. D. and Kaplan, E. P.
SYNTHESIS AND PROPERTIES OF ISOPARAFFIN
HYDROCARBONS OF THE COMPOSITION C₁₂-C₂₂
COMMUNICATION 2. [1963] 9p. 13 refs.
Order from OTS or SLA \$1.10 63-16801

63-16801

I. Petrov, A. D.
E. Kaplan, E. P.

Trans. of 2urnal Obshch Khimii (USSR) .942, v. 12
[no. 1/2] p. 99-103.
An abstract trans. is available from OTS or SLA \$1.60
as 61-20323 [1961] 18p.

1247266

DESCRIPTORS: *Alkanes, *Alkenes, *Ethyl radicals,
*Methyl radicals, *Butyl radicals, Hydrocarbons,
Physical properties, Chemical properties, Bromides,
Synthesis (Chemistry).

The following hydrocarbons were synthesized for the
first time: 4,5-dimethyloctane, 2,7-dimethyl-4,5-
dimethyloctane, 7,8-dimethyldecane, 5,6-dimethyl-
(Chemistry-Organic, TT, v. 10, no. 7) (over)

Office of Technical Services

Synthesis of Organosilicon Monomers; by A. D.
Petrov.
RUSSIAN.
Heywood and Company Ltd.,

Sci - Chem
Apr 65

278,173

Synthesis of Organosilicon Monomers, by ⁵⁸
A. D. Petrov, V. P. Mironov, et al. 492 pp.
RUSSIAN, bk, 1964.
CONSULTANTS BUREAU

Sci/Chemistry
Mar 68

346,008

A. D. Petrov

Petrov, A. D., Mironov, V. F., Ponomarenko, V. A.
and Chernyshev, E. A.
SYNTHESIS OF ORGANOSILICON MONOMERS.
1963, approx 575p
Order from CB \$22.50

Trans. of mono. [Sintez Krenniforganicheskikh
Monomerov, Moscow, 1961, 559p.].

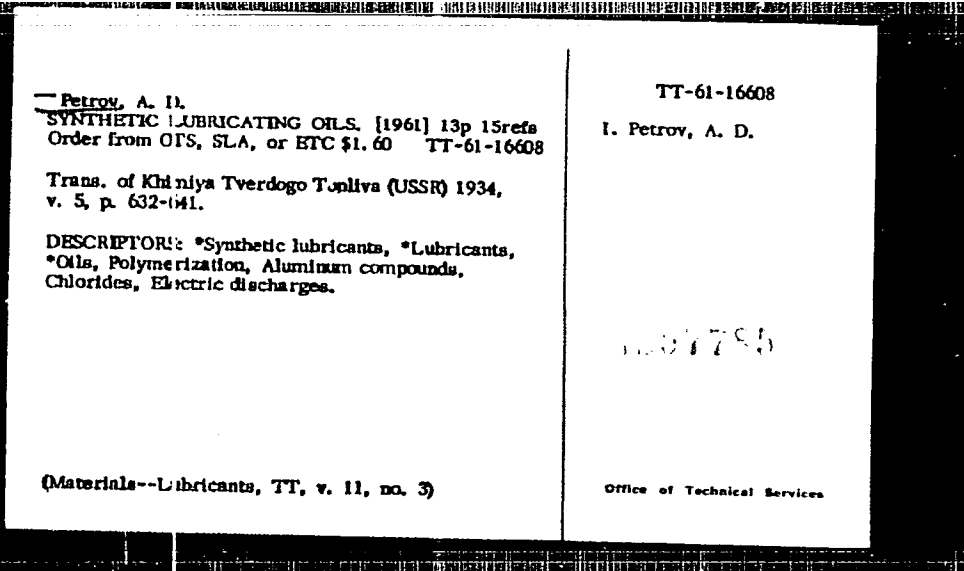
DESCRIPTORS: *Organic compounds, *Silicon com-
pounds, Synthesis (Chemistry), Plastics, Rubber,
Polymers.

(Chemistry-Organic, TT, v. 10, no. 12)

63-12531

- I. Petrov, A. D.
- II. Mironov, V. F.
- III. Ponomarenko, V. A.
- IV. Chernyshev, E. A.
- V. Consultants Bureau
Enterprises, Inc.,
New York

Office of Technical Services



Petrov, A. D.

SYNTHETIC LUBRICATING OILS. [1961] 13p 15refs
Order from OTS, SLA, or ETC \$1.60 TT-61-16608

Trans. of Khimiya Tverdogo Topliva (USSR) 1934,
v. 5, p. 632-641.

DESCRIPTOR: *Synthetic lubricants, *Lubricants,
*Oils, Polymerization, Aluminum compounds,
Chlorides, Electric discharges.

(Materials--Lubricants, TT, v. 11, no. 3)

TT-61-16608

I. Petrov, A. D.

1101784

Office of Technical Services

Synthesis of Organosilicon Monomers, by A.D. Petrov,
V.F. Mironov et al.

RUSSIAN, bk, 1961.

CB

Sci

Nov 61

Synthesis of Organosilicon Monomers With
Nitrile Groups, by A. D. Petrov, Ye. P.
Zakharov, et al., 8 pp.

RUSNIAM, per, Zhur Prikladnoy Khim,
Vol XXXV, No 2, 1962, pp 385-389. 9667326

FID-TI-62-1260

Sci -Phys
Jun 63

219,957

Synthesis of Branched C_{12} - C_{16} Acids in the $C_nH_{2n-1}COOH$ Series,
by G. I. Nikishin, Yu. N. Ogibin, A. D. Petrov, 6 pp.

RUSSIAN, per, Zhur Obshch Khim, Vol XXX, No 7, 1960,
pp 2148-2152.

CB

551
166, ~~289~~

Sci

Aug 61.

Organosilicon Compounds Containing a Cyano-Group,
by V. M. Vdovin, A. D. Petrov, 15 pp.

RUSSIAN, per. Uspekh Khim, No 7, 1962, pp 793-821.

CS

Sci

Mar 63

233,806

THE REACTION BETWEEN ALKENYL- AND ARYLHALOGENIDES
AND TRIARYLSILANES AT HIGH TEMPERATURES,
BY A. D. PETROV, Y. E. FISHER, 5 PP.

RUSSIAN, PER, ZHUR OBSHCH KHIM, VOL XXXII, NO 3,
1962, PP 698-703.

CB

SCI

FEB 63

221,533

THE EFFECT OF TEMPERATURE ON THE DIRECTION OF
THE REACTION OF ALIPHATIC ESTERS WITH LITHIUM ALKYL,
BY A. D. PETROV, E. P. KAPLAN, 6 PP.

RUSSIAN, PER, ZHUR OBSHCH KHM, VOL XXXII, NO 3,
1962, PP 693-697.

CB

SCI

FEB 63

221,532

Alcohols and the Protective Properties of their
Monolayers against Evaporation in Reservoirs, by
A. D. Petrov, A. A. Trapeznikov, 4 pp.

RUSSIAN, per, Dok Ak Nauk SSSR, Vol CXXXVIII,
(CXXXII), No 6, 1961, pp 1395-1398.

CB

Sci

Nov 62

217,980

Synthesis and Properties of Mono- and Poly-
alkylnaphthalenes. III., by D. N. Anisoyev, A. G.
Petrov. 91 pp.

RUSSIAN, part, Zhur Brak Khim, vol 2006 111, No 11,
1910.

OSIS 22 No 231

317 137

Sci - Chem

Oct 62

Organosilicon Compounds With Hydrocarbon Bridges
Between Silicon Atoms IV. The Pyrolysis of
a,w-Eisilalkanes, by A. D. Petrov, et al, 5 pp.

RUSSIAN, per, Zhur Obshch Khim, Vol XXXI, No 10,
1961, pp 3230-3233.

CB

Sci
Sep 62

211,759

SYNTHESIS OF SILICON-, GERMANIUM-, AND TIN-~~XXXXXXXX~~
CONTAINING PARA-SUBSTITUTED STYRENES AND A-
METHYLSTYRENES, BY A. D. PETROV, F. A. CHERNYSHEV,
4pp.

RUSSIAN, PER, DOK AK NAUK SSSR, VOL CXL, NO 4,
1961, PP 837-840.

CB

SCI

JUL 62

204,364

Synthesis and Properties of Di- and Triphenylalkanes.
Communication 4. Selective Hydrogenation of Di-
and Triphenylalkanes Over PtO_2 , by M. A. Ghal-tsova,
A. D. Petrov, 7 pp.

KHIMIA, per, Iz Ak Nauk SSSR, Otdel
Khim Nauk, No 2, 1961, pp 294-301.

03

Sci

Jan 62

196, 8 811

Catalytic Disproportionation of Alkyl (and
Alkenyl) Dichlorosilanes, by A. D. Petrov,
V. M. Vdovin, pp 8

RUSSIAN, per, Iz Ak Nauk SSSR, Otdel Khim Nauk,
No 3, 1960, pp 519-526.

CB

195,362

Sci
May 62

The Preparation of Organosilicon Derivatives of Bicyclo-
(2,2,1)-Heptane, by A. D. Petrov, A. F. Plate, E. A.
Chernyshev, 5 pp.

9
RUSSIAN, per, Zhur Obshch Khim, Vol XXXI, No 4, 1961,
pp. ~~1199-1208~~

1199-1208

CB

196,693

Sci
Apr 62

Synthesis and Properties of p-Dialkylbenzenes,
by A. D. Petrov, G. I. Nikishin, 7 pp.

RUSSIAN, per, Iz Ak Nauk SSSR, Otdel Khim Nauk,
No 4, 1960, pp 717-723.

CB

Sci

May 62

194,446

61-20147

Petrov, A. D., Krugov, K. M., and Khrenov, I. M.
SYNTHESIS AND PROPERTIES OF ETHYLPROPYL-
CYCLOHEXYLMETHANE AND ISOPROPYLHEXYL-
CYCLOHEXYLMETHANE. [1961] 3p. 7 refs.
Order from OTS or SLA \$1.10

- I. Petrov, A. D.
- II. Krugov, K. M.
- III. Khrenov, I. M.

61-20147

Trans. of Zhurnal Obshchei Khimii (USSR) 1945,
v. 15, p. 799-801.

DESCRIPTORS: Synthesis, *Methanes, Antiknock,
Octanes, Petroleum, Hydrogenation, Ethylenes,
Cyclohexanes, Molecular structure, Alcohols, *Fuels,
*Aviation fuels, Ethyl radicals, Propyl radicals,
Hexyl radicals.

154243

Ethylpropylcyclohexylmethane and isopropylhexyl-
cyclohexylmethane, not previously reported in the
literature, were synthesized. The pour points of these
hydrocarbons and their antiknock properties expressed
in cetene numbers were determined. (Author
(Materials--Fuels, TT, v. 7, no. 1)

Office of Technical Services

61-16883

Petrov, A. D. and Voronova, A. V.
ANTI-KNOCK PROPERTIES OF SOME BINARY MIX-
TURES. [1961] [i] p. 4 refs.
Order from OI'S or SLA \$1.10 61-16883

I. Petrov, A. D.
II. Voronova, A. V.

Trans. of [Akademiya Nauk SSSR]. Comptes Rendus
(Doklady) de l'Academie des Sciences de l'U.R.S.S.,
1941, v. 31, no. 8, p. 765-766.

DESCRIPTORS: *Hydrocarbons, *Heptanes, Antiknock.

Octane numbers of mixtures such as polymer gasoline
cannot be derived from the octane numbers of individual
pure compounds by simple calculation. An investigation
of the change of octane numbers of five binary mixtures
with the proportions of their components was carried
out and the conclusions drawn were compared with
those drawn by Smittenberg, Hoog, Moerbeek and
Zigden in 1941. (Author)
(Chemistry--(organic, TT, v. 6, no. 9)

Office of Technical Services

61-16934

Petrov, A. D. and Shchukin, V. I.
ISOMERIZATION OF NORMAL HEPTENE TO
METHYLDIETHYLETHYLENE AND OF NORMAL
OCTENE TO DIMETHYLBUTYLETHYLENE. [1961]
Sp. 8 refs.
Order from OTS or SLA \$1.10

61-16934

I. Petrov, A. D.
II. Shchukin, V. I.

Trans. of Zhurnal Obshchei Khimii (USSR) 1941, v. 11,
p. 1092-1095.

DESCRIPTORS: *Octenes, Isomerism, Chain reactions,
*Ethylenes, *Hydrocarbons, Raman spectroscopy,
Heptenes, Methyl radicals, Ethyl radicals, Butyl
radicals.

Isomerization of normal 1-heptene to methyl-diethyl-
ethylene and of normal 1-octene to dimethylbutylethyl-
ene was established. The difference in the schemes of
isomerization of normal olefins into branched chain
(Chemistry)--Organic, TT, v. 6, no. 9) (over)

Office of Technical Services

Petrov, A. D., Verentsova, N. I., and
Kokleeva, T. A.
SYNTHESIS OF 2-METHYL-4-HEXYNE AND
2,6-DIMETHYL-3-HEPTYNE. [1961] 5p. 12 refs.
Order from OTS or SLA \$1.10 61-16935

Trans. of Zhurnal Obshchei Khimii (USSR) 1941,
v. 11, p. 1096-1099.

DESCRIPTORS: Hydrocarbons, Synthesis, Antiknock,
*Fuels, Methyl radicals, *Heptynes, *Hexynes.

Synthesis of two new hydrocarbons is reported,
2-methyl-4-hexyne and 2,6-dimethyl-3-heptyne. Anti-
knock properties of acetylenic hydrocarbons have been
evaluated. (Author)

(Chemistry--Organic, TT, v. 6, no. 9)

61-16935

I. Petrov, A. D.
II. Verentsova, N. I.
III. Kokleeva, T. A.

Office of Technical Services

Petrov, A. D. and Karlik, L. D.
SYNTHESIS OF GLYCOLS OF THE ACETYLENE
SERIES. [1961] 5p. 16 refs.
Order from OTI or SLA \$1. 10

61-16936

Trans. of Zhurnal Obshchei Khimii (USSR) 1941, v. 11,
p. 1100-1103.

DESCRIPTORS: *Glycols, Synthesis, *Acetylenes,
Alcohols, Antiknock.

Synthesis of three acetylenic γ -glycols is reported:
5-decyne-4,7-diol, 9-octadecyne-8, 11-diol, 10, 13-
dimethyl-11-decyne-10, 13-diol. The method of
synthesis of glycols and alcohols of the acetylene
series suggested by L. Kazaryan was tested. Anti-
knock properties of acetylene alcohols and their sus-
ceptibility to tetraethyllead was studied. (Author)

(Chemistry--Organic, TT, v. 6, no. 7)

61-16936

I. Petrov, A. D.
II. Karlik, L. D.

Office of Technical Services

Petrov, A. D. Pavlov, A. M., and Makarov, Yu. A.
SYNTHESIS OF 3-ETHYLDECANE AND 2,5-DI-
METHYLUNDECANE. [1961] 3p. 4 refs.
Order from OTS or SLA \$1.10 61-16937

Trans. of Zhurnal Obshchei Khimii (USSR) 1941, v. 11,
p. 1104-1106.

DESCRIPTORS: Synthesis, Antiknock, Halogenation,
*Hydrocarbons, Chain reactions, *Fuels, Ethyl
radicals, Methyl radicals.

Syntheses of two new paraffins are reported, 3-ethyl-
decane and 2,5-dimethylundecane. Antiknock properties
and pour points of three normal and branched chain
paraffins with 12 and 13 carbon atoms have been
evaluated. (Author)

(Chemistry--Organic, TT, v. 6, no. 9)

61-16937

I. Petrov, A. D.
II. Pavlov, A. M.
III. Makarov, Yu. A.

Office of Technical Services

Petrov, A. D. and Laptava, E. L.
SYNTHESIS AND PROPERTIES OF SOME HIGHER
HOMOLOGS OF BENZENE. [1961] 5p. 12 refs.
Order from OIS or SLA \$1.10 61-16938

Trans. of Zhurnal Obshchey Khimii (USSR) 1941, v. 11,
p. 1107-1110.

DESCRIPTOR: Benzene, Synthesis, Antiknock,
Chain reactions, Hydrocarbons.

Three new homologs of benzene with branched side
chains were synthesized, methylacetylphenylmethane,
diisobutylheptylphenylmethane and dimethylpentadecyl-
phenylmethane. Antiknock properties of these and some
other representatives of the series C_6H_5R with
branched and normal paraffin chains were evaluated.
(Author)

(Chemistry--(organic, TT, v. 6, no. 7)

61-16938

I. Petrov, A. D.
II. Laptava, E. L.

Office of Technical Services

Synthesis and Properties of Branched Acids, Carboxylic
COOH, Composition C₂₀H₄₂O₂, by II. G. I. Mikshin, Yu. H.
Orlbin, A. D. Petrov, 1960 pp.

RUSSIAN, par, Zhur' Obshch Khim, Vol XXX, No 11, 1960,
pp 3543-3547

ca

sci
Oct 61

177,520

61-16870

Petrov, A. I. and Azatyan, V. D.
SYNTHESIS OF HYDROCARBONS OF THE ACETYLENE SERIES. [1961] [14]p. 115 refs.
Order from OTS or SLA \$1.60 61-16870

I. Petrov, A. D.
II. Azatyan, V. D.

Trans. of Uspekhi Khimii (USSR) 1940, v. 9, no. 5,
p. 498-521.

DESCRIPTORS: *Hydrocarbons, *Acetylenes,
Synthesis.

The first part of a program of synthesis of acetylenes and evaluation of their antiknock properties is reported. The literature on the subject is reviewed, physical constants of 57 known acetylenes are tabulated and a bibliography given comprising 115 items including unpublished work of the author and his co-workers. Blending octane numbers of five acetylenes were obtained. (Author)

Office of Technical Services

(Chemistry--Organic, TT, v. 6, no. 7)

61-18176

Petrov, A. D., Koptev, V. I., Kaplan, E. P.
SYNTHESIS AND PROPERTIES OF ISOPARAFFINS
WITH FROM 9 TO 12 CARBON ATOMS. [1961] 5p...
12 refs.
Order from OTS or SLA \$1.10 61-18176

Trans. of Akademiya Nauk SSSR. Otdelenie Khimi-
cheskikh Nauk. Izvestiya, 1944 [no. 1] p. 152-155.

DESCRIPTORS *Hydrocarbons, Synthesis, Molecular
isomerism, Antiknock, Properties.

Synthesis of five isoparaffins with from 9 to 12 carbon
atoms and different extent of branching of the chain was
effected through the tertiary alcohols by a Grignard
reaction; of these, 2,2,3,5-tetramethylhexane was
synthesized for the first time. It was shown that hydro-
carbons of the above mentioned composition possessing
two quaternary carbons or one quaternary and two
tertiary carbon atoms have high octane numbers of the
order of about 100. (Author)

(Chemistry--Organic, TT, v. 6, no. 6)

I. Title: Isoparaffins
I. Petrov, A. D.
II. Koptev, V. I.
III. Kaplan, E. P.

Office of Technical Services

Petrov, A. D. and Vittikh, M. V.
SYNTHESIS AND PROPERTIES OF ISOPARAFFIN
HYDROCARBONS WITH 13 TO 24 CARBON ATOMS IN
THE MOLECULE. [1961] 5p. 6 refs.
Order from OTS or SLA \$1.10 61-18174

Trans. of Akademiya Nauk SSSR. Otdelenie Khimi-
cheskikh Nauk. Izvestiya, 1944 [no. 1] p. 238-242.

DESCRIPTORS: Hydrocarbons, Molecular isomerism,
Synthesis, Properties.

On the example of six isoparaffins with a T-like struc-
ture containing from 13 to 24 carbon atoms in the
molecule, for the most part newly synthesized com-
pounds, it was demonstrated that the hydrocarbons of
this type with from 21 to 24 carbon atoms are dis-
tinguished by cetene numbers close to 100 and
sufficiently low pour points. (Author)

(Chemistry--Organic, TT, v. 6, no. 6)

61-18174

1. Title: Isoparaffins
- I. Petrov, A. D.
- II. Vittikh, M. V.

Office of Technical Services

61-18010

Petrov, A. D.
FUEL FOR HIGH SPEED DIESELS. [1961] 7p. 13 refs.
Order from O/S or ELA \$1.10 61-18010

L. Petrov, A. D.

Trans. of Akademiya Nauk SSSR. Otdelenie Khimi-
cheskikh Nauk. Izvestiya, 1941, no. 4/5, p. 533-543.

DESCRIPTOR: *Diesel engines, *Fuel oil, *Aviation
fuels

A discussion is given of cracked Diesel fuels and the
outlook for synthesis of low pour point components of
fuels for aviation Diesels. (Author)

Office of Technical Services

(Materials--fuels, TT, v. 6, no. 6)

Synthesis and Reactions of Organo-Silicon, Germanium,
and Tin Compounds, by A. D. Petrov.

GERMAN, per, Angew Chem, Vol LXXIII, 1961, pp 59-63.

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CIA/FDD XX-1054

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Sci - Chem, Min/Met

Oct 61

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Acylation of Silicohydrocarbons and Synthesis
of Silicon-Containing α -Methylstyrenes, by
E. A. Chernyshev, Yé. N. Klyukina, A. D. Petrov,
5 pp.

RUSSIAN, per, Iz Ak Nauk SSSR, Otdel Khim Nauk,
No 9, 1960, pp 1601-1606.

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Nitration of Aromatic Sila-Hydrocarbons in
Which the Aromatic Ring Occupies Various
Positions with Respect to the Silicon Atom,
by E. A. Chernyshev, M. E. Dolgaya, A. D.
Petrov, 5 pp.

RUSSIAN, per, Iz Ak Nauk SSSR, Otdel Khim
Nauk, No 8, 1960, pp 1424-1428.

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Synthesis and Properties of 4-Alkyl- and 4, 4'-
Dialkylphenyls of Composition C₁₆-C₃₂ and Their
Hydrides, by E. P. Kaplan, Z. I. Kazakova, A. D.
Petrov, 7 pp.

RUSSIAN, per, Zhur Obahch Khim, Vol XXX, No 2, 1960,
pp 369-375.

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Interaction of 2, 2, 3, 3-Tetramethylpentanone⁻⁴ With
Alkylolithiums, by A. D. Petrov, Kao Ch'ing-lang, V. M.
Semenkin, 6 pp.

RUSSIAN, per, Zhur Obahch Khim, Vol XXX, No 2, 1960,
pp 363-368.

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Synthesis of Diphenylalkanes by the Wurtz Reaction
in Tetrahydrofuran or Methylal, by A. D. Petrov,
E. F. Zakharov, Yu, M. Zaveryayev, 8 pp.

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Properties of C_{14} - C_{28} Naphthene Hydrocarbons of
Variable Structure, by A. D. Petrov, B. D. Zaloga,
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Synthesis of Polymers Having Alternating Siloxane
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RUSSIAN, par, Iz Ak Nauk SSSR, Otdel Khim Nauk,
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Synthesis of 2-Alkyl- and 2-Aryl-Biphenyls, by
A. D. Petrov, E. P. Kaplan, 5 pp.

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1963, pp 161-165.

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Reaction of tert-Butyl Lithium with Esters, by
A. D. Petrov, E. B. Sokolova, Mao Ching-lang,
10 pp.

RUSSIAN, per, Zhur Obshch Khim, Vol XXX, No 1,
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The Reaction of 1-Naphthylmagnesium Bromide with
Esters of Monocarboxylic Acids, by A. D. Fet'ov,
O. M. Meislov, I. I. Bufatin, 7 pp.

RUSSIAN, per, Zhur Obshch Khim, Vol XXIX, No 12,
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(NY-4844)

The Catalytic Hydrogenation and Polymerization of
Acetylene-Hydrogen Mixtures. The Synthesis of
Isobutylene From Acetylene and Hydrogen, by A. D.
Petrov, L. E. Antons, 8 pp.

RUSSIAN, per, Zhur Fiz Khim, Vol XIV, No 9/10,
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JPRS 7528

Sci - Chem

Feb 61

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Reaction of Symmetrical Tetraalkyldisiloxanes With
Dialkenyldialkylsilanes and With Symmetrical
Dialkenyltetraalkyldisiloxanes, by A. D. Petrov,
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June 61

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Polymerization of Propene Over a Zinc Chloride
Catalyst. Communication 4. Dehydrocyclopolymeriza-
tion in the Polymerization of Propene Over Zinc
Chloride, by L. I. Antsus, A. D. ~~Di~~ Petrov, 4 pp.

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Addition of Hydride Silanes to Alkenylbenzenes in the Presence of Chloroplatinic Acid, by A. D. Petrov, E. A. Chernyshev, M. E. Dolgaya, 7 pp.

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Petrov, A. D., Nikishina, G. I. and others.
 THE DEPENDENCE OF THE SURFACE-ACTIVE
 PROPERTIES AND WASHING CAPACITY OF SOLU-
 TIONS OF ALKYL BENZENE SULPHONATES ON
 THE LENGTH AND STRUCTURE OF THEIR ALKYL
 CHAIN (Zavisimost' Poverkhnostno-Aktivnykh Svoystv
 i Moyushchey Sposobnost' Rastvorov Alkilbenzol-
 sulfonatov ot Velichiny i Struktury Ikh Alkil'noy
 Tsopi). May 59 [8]p. 5 refs. C.T.S. no. 633.
 Order from LC or SLA ml\$1.80, ph\$1.80 61-15371

Trans. of Mashoboyno-Zhirovaya Promyshlennost'
 (USSR) 1958, v. 24, no. 8, p. 23-29.

Tests showed that the washing capacity of solutions of
 alkyl benzene sulphonates depends on the length of the
 chain and its branches: the longer and the less
 branched, the greater the washing capacity. Com-
 pounds having a straight or only slightly branched
 chain containing 12 carbon atoms are effective at
 higher temperatures than compounds having a
 (Materials, T.T., v. 5, no. 8) (over)

61-15371

1. Sulfonates--Surface properties
2. Detergents--Surface properties
3. Sulfonates--Molecular structure
 - I. Petrov, A. D.
 - II. Nikishina, G. I.
 - III. CTS-633
 - IV. Department of Scientific and Industrial Research (Gt. Brit.)

Office of Technical Services

Organomagnesium Synthesis of 2- and 3-(Trimethylsilyl)
Acrylic Acids and Vinyl Derivatives of Silicon,
Germanium, and Tin, by V. F. Mironov, A. D. Petrov,
N. G. Maksimova, 7 pp.

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1959, pp 1954-1960.

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Sci -
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Relative Reactivities of Some Organosilicon, Organo-
germanium, and Organotin Compounds, and Their Raman
Spectra, by V. F. Mironov, Yu. P. Egorov, A. D.
Petrov, 7 pp.

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Synthesis and Properties of Salts of Acids and of
Sulfo Esters of Alcohols With Alkylaromatic
Hydrophobic Radicals, by A. D. Petrov, G. I. Nikishin,
V. N. Gumenitakaya, 4 pp.

RUSSIAN, per, Zhur Obshch Khim, Vol XXX, No 3, 1960,
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Synthesis and Properties of α,ω -Polychlorodisilal-
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Syntheses of Aliphatic Aromatic Silanes and Their
Dehydrogenation, by A. A. Balandin, A. D. Petrov,
G. M. Murukyan, 5 pp.

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Interaction of Isopropylolithium With Esters, by
A. D. Ietrov, Kao Chin-lang, E. I. Alipova, 5 pp.

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Synthesis and Reactions of Vinyl Esters of
Silanols, by S. I. Sadykh-Zade, A. D. Petrov,
5 pp.

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Catalytic Hydrogenation of Silicon-Containing
Nitriles and the Fiber-Forming Properties of Poly-
amides Based on the Amines Obtained, by A. D.
Petrov, L. Kh. Freidlin, G. I. ~~Kuznetsov~~
Kudryavtsev, E. M. Sidorova, V. M. Yudin, T. I.
Shein, 4 pp.

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Catalytic Polymerization of Propylene-Propane Mixtures
Over Phosphoric Acid on Kieselguhr, by L. I. Antsus,
A. D. Petrov, 4 pp.

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On the Addition of Hydrosilanes to Dimethyl
ethynylcarbinol and to Its Cyanethylation Pro
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Synthesis of Organosilicone Monomers, by A. D. Petrov.

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Reaction of Triethylsilane With Secondary and
Tertiary Vinylethynylcarbinols in the Presence
of H_2PtCl_6 , by A. D. Petrov, I. M. Gverdtsiteli,
N. I. Chakshirvili, 3 pp.

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Synthesis and Reactions of β -Cyanoethylsilanes,
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The Addition of Silicohydrocarbons to α ,
 β -Unsaturated Acids and Their Esters, by A. D.
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The Condensation of Halo Alcohols With Benzene
Under the Influence of Sulfuric Acid, by V. N.
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Determination of the Structure of Paraffin and
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A New Method for the Synthesis of Aromatic Organosilicon Monomers, by E. A. Chernyshev, Li Kuang-liang, A. D. Petrov, 4 pp.

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Isolation of o-Terphenyl From Still Residues in
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Synthesis of Organosilicon Monomers From
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High-Temperature Condensation of Alkyldichlorosilanes
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Fluorosilicoorganic Compounds. A Study of the
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Tetrafluoroethyl Allyl Ether, A. D. Petrov, V. A.
Ponomarenko, G. V. Odabashyan, S. I. Krokhtmalev, 4 pp.

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Synthesis and Hydrogenation of 1,4,7-Triphenylheptane
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A. D. Kotlov, S/VP
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Direct Synthesis of 1,1-Dichlorosilylcyclopentane,
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Monomers, A. D. Petrov, V. P. Mironov, V. A.
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Synthesis and Properties of Disilylmethane,
1,2-Disilylethane, 1,3-Disilylpropane and 1,3,5-
Trisilene-2,4,6-Trimethylenecycloalkane, by A. D.
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Synthesis of Silicon-Containing Acetylenic Alcohols,
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The Addition of Trichloroethane to Acetylene,
Glefins, and Their Derivatives in the Absence of
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No 2, pp 302-304.

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Synthesis of C₁₄-C₂₀ Alkylbenzenes by Grignard-Wurtz Reaction in Ether-Free Medium, by A. D. Petrov, E. P. Zakharov, T. L. Krasnova, 13 pp.

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