

О неэффективности галогенсодержащих соединений как подавителей воспламенения метано-кислородных смесей за ударными волнами

- [1] Hastie J W. Molecular basis of flame inhibition // J. Res. Natl. Bur. Stand. — 1973. — Vol. 77A. — P. 733–54.
- [2] Westbrook C K. Inhibition of hydrocarbon oxidation in laminar flames and detonations by halogenated compounds // Symp. (Int.) Combust. — 1982. — Vol. 19. — P. 127–41.
- [3] Influence of CF₃I, CF₃Br, and CF₃H on the high-temperature combustion of methane / V Babushok, T Noto, D R Burgess et al. // Comb. Flame. — 1996. — Vol. 107. — P. 351–67.
- [4] Drakon A, Eremin A. On Relative Effectiveness of Halogenated Hydrocarbons for Suppression of Hydrogen-Oxygen Mixture Autoignition // Comb. Sci. Techn. — 2018. — Vol. 190. — P. 550–55.
- [5] Promotion and inhibition of the combustion of methane in oxidative gases with various oxygen concentrations by fluorinated hydrocarbons / V V Azatyan, Yu N Shebeko, Shebeko A Yu, Navtsenya V Yu // Rus. J. Phys. Chem B. — 2010. — Vol. 4. — P. 760–768.
- [6] Promoting effect of halogen- and phosphorus-containing flame retardants on the autoignition of a methane-oxygen mixture / A V Drakon, A V Eremin, O P Korobeinichev et al. // Combust. Explos. Shock Waves. — 2016. — Vol. 52. — P. 375–85.
- [7] The opposite influences of flame suppressants on the ignition of combustible mixtures behind shock waves / A Drakon, A Eremin, N Matveeva, E Mikheyeva // Comb. Flame. — 2017. — Vol. 176. — P. 592–8.
- [8] Drakon A, Eremin A, Emelianov A. Influence of CF₃H and CCl₄ additives on acetylene detonation // Shock Waves. — 2014. — Vol. 24. — P. 231–7.
- [9] Babushok V I, Linteris G T, Meier O C. Combustion Properties of Halogenated Fire Suppressants // Comb. Flame. — 2012. — Vol. 149. — P. 3569–75.
- [10] Gaydon A G, Hurler I R. The Shock Tube in High Temperature Chemical Physics. — London: Verlag Chapman and Hall Ltd., 1963.
- [11] CHEMKIN-II: A FORTRAN chemical kinetics package for the analysis of gas-phase chemical kinetics. Report SAND89-8009B : Preprint / Albuquerque, NM: Sandia National Laboratories ; Executor: R J Kee, F M Rupley, J A Miller : 1993.
- [12] Frenklach M, Hanson R K et al. *GRI – Mech3.0*. — 1999. — Access mode: http://www.me.berkeley.edu/gri_mech.
- [13] Азатян В В. Цепные реакции в процессах горения, взрыва и детонации газов. — ИПХФ РАН, 2017.
- [14] Experimental and Modelling Study of the Unimolecular Thermal Decomposition of CHF₃ / C J Cobos, A E Croce, K Luther, J Troe // Z. Phys. Chem. — 2011. — Vol. 225. — P. 1019–28.
- [15] Experimental and Modeling Study of the Reaction C₂F₄(+M) → CF₂+CF₂(+M) / C J Cobos, A E Croce, K Luther et al. // J. Phys. Chem. A. — 2013. — Vol. 117. — P. 11420–29.
- [16] Thermal decomposition of CF₃Br using Br-atom absorption / J Hranisavljevic, J J Carroll, M C Su, J V Michael // J. Res. Natl. Bur. Stand. — 1998. — Vol. 30. — P. 859–67.
- [17] Ab initio calculations and three different applications of unimolecular rate theory for the dissociations of CCl₄, CFCl₃, CF₂Cl₂, and CF₃Cl / S S Kumaran, M C Su, K P Lim et al. // J. Phys. Chem. — 1996. — Vol. 100. — P. 7541–49.
- [18] Kumaran S S, Su M C, Michael J V. Thermal decomposition of CH₃I using I-atom absorption // Int. J. Chem. Kinet. — 1997. — Vol. 29. — P. 535–43.
- [19] Lim K P, Michael J V. The thermal decomposition of CH₃Cl using the Cl-atom absorption method and the bimolecular rate constant for O + CH₃ (1609–2002 K) with a pyrolysis photolysis-shock tube technique // J. Chem. Phys. — 1993. — Vol. 98. — P. 3919–28.
- [20] Skorobogatov G A, Dymov B P, Tedeev R S. Measurement of rate constants and equilibrium constants of RI = R + I and I + R = I₂ + R for R = C₃F₇, iso-C₃F₇, C₆F₁₃, CF₃OCF₂CF₂ or C₃F₇OCF₂CF₂ // J. Gen. Chem. USSR. — 1991. — Vol. 61. — P. 178–85.
- [21] Sehon A H, Szwarc M. The C-Br bond dissociation energy in halogenated bromomethanes // Proc. R. Soc. London A. — 1951. — Vol. 209. — P. 110–31.
- [22] Thermal decomposition of CF₂HCl / M C Su, S S Kumaran, K P Lim et al. // J. Phys. Chem. — 1996. — Vol. 100. — P. 15827–33.
- [23] Tsang W. Single-pulse shock-tube studies on the decomposition of 1,2-dibromoperfluoroethane and allyl bromide // J. Phys. Chem. — 1984. — Vol. 88. — P. 2812–17.
- [24] Zaleskii V Yu. Determination of the rate constant for thermal dissociation of molecules by the shock-tube method // Kinet. Catal. — 1988. — Vol. 29. — P. 453–60.
- [25] Michelsen H A, Simpson W R. Relating state-dependent cross sections to non-Arrhenius behavior for the Cl+CH₄ reaction // J. Phys. Chem. A. — 2001. — Vol. 105. — P. 1476–88.
- [26] Pardini S P, Martin D S. Kinetics of the reaction between methane and iodine from 830 to 1150 K in the presence and absence of oxygen // Int. J. Chem. Kinet. — 2001. — Vol. 15. — P. 1031–43.
- [27] Evaluated kinetic data for high temperature reactions: Volume 4, Homogeneous gas phase reactions of halogen and cyanide containing species / D L Baulch, J Duxbury, S J Grant, D C Montague // J. Phys. Chem. Ref. Data. — 1981. — Vol. 10. — P. 1–721.
- [28] Keating E L, Matula R A. The high temperature oxidation of tetrafluoroethylene // T. J. Chem. Phys. — 1977. — Vol. 66. — P. 1237–44.
- [29] Azatyan V, Saikova G. Inhibiting the combustion of air-methane mixtures // Rus. J. Phys. Chem. A. — 2013. —

Vol. 87. — P. 1615–21.