

January 12, 1933

Mr. A. E. Mittnacht
Ethyl Gasoline Corporation.
Chrysler Building
New York City
New York

Dear Mr. Mittnacht:

Your letter of December 28th enclosing the correspondence of Mr. Boyle, Mr. Rolston and Mr. Halverson concerning the nature of exhaust gases from automobiles which burn Ethyl Gasoline, has already received my attention through correspondence with Mr. Boyle. I am attaching herewith a copy of the letter which I wrote to Dr. Hunter, giving him my opinions on the subject.

I trust this will be satisfactory for your purposes. You may make use of my letter in any correspondence which you see fit to carry on with Mr. Halverson and Mr. Rolston.

Very truly yours,

RAK:IS

KE 0011903

December 23, 1932

Dr. A. W. Hunter
Room 1022 Medical-Dental Bldg.,
Vancouver, B.C.

Dear Doctor Hunter:

A recent letter from Mr. C. E. Boyle of the Ethyl Gasoline Corporation contained a request that I write you and give you available information as to the results of exposure to exhaust gases from automobiles which employ Ethyl Gasoline as fuel.

The facts as gleaned from a number of sources are as follows. Exhaust gas from cars which burn Ethyl Gasoline contain carbon monoxide in concentrations which do not differ significantly from that shown when ordinary gasolines are burned. As you doubtless know, the concentration of carbon monoxide in exhaust gas varies considerably with the condition of motor operation. The maximal carbon monoxide concentrations appear when the fuel mixture is rich and when the motor is working at lower speeds. The combustion of Ethyl Gasoline gives rise to the customary concentrations of carbon monoxide plus finely divided lead in the form of bromide which is so finely divided as to behave essentially like a gas. The concentration of lead bromide is not sufficiently high to produce inappreciable effect for short exposure. The high concentration of carbon monoxide limits the exposure to undiluted exhaust gases so much that there is no possibility of the development of lead poisoning or appreciable lead absorption as a result of exposure to undilute exhaust gases. If the exhaust gas is sufficiently diluted to avoid carbon monoxide intoxication, the lead absorption is then negligible. The only other materials in exhaust gas as a result of the combustion of Ethyl Gasoline are small amounts (little more than traces) of hydrobromic acids, water vapor and carbon dioxide. From these facts, it is entirely clear that no clinical difference and no experimental difference can be made out in carbon monoxide intoxication from automobiles burning Ethyl Gasoline as compared with those which burn ordinary gasolines.

Dr. A. W. Hunter

If you are sufficiently interested in the subject to review available experimental data, I should be pleased to cite you to the sources in the literature.

Very truly yours,

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