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ORTA DOĞU TEKNİK ÜNİVERSİTESİ
MIDDLE EAST TECHNICAL UNIVERSITY
06800 ANKARA - TURKEY

Kimya Bölümü
Department of Chemistry

to AMITY Inc.

Tel : 90-312-210 3203 - 210 3202
Fax : 90-312-210 3200

Report on evaluations of the burning speed of TOCK Mixture

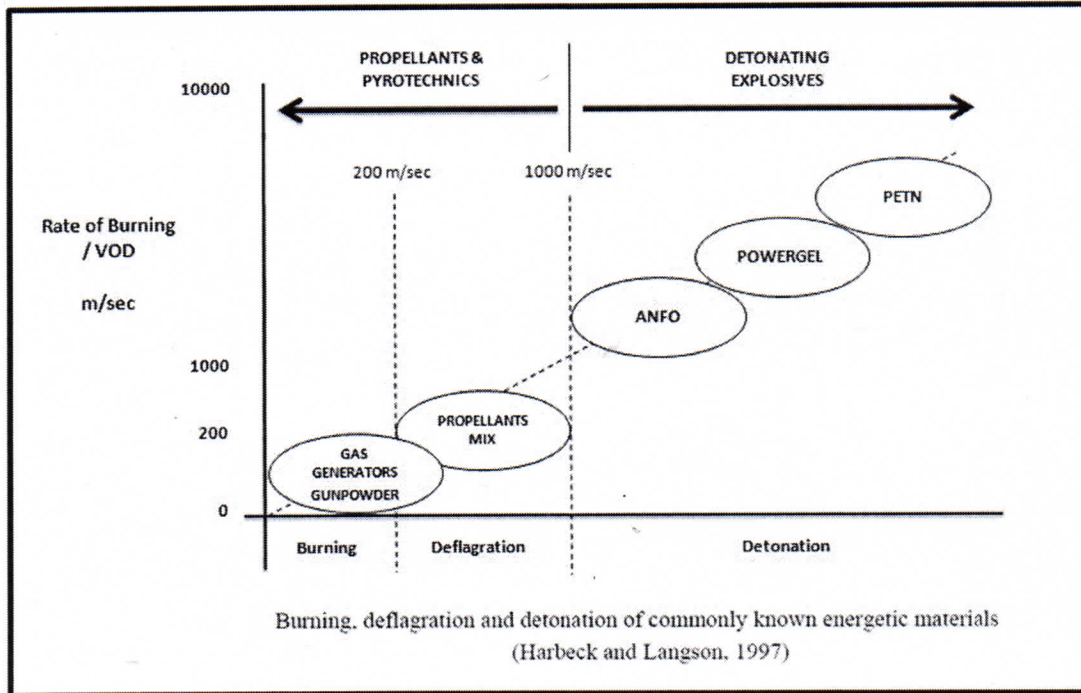
The observations and evaluation on the burning speed of the TOCK Mixture brought by Amity Inc. is carried out in Research Laboratories of Department of Chemistry, Faculty of Arts and Sciences, Middle East Technical University.

Sample: Then patented mixture, also registered as Tock, composed of chemicals and non-hazardous ingredients in powder form with light brown color, known by me within the scope of an NDA (non-disclosure agreement).

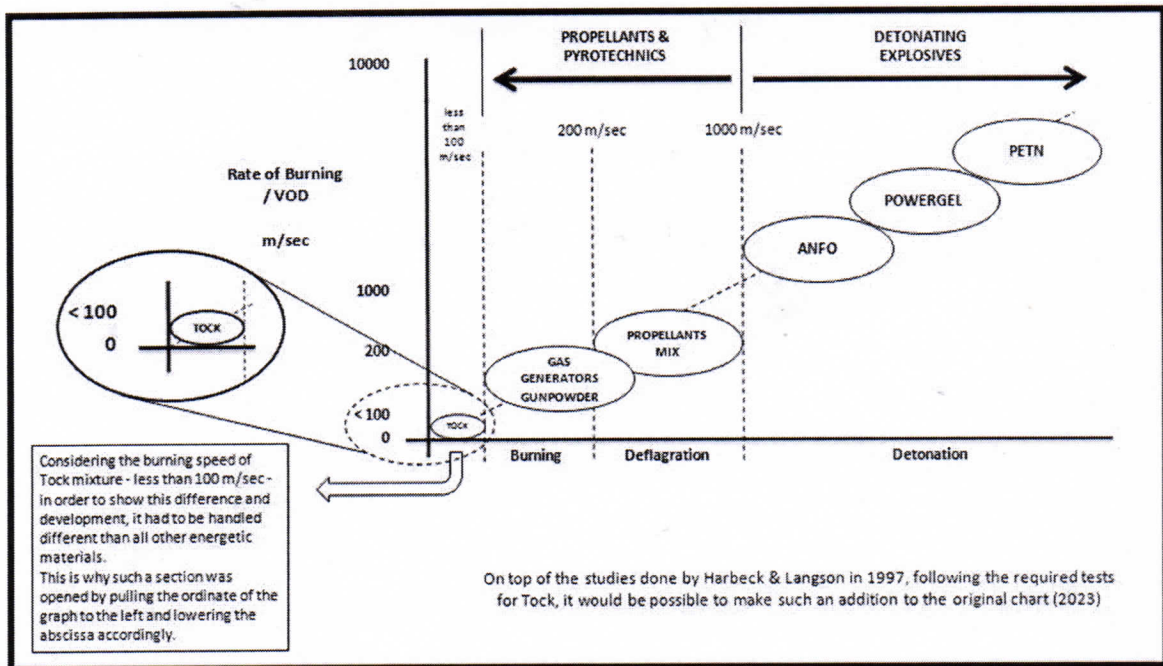
The tests according to the UN Book on Transport of Dangerous Goods, Chapter 2.5 (2.5.2.2 pages; 108-109 of 21st revised edition-2019) and Section 34 (pages, 369 - 373 of Manual of Tests and Criteria - 2009) on Oxidizing Solids were conducted on the Tock mixture.

According to the results, following can be mentioned:

- 1 - The product showed Oxidizing Solid properties
- 2 - If we bring the chart related to the burning - deflagration - detonation that defines the rate of burning at these categories, it is as follows:

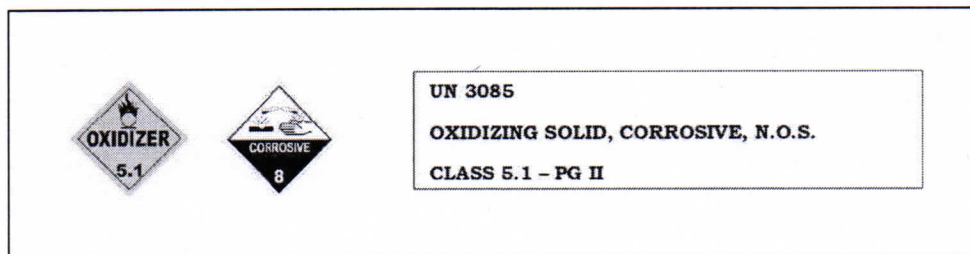


However, when the rate of burning for Tock Mixture is considered - which is less than 100 m/sec.- we may declare that it would be better to define it in a different way.



The results show not only the oxidizing property of the Tock mixture but also carries it to the lowest section of the chart still may be defined as a "Burning" product, until a new section is opened, being even less than those defined under "Burning".

Then, these results are the supporting arguments for Tock mixture - in connection with the tests we have carried out before and Dekra Report - to be defined under;



This report is given on the request of AMITY Inc.

Prof. Dr. Teoman Tincer

Teoman Tincer

October 2023

Ref:

Harbeck M., Langson W., 1997. Hydro-fracturing; Propellant based rock breaking. An overview of the technology and its underground applications. Mintek Blasting Conference, Johannesburg, 105-110.