The World's First Self-Stemming Non-Detonating Cartridge

Green Break Technology (Pty) Ltd
2nd Floor, Block 2, Northgate Park, Paarden Eiland, Cape Town, South Africa
PO Box 5594, Cape Town, 8000, South Africa

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The following table represents the summary of a thermochemical analysis done by Rheinmetall Denel Munition, evaluating the gaseous composition of AutoStem products.

REACTION PRODUCTS:		
NAME		WGT.%
H2O	G	32.49
CO2	G	31.36
N2	G	23.92
CO	G	11.47
OH	G	0.38
H2	G	0.24
O2	G	0.07
Other	G	0.07

Notes for interpretation:

- This thermochemical analysis does not take into account the oxygen content of air (oxygen constitutes 21% of the content of air).
- The oxygen content of air reduces the CO component in the reaction products by way of additional oxidation
- Furthermore, since conducting this analysis, we have changed the ratio of the two components making up our proprietary mixture which has reduced the quantity of CO predicted by a significant amount not reflected here.
- As a result, the above thermochemical analysis overstates the quantity of CO produced in reality, but can still be used as an illustrative case as follows:
    - In this exaggerated worst case, approximately 11g of CO are produced per 100g of AutoStem utilised;
    - To put this in context: Assuming this combustion gas is released into a closed space measuring no more than 5m x 5m x 5m without any ventilation at all, **the quantity of CO in ppm per 100g of AutoStem utilised will never exceed 0.09 ppm**.

We'd be happy to answer any questions you have.

Green Break Technology (Pty) Ltd
2nd Floor, Block 2,
Northgate Park,
Paarden Eiland,
Cape Town,
South Africa
PO Box 5594, Cape Town, 8000
Mobile: + 27 82 978 8548
Email: jcohen082@icloud.com