Determination of what is "Hellabomb"

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1 Objective

To determine quantitatively what an object or concept must encompass to be "hellabomb" as used in colloquial speech and use it as a comparative source.

2 Derivation

"Hellabomb" is a common colloquialism used to announce that a particular object or idea possesses a large amount of positive qualities. The prefix "hella-" is defined to denote units in quantities of 10^{27} [Moore (2010)]. The unit "bomb" is not a defined unit. However, Trinitrotoluene (TNT) is a common reference for when comparing the explosive potential of bombs. If a bomb as a unit is assumed to have the same potential energy of TNT, at a rate of $4863\frac{J}{g}$ [Cooper (1996)], then one bomb, symbol B, will be equivalent to

$$1B = 4863000\frac{J}{kg}. \tag{1}$$

Thus, by definition, one "hellabomb", symbol HB, is equal to

$$1HB = 4.863 \times 10^{33}\frac{J}{kg}. \tag{2}$$

The conversion of mass to energy is governed by

$$E = mc^2. \tag{3}$$

Which gives the theoretical limit to mass-energy equivalence at c^2 or approximately 9.0×10^{16}. Thus, an object cannot be "hellabomb" as it exceeds the theoretical limit.

3 Results and Conclusions

The derivation of the unit hellabomb was shown to exceed the theoretical limit to mass-energy equivalence and thus, no object can hold the definition of "hellabomb". Immaterial concepts cannot be held within the realm of physical limits and thus can achieve the level of "hellabomb". Therefore, the usage of the adjective "hellabomb" in modern colloquialisms should be limited to conceptual talk only and not reference physical objects.

References

Cooper, P. W. (1996). *Explosives Engineering*. Wiley-VCH.

Moore, M. (2010). Hella number: scientists call for new word for 1,000,000,000,000,000,000,000,000,000.