

Correlation between concentration of sugar water and intensity of Alka-Seltzer carbon dioxide out-gassing

- Sugar enhances out-gassing -

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sugar enhances out-gassing

Three tablets of grape flavor Mentos were dropped into;



150mL of bottled soft water
no sugar
Then One tablet of Alka-Seltzer was added



More
bubbling

150mL of bottled soft water
15g of sugar
Then One tablet of Alka-Seltzer was added

Grid spacing is 0.5cm










Method

- 1 150ml sugar water with different concentration (0g, 7.5g, and 15g) (granulated sugar)
- 2 carbonate sugar water with Alka-Seltzer (1, 2, and 3 tablets)
- 3 drop 3 Mentos tablets, 10 seconds then photograph bubbles

Environmental conditions

Temperature: 19.7 C

Atmospheric pressure: 1016hPa

Alka-Seltzer Granulated sugar	1 tablet	2 tablets	3 tablets
0 g			
7.5 g			
15 g			

Results

- Higher sugar concentration enhances out-gassing
- Increased number of Alka-Seltzer tablets was not a factor

Discussion

- Under microgravity, bubbles may surround tablets and out-gassing may be decreased

References

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