

ATTEMPT #5



Disclaimer:

This document is not an official information sheet or safety data sheet and is not stand-alone by any means. The information provided here is not comprehensive. It's meant to compliment other sources by combining some of the more important information about calcium gluconate snakes.

Dangers and Safety:

The decisions to not wear certain pieces of personal protective equipment (PPE) are from the perspective of years of formal training and experience. NileBlue videos are for entertainment purposes only. We discourage anyone from repeating what they see.

In future videos on NileBlue, the message about safety will be clearer. There will be more details about choices of PPE and the safety measures put in place during experiments.

The hazards that come about when making carbon snakes from things like calcium gluconate are minimal. No harmful gases are produced (H_2O & CO_2) and the solid products from this reaction are not toxic and generally safe (C & CaO). However, in the making this video, all of the relevant risks were accounted for, which include the possible ways the reaction could go wrong, fire safety, and ventilation.

The main risk of exposure to the snake is irritation. C & CaO may be irritating if exposed to skin and eyes or if inhaled. Inhalation was avoided through proper ventilation (fume hoods), glasses were worn as eye protection and hands were washed thoroughly after handling.

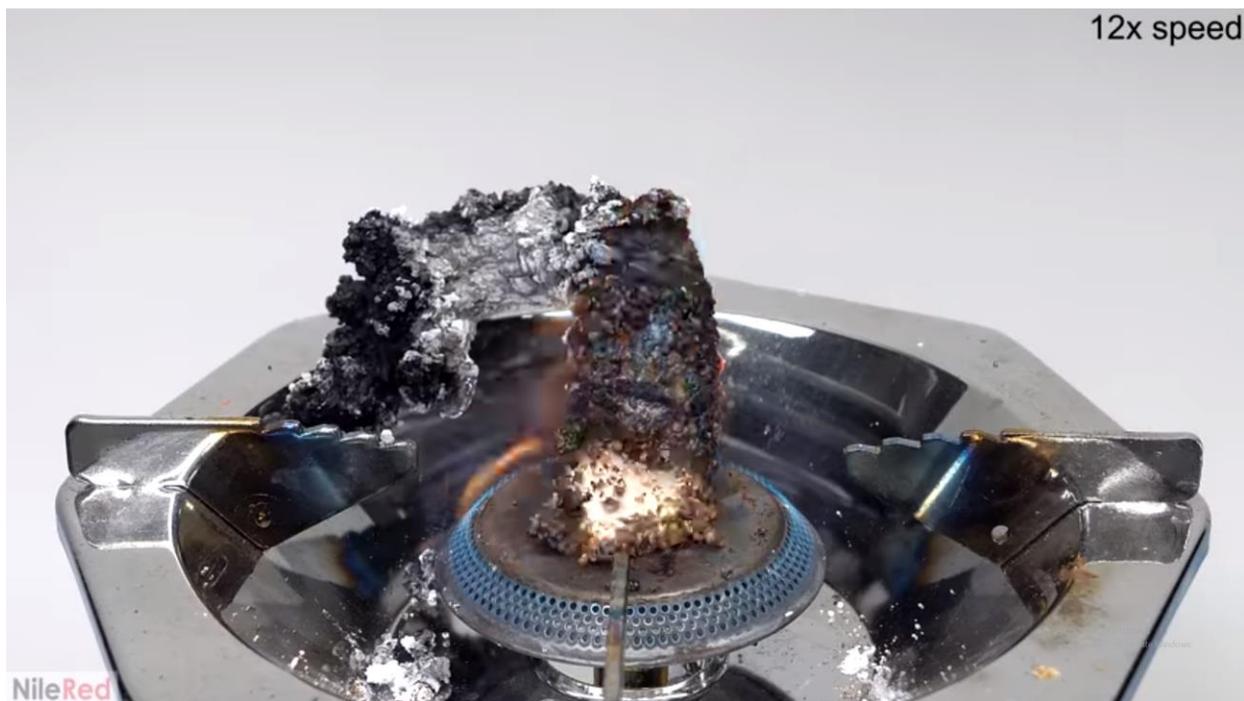
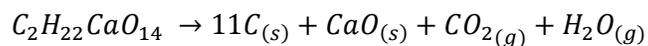
Calcium Gluconate Snake

NileRed

General Information:

Sugar snakes can be formed with a variety of different reactions, but they all follow the same general idea. A solid or a mixture of solids are heated, and in their decomposition, they make carbon and other solids that form the structure of the snake and gases that create pores and expand it.

When burned, calcium gluconate breaks down into C, CaO, CO₂ and H₂O:



Depending on the heat source and how the reaction progresses, every snake will be different!

Waste Management:

The snakes made from burning calcium gluconate are composed of substances found in ash (C & CaO), so there're safe to put in the garbage.