

Crushability Test Lab

Objective:

Identify the similarities or patterns between each known and unknown substance.

Materials:

- spoon
- safety goggles

Known chemicals:

- table sugar (sucrose)
- table salt (sodium chloride)
- Epsom salt (magnesium sulfate)
- MSG (monosodium glutamate)

Unknown chemical:

- kosher salt



SAFETY

Safety goggles should be worn at all times during the crushability test lab.

Procedure:

1. Starting with the four known chemicals, place each substance into a separate pile on your counter and label them accordingly.
2. Crush the chemicals one at a time with the spoon, and make sure to wipe off the spoon before moving on to the next substance.
3. Record your observations for discussion.
4. Place the unknown chemical on the table and perform the crush test again.
5. Once the final crush test is completed, discuss the unknown chemical.

Questions:

1. While conducting your experiment, did you notice any variables that were difficult to control?
2. What potential sources of error did you encounter?
3. Based on the observations you made, what do you believe is the unknown chemical? Why?