

## Organic Lab –Joke Juice!

Name: \_\_\_\_\_ Date: \_\_\_\_\_

Partner: \_\_\_\_\_

**Purpose:** To apply the cross-linking action of borax on guar gum to produce a “joke juice”.

### Apparatus:

- 1 100 mL beaker
- 1 250 mL beaker
- 50 mL graduated cylinder
- glass stirring rod
- electronic balance
- hot plate
- dropper pipette
- small juice bottle (~375 mL)

### Reagents:

- 1.5 g guar gum
- 1 g sodium tetraborate (Borax)
- 200 mL water
- food colouring

### Procedure:

#### 1% GUAR GUM SOLUTION:

1. Add **1.5 g guar gum** slowly while stirring to **150 mL water**.
2. **Warm** on a hot plate while **stirring constantly**, until dissolved.
3. Remove any lumps and discard.
4. Add a few drops **food colouring** until desired colour of “**juice**” is achieved

#### 4% Borax Solution:

4. Add **1 g Borax** to **25 mL water**.
5. **Heat** and **stir** to help dissolving.

#### JUICE IT:

6. Pour the guar gum solution into the juice bottle.
7. Add borax solution while stirring or shaking, until the “juice” has reached a viscosity where it still looks like a liquid, but will NOT pour out the bottle.

-ideally, some of the slime should come out the bottle when chucked, but then go back in

8. Try it out on unsuspecting victims!
9. If the "juice" gets watery after a few days, simply add a few more drops of borax solution.