

GOVERNMENT DEGREE COLLEGE (W), GAJWEL

DEPARTMENT OF CHEMISTRY

BEST PRACTICE

PREPARATION OF HAND SANITIZER

OBJECTIVES OF THE PRACTICE: As part of best practices, our students have prepared hand sanitizer in the chemistry laboratory as a precautionary measure to control the spread of COVID -19 virus.

THE CONTEXT: After the spread of COVID -19 virus, the importance of sanitizer and wearing mask is made mandatory by the Government of India. As part of best practices, our students have prepared hand sanitizer in the chemistry laboratory and supplies to the students and faculty. This has made to serve the needy people at the free of cost. The cost of sanitizer is quite expensive outside so we have supplied to the various departments free of cost.

Preparation method:

To prevent the spread of infectious diseases like COVID-19, if water and soap aren't available, next best option, according to the Centers for Disease Control and Prevention (CDC)Trusted Source, is to use an alcohol-based hand sanitizer that contains at least 60 percent alcohol.

Required ingredients per liter:

For a larger batch of hand sanitizer, the World Health Organization (WHO)Trusted Source has a formula for a hand sanitizer that uses:

- 99.8% Isopropyl alcohol or ethanol- 751.5 ml
- 3% Hydrogen peroxide – 41.7ml
- 98% Glycerol – 14.5ml
- Sterile distilled or boiled cold water – 192.3 ml

Make the hand sanitizer in a clean space. Wash your hands thoroughly before making the hand sanitizer. To mix, use a clean spoon and whisk. Wash these items thoroughly before using them. Make sure the alcohol used for the hand sanitizer is not diluted. Mix all the ingredients thoroughly until they're well blended. Don't touch the mixture with your hands until it's ready for use.

RESULT:

1. Soap and water are more effective than hand sanitizers at removing germs but soap and water are may not available at all times. Although alcohol-based hand sanitizers can quickly reduce the number of germs in many situations.
- 2.This sanitizer is supplied to all departments of college for the benefit of students and staff.



