# WHO-recommended Handrub Formulations

Reference: https://www.who.int/gpsc/5may/Guide to Local Production.pdf

### **METHOD: 10-LITRE PREPARATIONS**

These can be prepared in 10-litre glass or plastic bottles with screw-threaded stoppers.

### Recommended amounts of products:

FORMULATION 1	FORMULATION 2
<ul> <li>Ethanol 96%: 8333 ml</li> <li>Hydrogen peroxide 3%: 417 ml</li> <li>Glycerol 98%: 145 ml</li> </ul>	Isopropyl alcohol 99.8%:     7515 ml      Hydrogen peroxide 3%: 417 ml      Glycerol 98%: 145 ml

## Final products

FORMULATION 1	FORMULATION 2
Final concentrations:	Final concentrations:
<ul> <li>Ethanol 80% (v/v),</li> </ul>	<ul> <li>Isopropyl alcohol 75% (v/v),</li> </ul>
<ul> <li>Glycerol 1.45% (v/v),</li> </ul>	<ul> <li>Glycerol 1.45% (v/v),</li> </ul>
<ul> <li>Hydrogen peroxide 0.125% (v/v)</li> </ul>	Hydrogen peroxide     0.125% (v/v)

#### General information

Labelling should be in accordance with national guidelines and should include the following:

- · Name of institution
- WHO-recommended handrub formulation
- · For external use only
- · Avoid contact with eyes
- · Keep out of the reach of children
- Date of production and batch number
- Use: Apply a paimful of alcohol-based handrub and cover all surfaces of the hands. Rub hands until dry
- Composition: ethanol or isopropanol, glycerol and hydrogen peroxide
- · Flammable: keep away from flame and heat

