

Preparation of disinfectant for hand hygiene

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Since the stocks of disinfectant for hand hygiene are running out, hospital pharmacies might need to prepare this product for their hospitals where possible. To support the preparation, a formulation of a disinfectant for hand hygiene with 70% ethanol with glycerol as humectants is given below:

Composition:

Alcohol ketonatus 95%	70 g (= 86 ml)
Glycerolum 85%	1 g
Aqua purificata ad	100 g

Preparation:

1. Mix the alcohol with glycerol.
2. Add purified water to weight.
3. Mix and fill in the package.

Various bottles of HDPE, LDPE or PP can be used as packaging.

Shelf life:

The shelf life of the unopened packaging is set at 6 months and after opening 3 months within this period. This is not based on shelf life studies but on the information from Practical Pharmaceutics.

Labeling:

Indicate on the label the composition, shelf life and the warning "fire hazard"

Explanation:

The amount of 95% alcohol is calculated in such a way that the final alcohol percentage is more than 70%. Instead of alcohol ketonatus, alcohol with isopropyl alcohol can also be used.

1% glycerol 85% has been added to the solution to prevent drying of the skin.

Working with (larger) amounts of alcohol in the pharmacy entails risks, such as the toxicity after inhalation by the operator and the risk of fire. Work in an explosion-proof environment and ensure adequate ventilation and the absence of ignition sources.

Regulations:

In The Netherlands, Disinfectant for hand hygiene is a biocide and it is not permitted to have it available or to place it on the market without permission from the authorities. Due to the special circumstances, Dutch pharmacists have obtained temporarily permission to prepare disinfectant for professional use.