

Starting Formulation, CL-9053

May 4th 2020
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End-Use Homecare

Alcohol based hand sanitizer with hydrogen peroxide

Pumpable Ethanol and Hydrogen peroxide containing hand sanitizer
utilizing LAPONITE-RD, containing 73 Vol% Ethanol

Formulation

Pos.	Component	Supplier	Function	Weight [g]	Volume [ml]
1	Demineralized water		Solvent	27.0	27.0
2	LAPONITE-RD	BYK	Rheology additive	0.8	0.8
3	Ethanol	Various	Anti-microbial	67.2	85.0
4	Glycerine	Various	Humectant	1.0	0.8
5	Hydrogen peroxide (3% active)	Various	Anti-septic	4.0	4.0
				100.0	117.0

Instructions

- Add demineralized water to a suitable container and start stirring at 500 rpm using a tooth blade stirrer
- Slowly add LAPONITE-RD portion wise under stirring over a period of approx. 15 minutes
- Continue stirring until the solution is clear
- Add ethanol under stirring at 1000 rpm; continue stirring for 15 minutes
- Add glycerine under stirring at 1000 rpm; continue stirring for 5 minutes
- Add hydrogen peroxide under stirring at 1000 rpm, continue stirring for 5 min

Characteristic Data/ Specification

Data	Unit	Value
Rheology additive content	%	0.8
Total solid content	%	0.8

Further information / Application

The formulation is designed to be used as is.

The formulation will work through a pump or squeeze bottle. The viscosity will break and flow easily under pressure.