



Foam Nozzle

● Jack

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Summary

fit in PET bottle - creates lather

[Household](#) > [Kitchen](#)

Tags: [soap](#) [soapdispenser](#) [foam](#) [lather](#) [handsoap](#)
[schaumseife](#) [schaumseifenspender](#)

There are a lot of foam soap dispenser on the marked but they all get problems with dish detergent as the pumps get stuck without lubricant and they all stop working after some time as there is only a single very fine sieve which gets clogged.

But foam soap is much more ecological as it saves a lot of soap just going down the drain and allows better cleaning due to bigger surface area. You can use this for hand wash car wash doing dishes or body shower and hair washing. It is also possible to use colored foam bath and paint with it (fun for children).

! Warning THIS IS NOT FOR BEGINNERS

Printing the Filter is only for experts as it need some checks and may need configuration changes (must not fill gaps, may need to disable or change top bottom behavior). But feel free to try - but please use the test first so you are not disappointed by a bad printing result.

To get i nice fine Filter (spacing 0.2) single lined bridges are needed but every object will have two lines (except infill or spiral prints) so here a trick is used so when printing the object a space between the lines stays open as no inner line fit in there. But you have to check how your slicer will deal with that and configure it to work that way.

Also for first insertion into the bottle you should soak it in warm (45°C) Water so the seal will deform and fit.

Use

Foam requires only 10% soap (mix 1 part soap with 9 parts water - ratio may depend on your soap). You fill your bottle less then a quarter as the Air will create the foam. When turning upside-down soap will drip onto the filter while when pressing the bottle the snorkel (need to be above liquid) will allow air to mix and create foam while the second stage will refine the lather.

A straw or tube can be inserted into the snorkel to allow more liquid.

Another option would be to use a **normal spout** but then you need to shake the bottle each time you want foam - which is suboptimal for daily use.

Model files

029schaumduesen04l01newfilter.3mf

☐ Nozzle 0.4 Layer .1 (or .2) New Filter mesh generation

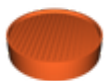
029schaumduesenewfiltertestn04l01.3mf

☐ For Print Testing nozzle .4 layer .1 (or .2)



old-029schaumduesen04l01.3mf

☐ Nozzle 0.4 Layer .1 (or .2) (for older slicer without adaptive line width compensation)



old-029schaumduesefiltertestn04l01.3mf

☐ For Print Testing nozzle .4 layer .1 (or .2)



old-029schaumduese.stl

☐ nozzle .2 layer 0.08 (for older slicer without adaptive line width compensation)



029schaumduese.scad

☐ newFilterGen

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