



Rocket engine balloon



rorys3D

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Summary

This is small fun model of rocket engine that propels an inflatable balloon. This is 1 perimeter print.



1.18 hrs



2 pcs



0.20 mm



0.40 mm



PLA



6 g



Prusa
MK3/S/S+

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Tags: [rocket](#) [fun](#) [inflatable](#) [nozzle](#) [engine](#) [helix](#)
[balloon](#) [thrust](#)

This is small fun model of rocket engine that propels an inflatable balloon. It has 3 nozzles that are in a helix shape and thus help stabilize the nominal trajectory. Balloon can get quite high, but it is prone to wind. Although this is model iteration 7, it is still rather experimental. I'll be glad if you improve it even more ;).

You can inflate it directly through the engine or use the inflating adapter.
Balloon that is harder to inflate is better.

Hold the balloon just above the engine neck or place it on a flat surface and release.

Print the engine with **1 perimeter**, 0 infill, 0 top and 0 bottom layers (similar settings as for RC planes printing). So you get the engine as light as possible (3.5g).

In the files below you can also find the old V2 version, V7 version without outer shell and V7 engine for SLA print.

Also check out:

<https://www.youtube.com/channel/UChKp-968z1i5PN29gbR7YfA>

<https://www.cgtrader.com/rorys3d>

Model files



rocket_engine_7.3mf



inflating_adapter.3mf



rocket_engine_v7.stl



inflating_adapter.stl



old_v2.3mf



old_v2.stl



v7_without_outer_shell.3mf



v7_without_outer_shell.stl



rocket_engine_v7_for_sla_print.stl



rocket_engine_v7_for_sla_0p9mm.stl

Print files



rocket_engine_7_02mm_pla_mk3s_42m.gcode

🌀 PLA 🌀 0.40 mm 🌀 0.20 mm 🕒 0.70 hrs 📊 3 g 🖨️ Prusa MK3/S/S+



inflating_adapter_02mm_pla_mk3s_29m.gcode

🌀 PLA 🌀 0.40 mm 🌀 0.20 mm 🕒 0.48 hrs 📊 3 g 🖨️ Prusa MK3/S/S+

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