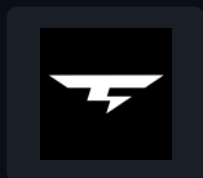


NEWSPACE MARKET · COMPANY PROFILE



Thaliana Space

Poland · founded 2022 · thaliana.space

5

PRODUCTS

5

SERVICES

newspacemarket.com/companies/thaliana-space/

as of 20 August 2026



Thaliana Space

Thaliana Space is a Polish space propulsion company headquartered in Warsaw, developing eco-friendly satellite propulsion systems based on highly concentrated hydrogen peroxide as a green propellant alternative to conventional toxic hydrazine. The company's portfolio includes propulsion systems, propulsion components, hydrogen peroxide production and supply, and catalysts for catalytic decomposition propulsion, offering a less toxic, more environmentally responsible approach to satellite attitude control and orbit manoeuvring. Thaliana Space serves satellite manufacturers, commercial constellation operators, and spacecraft developers seeking green propulsion solutions that reduce handling hazards and environmental impact while maintaining the performance required for satellite operations. Thaliana Space sp. z o.o. was registered in September 2022 (KRS 0000993040) as a spin-off of the Łukasiewicz Research Network - Institute of Aviation (Łukasiewicz - ILOT) in Warsaw, commercializing over fifteen years of the Institute's rocket propulsion research, and is supported by the ESA Business Incubation Centre (ESA BIC) Poland. In February and March 2025, Thaliana Space signed licensing agreements with Łukasiewicz - ILOT to commercialize a family of 98% high-test peroxide (HTP) rocket engines - a 1 N monopropellant thruster and a 420 N bipropellant engine - for satellites, orbital transfer vehicles and launcher upper stages, and began production and delivery to customers. In April 2025, MaiaSpace signed a multi-party agreement with Łukasiewicz - ILOT and Thaliana Space for Thaliana Space to manufacture and deliver 420 N HTP bipropellant engines for the Colibri kick-stage of MaiaSpace's orbital rocket; an atmospheric hot-fire qualification test campaign of these engines was succ

This profile is generated from the live NewSpace Market catalogue. Specifications are as published by the manufacturer; every product links to a page where a request for quotation reaches the company directly.

SERVICES

Services

Computer simulations

Thaliana Space performs various computer simulations, including structural, thermal, dynamic, and flow analyses, to support design and development processes.

Engineering advisory calls

Thaliana Space provides expert engineering advice and consultation through advisory calls, leveraging its state-of-the-art knowledge.

Holistic machine design services

Thaliana Space offers comprehensive machine design services that adhere to industry standards, ensuring robust and compliant designs for various applications.

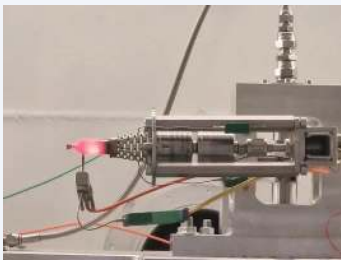
Lease of dedicated propulsion units for HTP production

Thaliana Space offers the lease of dedicated propulsion units for in-house production of highly concentrated hydrogen peroxide (HTP) for customers requiring large quantities.

Participation in space technologies research projects

Thaliana Space is open to partnering or subcontracting for space technologies research projects, including proposal preparation for ESA, EDA, and government programs.

Product catalogue



THALIANA SPACE

1N HTP Monopropellant Thruster

1 N monopropellant thruster running on 98% high-test peroxide, developed at Łukasiewicz - ILOT and commercially produced by Thaliana Space under license for satellite ACS and deorb

Propellant	98% HTP (monopropellant)
Nominal Thrust	1 N
Type	Catalytic monopropellant thruster
Licensor	Łukasiewicz Research Network - Institute of Aviation
License signed	February-March 2025

price on request



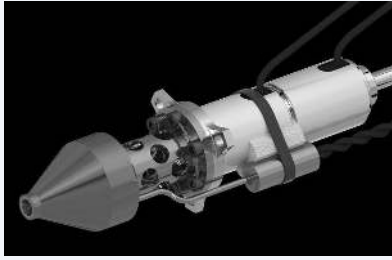
THALIANA SPACE

420N HTP Bipropellant Kick-Stage Engine

420 N-class bipropellant rocket engine using 98% hydrogen peroxide as oxidizer, developed under ESA's GRACE 1/2 programs and manufactured by Thaliana Space for MaiaSpace's Colibri

Nominal Thrust	420 N (per engine)
Oxidizer	98% hydrogen peroxide (HTP)
Type	Bipropellant liquid rocket engine
Application	Kick-stage / orbital transfer vehicle (OTV) / launcher upper stage
Heritage	ESA GRACE 1 & GRACE 2 programs, Łukasiewicz - ILOT
Customer program	MaiaSpace Colibri kick-stage
Qualification status	Atmospheric hot-fire test campaign completed April 2026; vacuum test stand qualification p

price on request



THALIANA SPACE

Green Propulsion System (4x1N HTP Monopropellant Module)

Blowdown monopropellant propulsion system using 98% HTP with four 1 N thrusters for LEO small-satellite orbital maneuvers, attitude control, and end-of-life deorbit.

Propellant	98% HTP
Wet mass	< 25 kg
Dry Mass	< 12 kg
Type	Blowdown monopropellant
Total Impulse	14000 Ns
Nominal Thrust	4 x 1N
Thermal Control System	Semi-passive

price on request



THALIANA SPACE

High Test Peroxide (HTP)

Highly concentrated, pure hydrogen peroxide (HTP) propellant offered in concentrations from 80% up to 99.99%, with a 98% grade tailored for in-space propulsion systems.

Concentration range	80% to 99.99%
Recommended grade for in-space propulsion	98% HTP

price on request



THALIANA SPACE

Highly concentrated, pure hydrogen peroxide

Thaliana Space offers highly concentrated hydrogen peroxide (HTP) ranging from 80% to 99.99%, with 98% HTP specifically designed for in-space propulsion systems.

Concentration range	80% up to 99.99%
Dedicated for in-space propulsion systems	98% HTP

price on request

Contact Thaliana Space

Open the company profile on NewSpace Market to see full specifications and datasheets, and to send a request for quotation that reaches the manufacturer directly.

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<https://thaliana.space/>

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