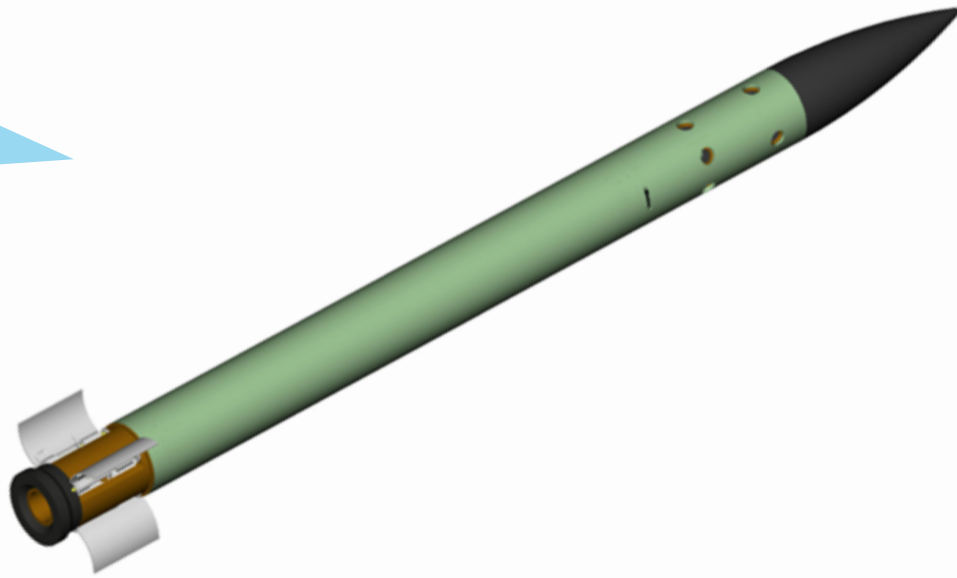


A6 AHR  
SMALL  
CALIBRE



EDePro  
Engine Development & Production

# A6 ANTI-HAIL ROCKET

*The modern reality of hail suppression*

As governments, countries, and weather-dependent businesses across the globe put more effort to prevent the damage cost by hailstones, the need for efficient, cost-effective hail suppression systems is increasing on a daily basis. As a company with a strong background in propulsion systems solutions for solid propellant rockets, rocket systems, and defence equipment, we use our original know-how to develop high-tech civilian solutions. Anti-hail rocket A6 is one of those solutions, currently in operational service in numerous countries worldwide.

## Tactical Use

The A6 Anti-hail rocket is used for dispersion of reagent into hail clouds. The rocket carries a 400g of reagent mass and disperses it at high altitudes in a period of 35 to 43 seconds. Single projectiles or a salvo of rockets are used to produce nuclei during the burning of pyrotechnic substances and inject these nuclei directly into the cloud region preventing hail formation.

## The Rocket & Container System

The rocket and container make a unique system, placed on the launcher. Reusable containers emulate the Launcher which enables the rocket to be launched from its container. This type of launching ensures that the rocket has a great initial speed over above 80 m/s. AHR A6 can be launched from different types of launchers with minimal modifications to the launcher itself.

## Compact Design

The small calibre (55 mm) reduces the material consumption of the rocket, thereby reducing its cost. The dimensions of the launcher are minimal. The construction is compact and robust and it enables swift gaining of elevation and azimuth.

## MAIN SPECIFICATIONS

- Ø Calibre: 55 mm
- CG\*: 400 m
- Takeoff mass: 3.5 kg
- Length: 841 mm

\*Centre of gravity measured from rocket nose tip

## Safety & Environment Protection

Rockets are almost completely made of thermo-plastic materials to secure environmental safety. When the active phase of flight finishes (reagent has discharged), the rocket is self-destructed at a safe altitude, while completely harmless debris falls down. Two independent pyrotechnic timers provide the right timing for the activation of operations necessary for the rocket's self-destruction.





## MAIN TACTICAL AND TECHNICAL PERFORMANCES

### Technical Specification

	Data	Unit
Vertical range (elevation angle 850)	5800	m
Period of reagent emission*	36	m
The moment of self-destruction*	43	s
Operating temperature range	-20±60	°C
Ignition circuit resistance	1.2	Ω
Required electricity for the activation	0.68	A
Required voltage	24	V
Calibre (container)	60	mm
Calibre (rocket)	55	mm
N° of containers	6	/
Length (container)	1037	mm
Mass (container)	1	kg
Takeoff mass	3.5	kg
Launcher's mass	65	kg
Elevation range (50 incr.)	450 ~ 850	/
Azimuth range (50 incr.)	0~3600	/
Burning time	3.0	s
Motor total impulse	2150	Ns
Propellant's mass	1050	g
Start of discharge*	7	s
End of discharge*	43	s
Reagent's mass	400	g
Reagent activity at -100 °C	2.5*1000	par/g mixture

\*adjustable according to customer's requirements.

### BENEFITS

- » Simple and fast usage requiring only a few hours of training of an operator.
- » The rocket launches from its container.
- » Main performances adjustable to specific user's requirements.
- » Two independent pyrotechnic timers enable the right timing of rocket self-destruction.

