

# **TECHNICAL DATA SHEET**

# NFAI-PHENOTHRIN/PERMETHRIN NON FLAMMABLE AIRCRAFT INSECTICIDE PHENOTHRIN/PERMETHRIN Combination Aerosol Insecticide for Aeronautical Use

#### **DESCRIPTION**

PSA Non Flammable Aircraft Insecticide Phenothrin/Permethrin (NFAI Phenothrin/Permethrin) is a combination aerosol containing 2% permethrin and 2% d-phenothrin. It is a non-flammable and aircraft approved insecticide for professionals, fully compliant with International Health Regulations (IHR) and World Health Organisation (WHO) recommendations, used for pre-departure and on-arrival cargo holds aircraft disinsection methods.

#### **FEATURES & BENEFITS**

- Effective on many flying and crawling insects (*Musca Domestica, Aedes, Anopheles, Culex, Tribolium* sp.).
- Total mortality on mosquitos in less than 3 minutes.
- Compliant with International Health Regulations and WHO's recommendations and procedures for the disinsection of cargo holds.
- Non-flammable aerosol formulation.
- Dry diffusion for maximum efficacy.
- "Single-shot" aerosol.
- Recyclable plastic cap and aluminum can.



Calculated Carbon Footprint.

#### **APPLICATION**

- Disinsection of aircraft cargo holds.
- Product suitable for use in confined spaces.
- To be used for cargo holds disinsection at the last port of prior to departure or on-arrival.
- Note that the WHO recommends the alternative use of a single-shot aerosol can containing
  either 2% d-phenothrin or 2% 1R-trans-phenothrin alone, in special circumstances such as nonauthorization or non-availability of the phenothrin/permethrin combination aerosol for regulatory
  reason, and for small aircrafts with very small holds.

#### PRE-DEPARTURE PROCEDURE

- Treatment must be carried out after all cargo has been loaded, and just before the hold door is closed.
- Since aerosols may set off smoke alarms, be sure to advise the crew that hold spraying is about to commence.
- During disinsection and for 5 min after completion of spraying, the aircraft's air-conditioning must remain off. Recirculation fans may be left on if essential for operation of the aircraft but should be set to the lowest rate.
- Aerosols must be discharged into each cargo hold in such a manner as to ensure that all parts of the cargo hold have been disinsected.











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- As the cargo hold door is being closed, leave just enough of an opening to stand the aerosol(s) NFAI Phenothrin/Permethrin can between the cargo containers.
- Hold the nozzle(s) down to activate the aerosol.
- When you see that the spray has been activated, close the hold door immediately, leaving the cans in place to complete the disinsection process.
- Once the aircraft has reached its destination, the exhausted cans are to be collected by ground handlers.
- Application rate for cargo hold disinsection as per WHO recommendations (2nd Edition Nov.2023):
  - <sup>o</sup> 140g / 100m<sup>3</sup> for Fwd Hold and Aft Hold of Commercial passenger or freighter aircraft.
  - ° 55g / 100m³ for Main Deck Cargo of a freighter aircraft.

#### **ON-ARRIVAL TREATMENT PROCEDURE**

- Under no circumstances should a hold door be opened without approval from the local authority
- Since aerosols may set off smoke alarms, advise the crew that hold spraying is about to commence.
- During disinsection and for 5 min after completion of spraying, the aircraft's air-conditioning
  must be switched off. Recirculation fans may be left on if they are essential for operation of the
  aircraft but should be set at the lowest flow rate.
- Disinsection may be done manually by directing the spray into small pressure hatches where present or by placing aerosols inside the hold.
- Open the hold door by no more than 30 cm, place the aerosols inside the hold in a secure upright position, and activate the lock-down nozzle(s).
- Once the spray aerosol(s) appears to be functioning correctly, immediately close the hold door to complete disinsection.
- Allow 2.5 min for the aerosols to fully discharge, and then wait a further 5 min for saturation.
- Application rate for cargo hold disinsection as per WHO recommendations (2nd Edition Nov.2023):
  - ° 140g / 100m³ for Fwd Hold and Aft Hold of Commercial passenger or freighter aircraft.
  - ° 55g / 100m³ for Main Deck Cargo of a freighter aircraft.

#### CHARACTERISTICS

Permethrin - ratio 25/75 (CAS 52645-53-1) ......2% w/w

Aspect: Colourless to slightly yellow liquid Fragrance: Characteristic – peach fragrance

Flammability: Non-flammable

Packaging: Aerosol

Recyclable aluminium can. Resistance to pressure up to 18 bars

Flow rate: Between 0.8 & 1.2 g/s as per WHO recommendations.

#### **CERTIFICATIONS AND ACCREDITATIONS**

- Aerosol product NFAI-Phenothrin/Permethrin:
  - o Compatible with aircraft materials: AMS1450
  - o Referenced on Airbus Consumable Material List (CML) 11ABB2
  - Compliant with WHO's recommendations for disinsection of aircrafts.



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- Active ingredients:
  - Assessed by WHO. as part of the IPCS (Int'l Programme on Chemical Safety) 1989.
  - D-Phenothrin and Permethrin approved as per the EU Biocidal Products Regulation N°528/2012, for use as Product Type 18 (Commission Implementing Regulation (EU) n°1090/2014).
- PSA certified to ISO 9001:2015
- PSA NATO Cage Code: FA2X6

#### ORDERING INFORMATION

Product Code	Product	Size	Nozzle	Volume treated (m <sup>3</sup> )	Units /carton	CO2 / unit (EXW Paris)
AR000031	6 NFAI-150DP (#236T)	150 g	Single-shot	430	50	184,14 Kg



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#### **PACKAGING**

Carton	Cartons per	Cartons per	Number of	Pallet Dimensions (cm)	Pallet Height
Dimensions (cm)	Pallet	Layer	Layers		(cm)
46 x 24 x 18	36	6	6	80x 120	120

#### **WARNING**

Pressurised container: May burst if heated. May cause an allergic skin reaction. Very toxic to aquatic life with long lasting effects.

#### **PRECAUTION**S

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No Smoking. Do not pierce or burn, even after use. Avoid breathing spray, gas, vapours. Contaminated work clothing should not be allowed out of the workplace. Avoid release to the environment. IF ON SKIN: Wash with plenty of water. If skin irritation or rash occurs: Get medical advice/attention. Take off contaminated clothing and wash it before reuse. Collect spillage.

#### STORAGE AND DISPOSAL

Protect from sunlight. Do not expose to temperatures exceeding 50°C/122 °F. Store in a cool, dry, ventilated place. Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation

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