





HELP PATH-GUARD LEAD THE WAY TO A SAFER TOMORROW



PATH-GUARD Dry Fog System

SYSTEM COMPONENTS - AN OVERVIEW

Component #1 - Dry Fog Technology

- Understanding Dry Fog
- How PATH-GUARD Works
- Fog Droplet Surface Diameter

Component #2 - The Fogging Unit

- The Dry Fog Backpack Unit
- Backpack Unit Overview
- Ultra-sonic Nozzle Technology
- Understanding the Fogging Nozzle
- Nozzle Options and Flow Rates
- Wet/Dry Droplet Comparison Chart
- Adjustable Droplet Size

Component #3 - The Solution

- Solution Overview
- Anti-pathogenic Efficacy
- Conveniently Sized Containers

Review of Key Features and Benefits





Component #1

~ Dry Fog Technology ~

PATH-GUARD Dry Fog System

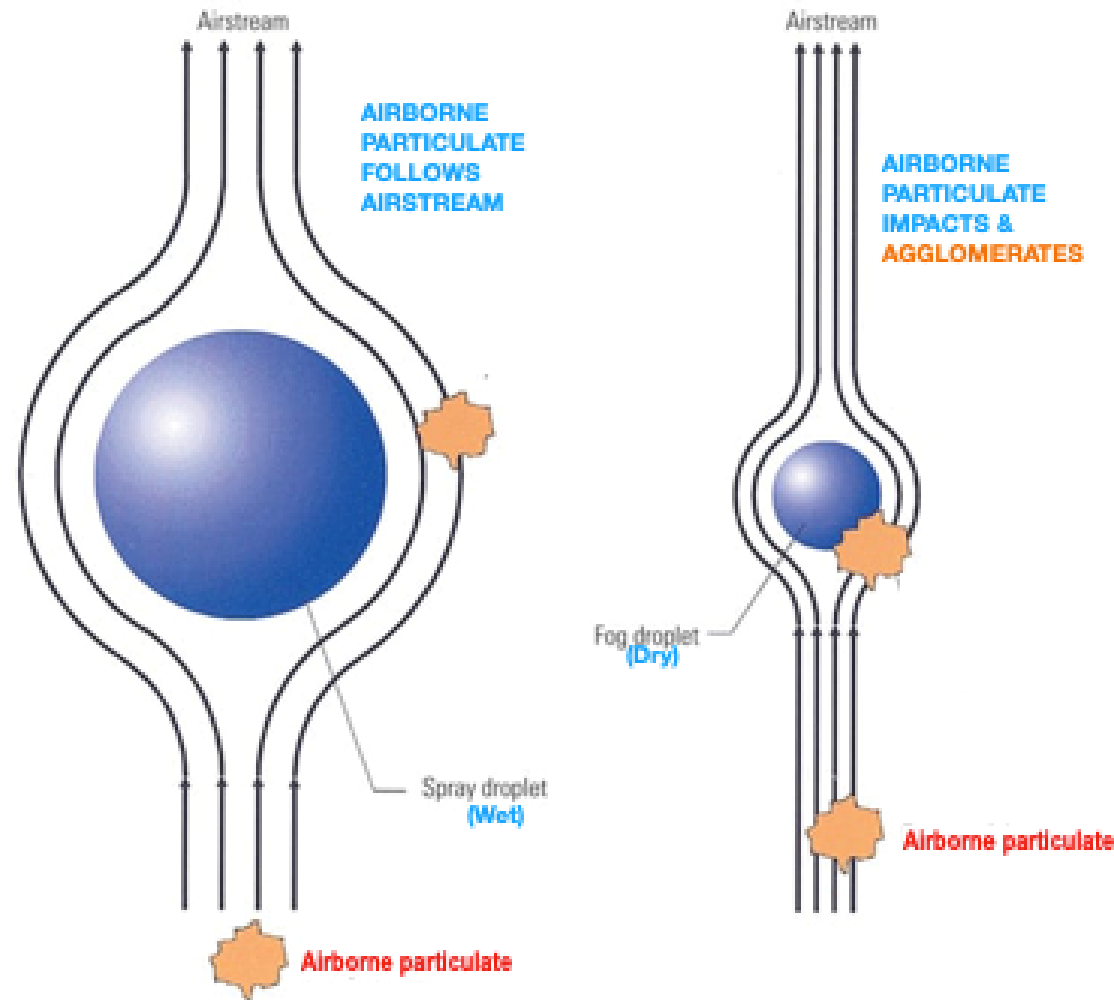
UNDERSTANDING DRY FOG

- The use of Dry Fog for particle suppression is based on a natural phenomenon known as agglomeration.
- When like-sized water droplets and airborne particulate collide, agglomeration (sticking) occurs which results in larger particles which have become too heavy to remain suspended in the air. This is called gravitational agglomeration and by this process, pathogens are removed from air.
- Both particles and water droplets need to be in close proximity to each other.
- Path-Guard uses a plant-based anti-pathogenic solution together with compressed air in order to create the necessary micron-sized droplets needed for agglomeration.
- Gravity forces the newly agglomerated particle back down into the process, resulting in pathogen removal and disinfection of the air.
- If the droplet diameter is much greater than the particle, the particle simply follows the airstream lines around the droplet, and little or no contact can occur, meaning that airborne particulate (pathogens) cannot be removed from the air. The Path-Guard Dry Fog backpack unit produces a droplet as small as 0.1 μm to 10 μm in size, making it capable of airborne virus elimination.



PATH-GUARD Dry Fog System

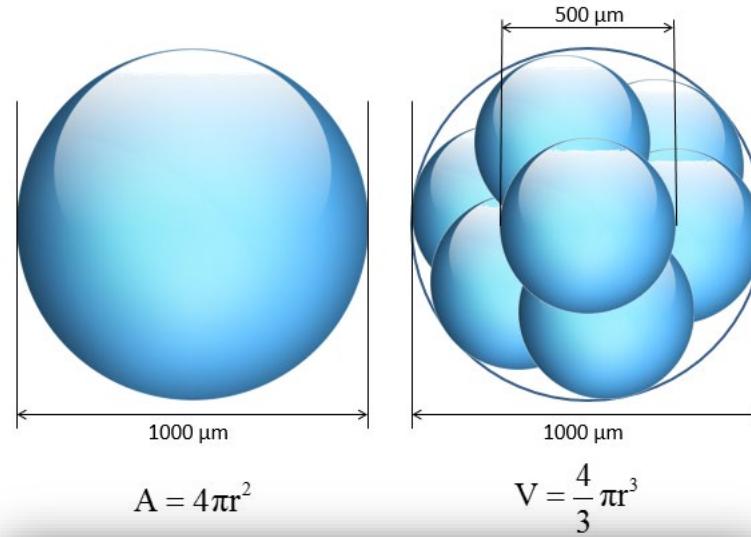
HOW PATH-GUARD WORKS: The Natural Phenomenon of Agglomeration



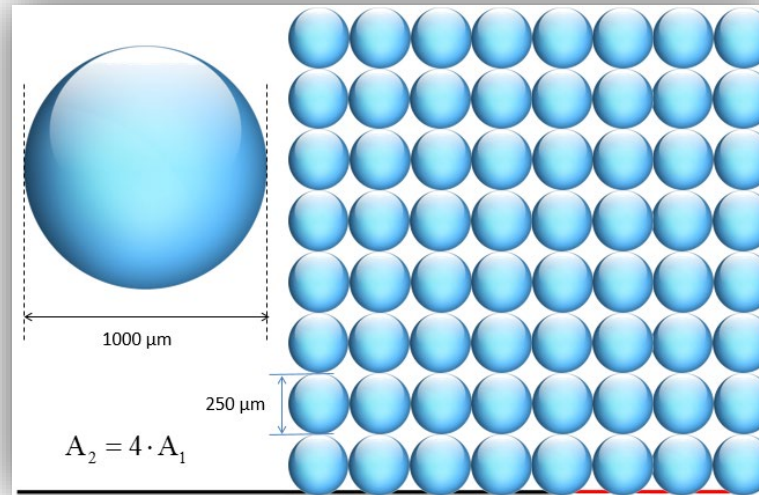
- When like-sized droplets and airborne particulate collide, agglomeration (sticking) occurs as a result of their similar gravitational force. This results in larger particles that have now become too heavy to remain suspended in the air.
- If the droplet diameter is much greater than the airborne particulate, the particulate simply follows the airstream lines around the droplet, and little or no contact occurs.

PATH-GUARD Dry Fog System

FOG DROPLET SURFACE DIAMETER



Droplet size versus surface area for 1 gallon of atomized solution



Our nozzle can cover half the size of a football field in fog with a single gallon of PATH-GUARD solution.



Component #2

~ The Fogging Unit ~

PATH-GUARD Dry Fog System

The DRY FOG BACKPACK UNIT



PATH-GUARD Dry Fog System

BACKPACK UNIT OVERVIEW

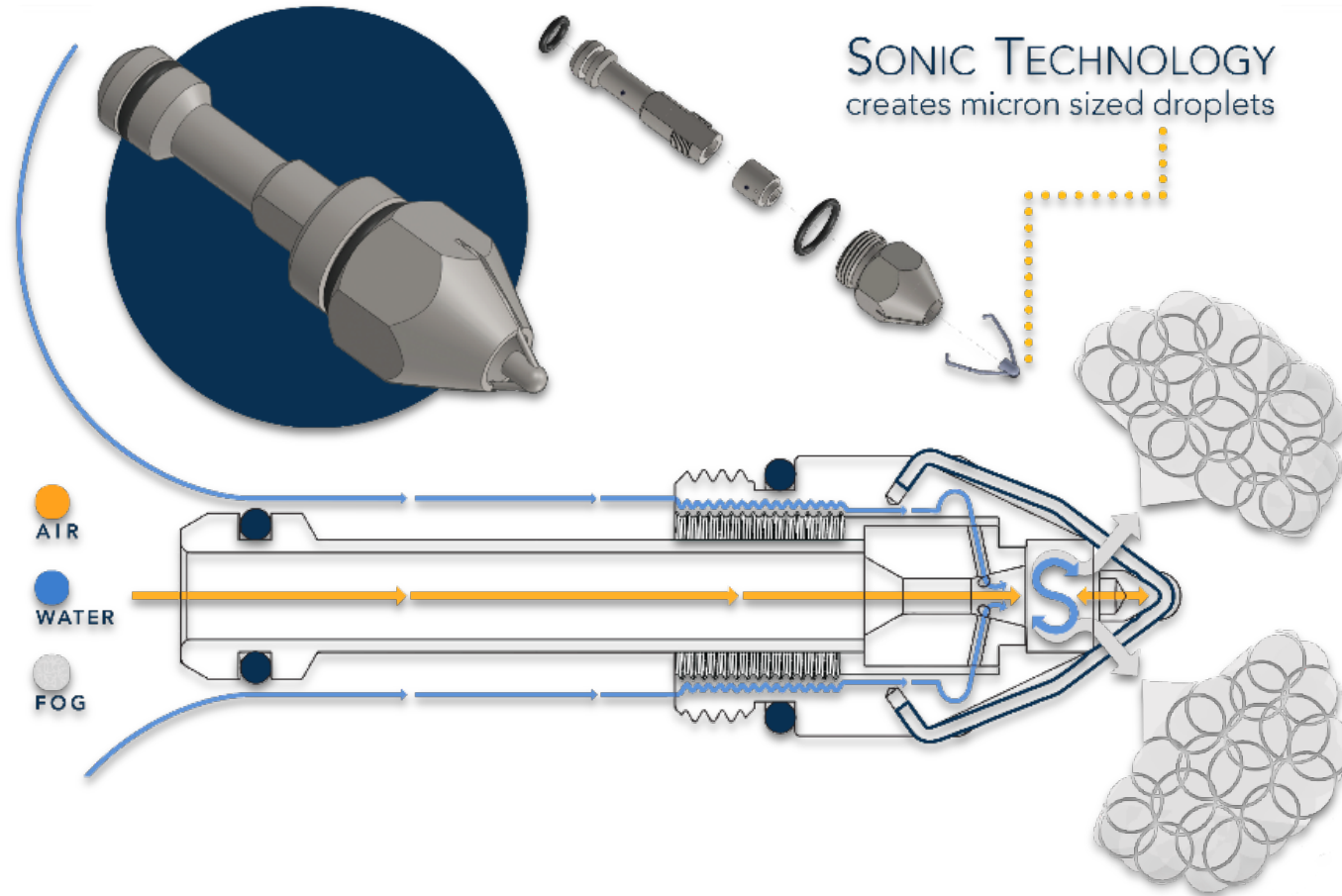
- Smallest droplet size available at 0.1 to 10 μm in size, making it capable of airborne virus elimination
- Sub 10 μm droplets allow for better surface area coverage using less disinfectant.
- **Electrostatically charged** particles without the need for batteries or electricity
- Droplet size can be tuned via onboard regulation allowing for wetter or drier application when required.



- Can disinfect without leaving residue if required.
- Different nozzles available for multiple flows and different applications
- Rugged design and made in the USA
- The backpack unit has a trigger gun assembly that can operate the unit via the gun.
- Switch on top allows switching between the “dry” and “wet” settings from the backpack.

PATH-GUARD Dry Fog System

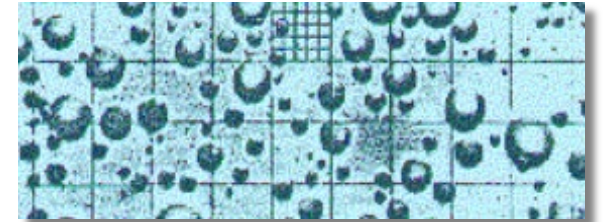
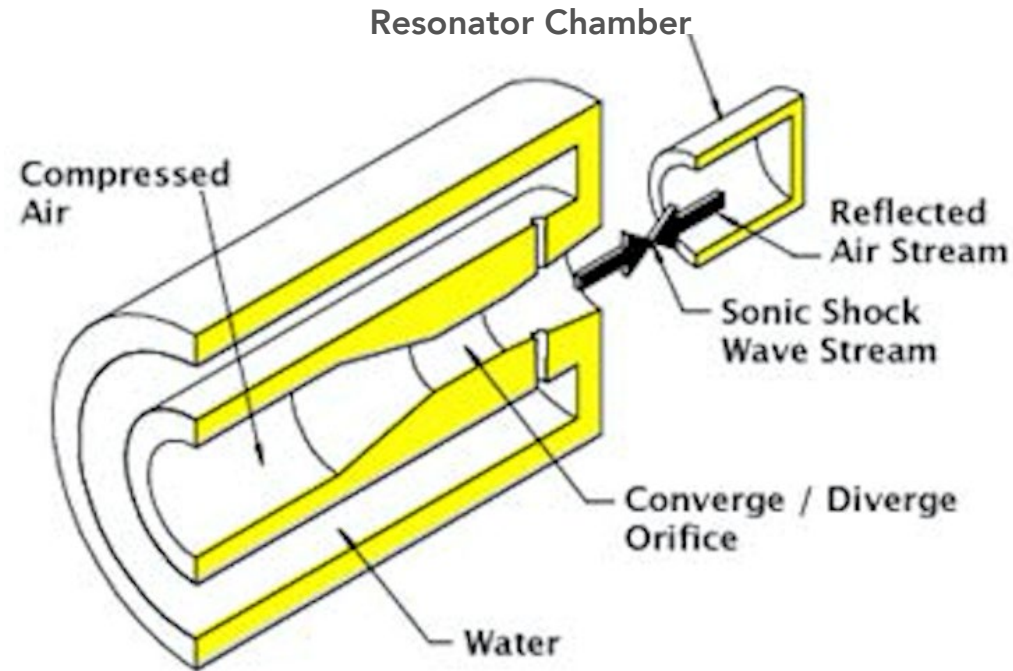
ULTRA-SONIC NOZZLE TECHNOLOGY



PATH-GUARD Dry Fog System

UNDERSTANDING the FOGGING NOZZLE

- Compressed air at 70 - 90 psi is fed through the convergent/divergent venturi in the center of the nozzle
- As air is reflected off the resonator cap the colliding air creates an ultrasonic shock wave
- PATH-GUARD's solution is fed from the outer ring into the airstream and is atomized by the shock wave into droplets under $10\mu\text{m}$



PATH-GUARD Dry Fog System

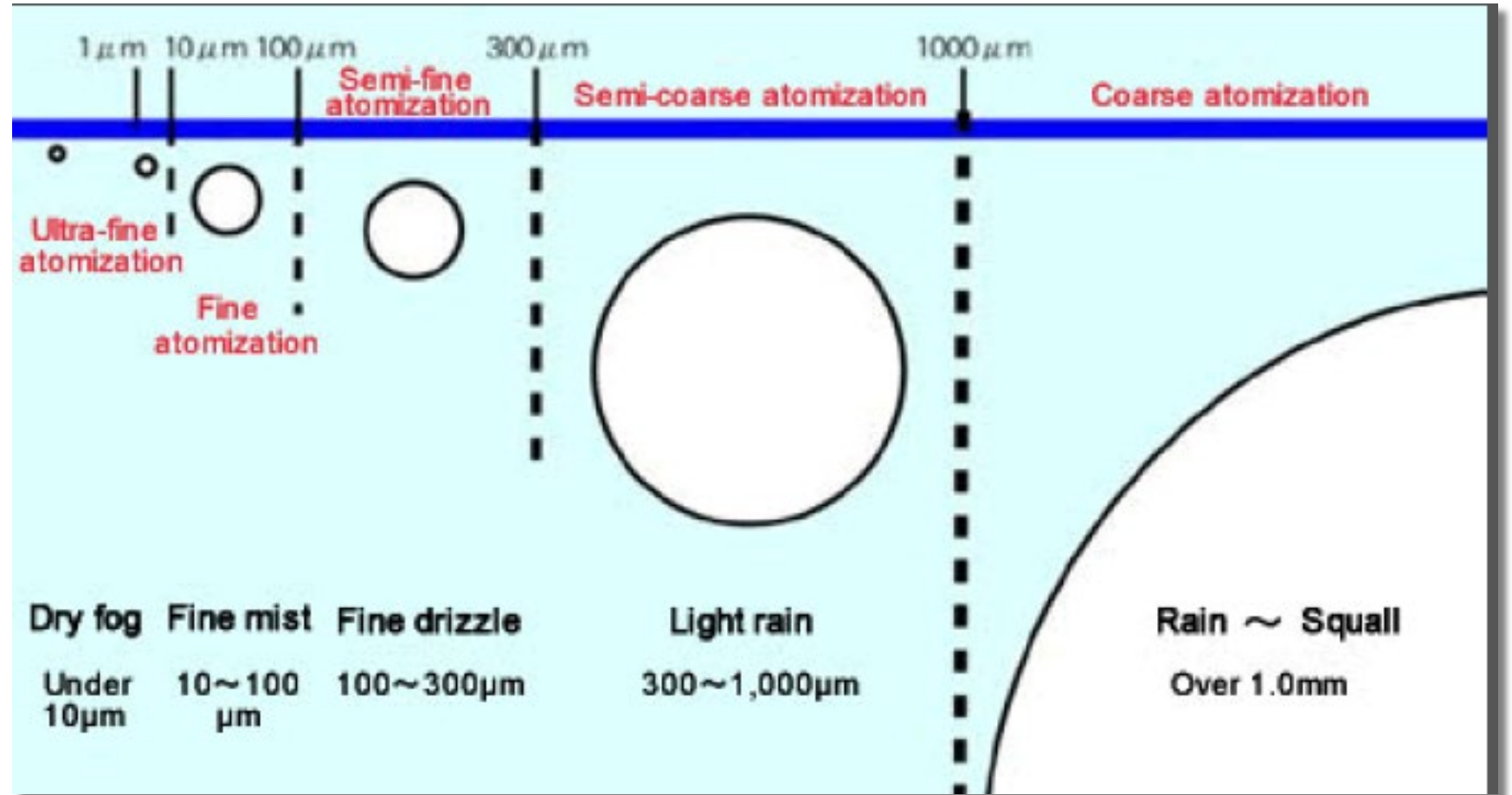
Nozzle Options and Flow Rates

- FCN-3
3.5 SCFM @ 90 PSI Air
3 Gallons per hour disinfectant
- FCN-6
7.3 SCFM @ 90 PSI Air
5 Gallons per hour disinfectant
- FCN-10
9.5 SCFM @ 90 PSI Air
8 Gallons per hour disinfectant



PATH-GUARD Dry Fog System

WET/DRY DROPLET COMPARISON CHART





Component #3

~ The Solution ~

PATH-GUARD Dry Fog System

SOLUTION OVERVIEW

The active ingredient in PATH-GUARD's anti-pathogenic solution is comprised of phytochemical compounds derived and formulated from plants.

- Broad spectrum effective against 171 pathogens
- Certified input for Organic
- **Hospital-grade and non-GMO, safe for children and pets**
- Biodegradable, totally soluble, safe for the environment
- Alcohol, bleach and chemical-free
- Non-toxic, contains GRAS food-grade ingredients
- **OSHA approved for use on food counters, aquatics, and plants**
- Safe for sensitive electronics
- Proven. Active ingredient used successfully for pathogen containment worldwide.
- **EPA, FDA, USDA, EU, JAS input compliant**
- Developed and made in the USA



PATH-GUARD Dry Fog System

National Academy of Sciences

The active ingredient in our solution is effective against Airborne
Transmission of Virus is the "**Dominant**" way it spreads

If you're working in an office, eating in a restaurant, working out at a gym or a club and someone 30 feet away exhales tiny particles of the coronavirus, those particles can drift and infect you. Picture cigarette smoke wafting across a room. Same thing.

The precautions global and federal agencies are advising aren't good enough. Social distancing — keeping six feet away — and washing your hands [won't protect you from this airborne virus](#). That isn't fear-mongering. It's science.

The Solution;



PATH-GUARD Dry Fog System

ANTI-PATHOGENIC EFFICACY

The active ingredient in our solution is effective against pathogens of fungal, bacterial, viral, airborne transmission, yeast origin, such as:

- COVID-19
- MRSA
- C-diff
- Salmonella
- E-coli
- H1N1
- Staphylococcus
- Mycobacterium tuberculosis
- Ebola
- Influenza
- Herpes simplex
- Pseudomonas
- Penicillium
- Legionella pneumoniae
- Campylobacter jejuni
- Giardia lamblia
- Mycobacterium smegmatis
- Fusarium
- Fecal coliforms
- Streptococcus
- Avian influenza



...and 150 more pathogens, both surface and airborne!

PATH-GUARD Dry Fog System

CONVENIENTLY SIZED CONTAINERS



PATH-GUARD Dry Fog System

REVIEW of KEY FEATURES and BENEFITS

- The PATH-GUARD Solution is cost effective, yielding approximately 25,000 sq. ft. per gallon of dry fog coverage.
- The PATH-GUARD solution comes pre-mixed and ready-to-use at the required 3% strength and is available in conveniently sized containers.
- The active ingredient in PATH-GUARD's solution has a proven track record of success world-wide in killing the most aggressive pathogens known to man. **Like SARS, Ebola, and MRSA.** Yet it is plant-based and All Natural.
- The PATH-GUARD Dry Fog System works with Nature by harnessing the power of agglomeration to achieve a safe and healthy breathing environment.
- PATH-GUARD Disinfectant Solution kills pathogens, including odor-causing bacteria and mold on touch points, breathing spaces, and HVAC systems.



Tested. Proven. Approved.



Disclosure: The active ingredient in PATH-GUARD Solution has been tested, proven, and approved for efficacy, purity, and safety by numerous consumer and governmental agencies.



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