

**TECH OFFER**

**Effective and Versatile Deodorant Solution for Odor Removal**



**KEY INFORMATION**

TECHNOLOGY CATEGORY:

Sustainability - Sustainable Living

Chemicals - Additives

Materials - Composites

TECHNOLOGY READINESS LEVEL (TRL): **TRL9**

COUNTRY: **SINGAPORE**

ID NUMBER: **TO175078**

**OVERVIEW**

Issues associated with odor generation present significant challenges in various aspects of daily life, encompassing unpleasant smells from various sources such as toilets, kitchens, pets, tobacco, hospitals, and transportation. These unwanted odors have a detrimental impact on individual well-being, social interactions, and overall environmental quality. Deodorants play a crucial role in addressing these challenges, fostering a more comfortable and hygiene environment. However, conventional deodorants primarily rely on masking the unwanted odors with a strong fragrance, resulting in a slow and ineffective deodorization process, particularly against strong smells.

The technology owner has developed a proprietary formulation that offers an effective deodorization approach. Unlike common deodorants, the unique deodorant using the proprietary formulation can remove the sources of unpleasant smells through chemical reactions. It demonstrates remarkable efficiency against a broad spectrum of odors, including those from rotting fish and meat, rotting eggs and milk, rotting vegetable waste, ammonia in toilets, sweat, and body odor. This innovative solution has

the potential to revolutionise odor control across diverse scenarios.

The technology owner is seeking R&D collaboration with industrial partners who are interested in incorporating this deodorant into their products and applications.

## TECHNOLOGY FEATURES & SPECIFICATIONS

Compared to conventional deodorants, this deodorant quickly interacts with unpleasant odor molecules and immediately envelops, degrades, and neutralizes the molecule, eliminating the unpleasant odor around it. Key features of this technology are:

- Universally against the four major malodors (i.e., ammonia, trimethylamine, methyl mercaptan, and hydrogen sulphide)
- Distinctive technique utilising zinc ions to decompose hydrogen sulfide, the source of putrefaction and fecal odor
- Effectively decompose human body odor and pet odor by using inorganic salts
- Reliable and efficient deodorization with a high deodorizing rate

## POTENTIAL APPLICATIONS

This innovative deodorant can be used in many situations since it is universally effective against the major odors in daily life. Potential scenarios include (but are not limited to):

- **Transportation:** public transportation or private cars. It effectively neutralises unpleasant odors during long trips, ensuring a comfortable space for passengers.
- **Medical institutions:** hospitals and clinics. It eliminates various odors occur in health care facilities, maintaining a comfortable environment for patients and staff.
- **Hotels and accommodation:** hotel rooms, shared spaces, and the entire accommodation. It provides a clean and comfortable environment, accommodating different guest preferences.
- **Educational institutions:** school and university classrooms, libraries, and common areas. It delivers safe and effective deodorizing effects for diverse population, including youth.
- **Event Venue:** indoor and outdoor events, concerts, and sporting occasions. It is particularly useful for odor control in places where many people gather.

## UNIQUE VALUE PROPOSITION

- Effective deodorization against four major odors
- Enhance high safety in human health
- Low price despite its high effectiveness
- Customisable to meet different specifications