

# Multi-functional Spray

## 多功能噴劑

The project applies multi-functional odour-control technologies to develop uniforms for workers of Food and Environmental Hygiene Department of HKSAR Government, who are working in picking corpses. The important functions for these uniforms are odour-control and anti-bacteria. The multi-function was based on nano- and micro-encapsulation odour-control technology for improving the protection, safety, hygiene and comfort of garments and apparel.

此項目把多功能整理技術為食物環境衛生署轄下負責收檢屍體的人員開發制服，採用以納米或微型膠囊技術為本的多功能技術，為制服開發具有臭味控制和抗菌功能，再加以改良或發展，以提高服裝的保護性、安全性、衛生度和舒適性。



### Application 應用

The multi-functional spray is water soluble odour absorber based on zinc salt of ricinoleic acid blended with betaine compounds and lauryl methacrylate. It is non-toxic, non-irritating and non-corrosive. It can remove unpleasant smelling substances such as smoke, isovaleric acid, mercaptane, hydrogen sulfide, ammonia and amines from the ambient air. In addition, the neutraliser contains emulsifier for oil and anti-bacteria agent for good cleaning and anti-bacterial application. Since it is colourless and transparent, it will not influence the basic colour of the base material for application, especially on textile.

此噴劑是一種含蓖麻油酸鋅，甜菜鹼化合物及甲基丙烯酸月桂酯的高效氣味吸收劑，無毒，不含刺激物，無腐蝕性。此噴劑可以清除烟味、異戊酸味、硫化氫、氨氣及有機胺化合物等臭味源。另外，此噴劑中含有乳化劑和抗菌劑，有利清潔和殺菌。此噴劑無色透明，噴灑後不會影響被噴灑布料的顏色，尤其適用於紡織品的除臭抗菌應用。

## Industry Benefits 業界效益

This spray is an effective odour neutraliser that is non-toxic, non-irritating and non-corrosive. It removes unpleasant smelling substances such as smoke, isovaleric acid, mercaptane, hydrogen sulfide, ammonia and amines from the ambient air by encircling and oxidation-reduction reaction. The main ingredients in this spray are betaine compounds, zinc diricinoleate and lauryl methacrylate. The active ingredients can dissolve and neutralises toxic and effluvial gases which include acidic odours and alkali odours.

Advantages:

- Environmentally friendly
- No skin irritation
- Excellent deodorising, air-purifying and sterilising effect
- Convenient to use
- Low cost

此噴劑無毒，無刺激，無腐蝕性。與市面其他除臭噴劑不同之處在於不是簡單的香味掩蓋，而是通過氧化還原反應中和臭味分子，徹底根除臭味源，例如煙味、異戊酸味、硫化氫、氨氣及有機胺化合物。噴劑中的有效成分為甜菜碱化合物，蓖麻油酸鋅以及甲基丙烯酸月桂酯等。這些活性物質可溶解、中和酸性和鹼性的惡臭有毒氣體。

優點：

- 環保
- 皮膚無刺激
- 優良的除臭，空氣淨化和抗菌效果
- 使用方便
- 低成本

## Licensing Details 獲取專利

Non-exclusive licence covers the technology to formulate the multi-functional solution.

非獨家專利授權許可提供配製多功能噴濟的技術。

Funding  
Organisation  
撥款機構



Research  
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