



US EPA REGISTERED FORMULATION  
EPA Regn. #739-R-07-007

chemtex



COAT • PREVENT • PROTECT

COAT

90D

ANTI-MICROBIAL SURFACE COATING



PROTECTS FOR  
**90**  
DAYS\*



A person in a white protective suit and mask is using a spray wand to apply a coating to a glass and metal structure. The image is tinted green.

# 90 DAYS PROTECTION \_\_\_\_\_

**CHEMTEX BIO BUBBLE™ COAT 90D** is a Trimethoxysilyl Quaternary Ammonium Chloride based long lasting invisible coating that kills viruses and bacteria, on contact for up to 90 days. **Effective on all hard and soft surfaces.**

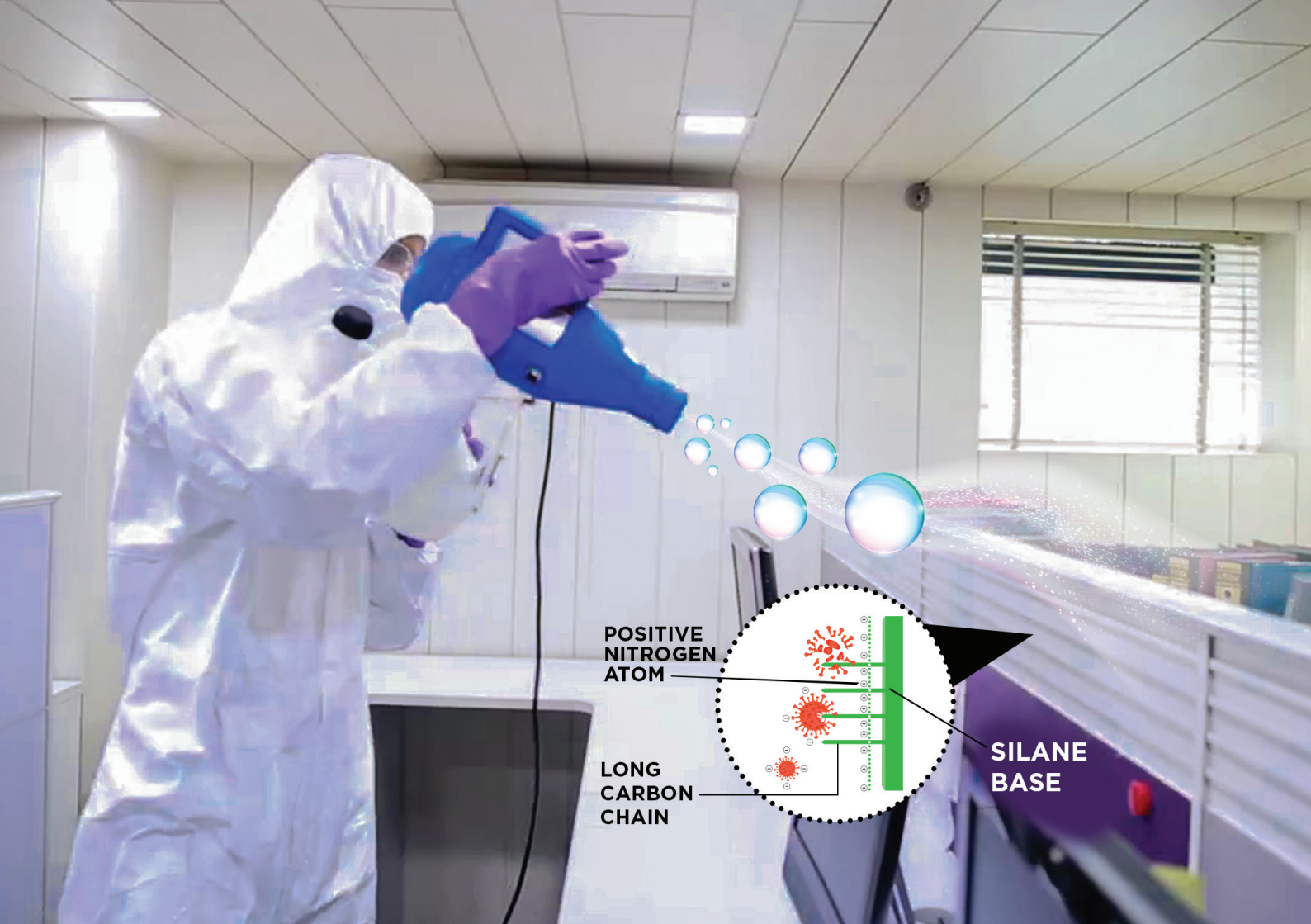
It is a naturally derived non-staining formulation based on retentive Silane technology as an active method for control of gross microbial colonization under extreme conditions, having broad spectrum antimicrobial activities with low cytotoxicity which does not allow viruses, bacteria, mould, mildew or fungi to survive on the treated surfaces.

On uniform application of the product, **CHEMTEX BIOBUBBLE™** forms a mono-molecular cationic preventive layer over the treated surfaces, which attract the microbes by their negatively charged cell membranes, destroying them through cellular electrocution.

**CHEMTEX BIOBUBBLE™** is a colourless, non-toxic, biodegradable, water based formulation which can be applied on any hard and soft surfaces in public, commercial, and residential facilities.

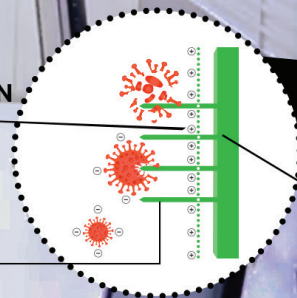






**POSITIVE  
NITROGEN  
ATOM**

**LONG  
CARBON  
CHAIN**

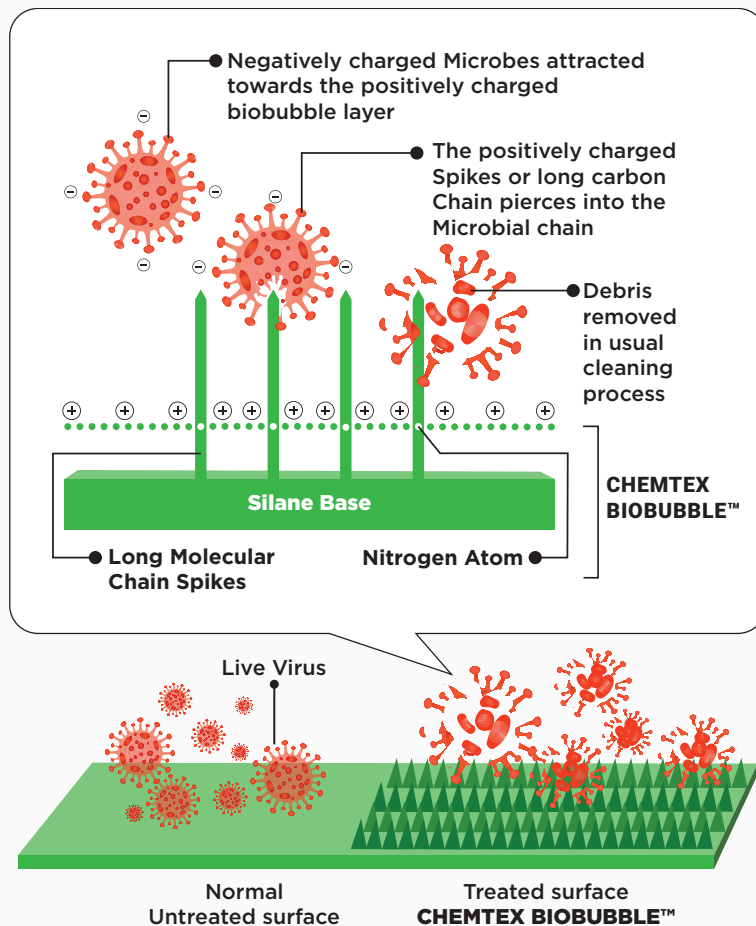


**SILANE  
BASE**

# HOW IT WORKS

**CHEMTEX BIOBUBBLE™** creates an invisible positively charged antimicrobial coating on the treated surfaces which attract the negatively charged pathogen cell membranes, puncturing, auto-lysing and disrupting their life cycle. Like a series of invisible “spike” structures, 10nm in length which perforate the microbial cell membranes as soon as they come in contact with the surfaces.

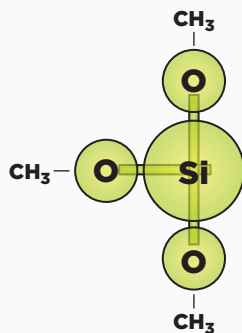
Even effective on genome size of 5 kb. This defensive bubble layer remains intact for up to 90 days and keeps on its antimicrobial performance for this period.



# MOLECULE STRUCTURE

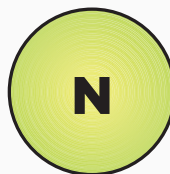
Each **CHEMTEX BIOBUBBLE™** molecule can be categorized in three parts, each having its own working chemistry.

The silane base derived from “sand” covalently bonds with the application surface after undergoing hydrolysis reaction, serving as a surface anchor.



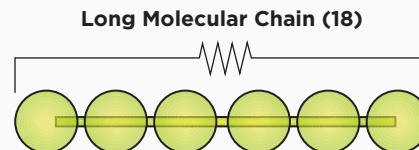
The anchor allows for covalent bonds to form readily through hydrolysis reactions.

The **Positively Charged Nitrogen Atom** from “Air” serves as a bonding agent.



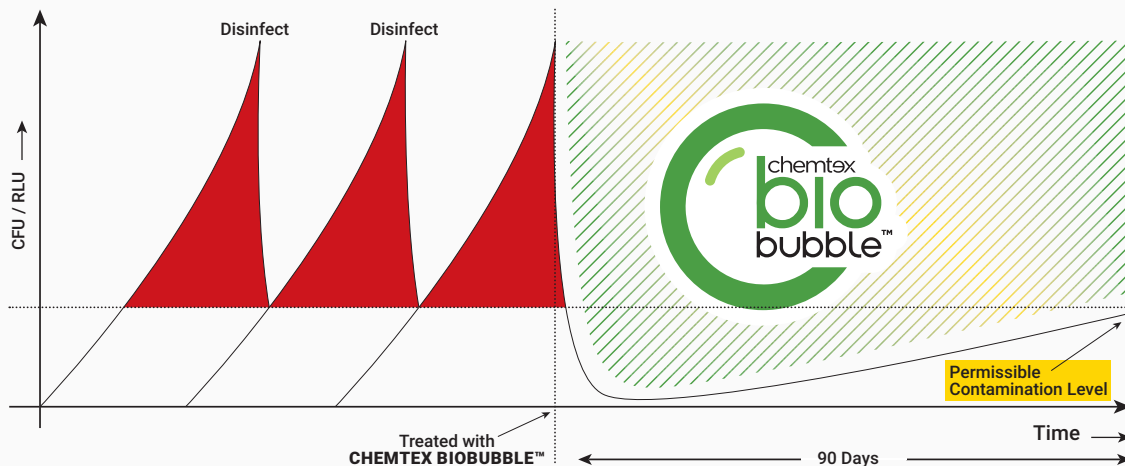
This centrally located, positively (+ve) charged Nitrogen plays an important role in attracting microbes

The Quaternary **18 Carbon long chain** or “spikes” derived from “Charcoal” directly pierces through the microbial cells, electrocuting and eliminating them.



A long molecular chain that acts like a spear to physically pierce through the microbial cell membranes.

# ANTI-MICROBIAL SURFACE COATING OVER REGULAR DISINFECTION



Regular Disinfection with conventional disinfectants prevents microbial contamination up to few hours. The infection load increases with time, leaving behind insignificant residues.

**CHEMTEX BIOBUBBLE™** Surface Treatment ensures prolonged sanitation with single use and does not allow microbes to accumulate over surfaces for up to 90 days.



# KEY FEATURES AND BENEFITS



NO PHENOL



NO ALCOHOL



NO ALDEHYDES

- Long lasting coating
- Saves time and cost
- Preventive approach: Safe and long-term antimicrobial function
- Transparent mono-molecular coating
- Cost effective, less laborious
- Free from SVHC, such as fluorine, PBT & vPvB-substances
- Non-Toxic, Organic and Completely Biodegradable
- Non-Corrosive: Compatible with most metal surfaces
- Prevents mal-odour and bio-film formation
- Continue routine cleaning protocols
- Non leaching, not reactionary technology



**HOW TO USE**

STEP

1

## Surface Preparation



Pre clean the surfaces with 0.4% solution of **ALSTASAN II-256**

STEP

2

## Electrostatic Fogging



Apply **BIOBUBBLE COAT 90D** over the pre-cleaned surfaces with an Electrostatic Fogger.

STEP

3

## Uniform Spreading



Wipe off the excess liquid with a clean and dry microfiber cloth.

[Video Link](#)

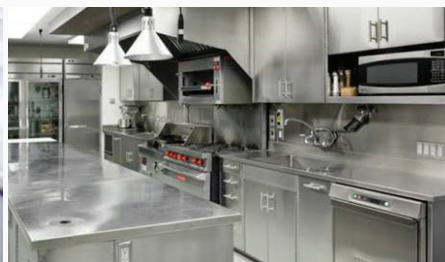


**CHEMTEX BIOBUBBLE™**  
**COAT 90D** for use on all  
non absorbent frequently  
touched hotspots

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- Doorknobs
- Handles
- Furniture
- Touchpoints
- Tabletops
- Counter Tops
- Buttons and Switches
- Taps and Faucets
- AC Filters
- Handrails
- Lift buttons
- Accessories







Available pack sizes: **500ml, 700ml**

# PHYSICOCHEMICAL DATA

ATTRIBUTES	TYPICAL VALUE
Form	Clear Liquid
Appearance	Colourless to Slight Pale
Ionic Charge	Cationic
pH (1% Solution)	5.0 - 8.0
Specific Gravity	1.0 ± 0.1
Active Ingredient(s)	Trimethoxysilyl Quaternary Ammonium Chloride

The above data have been obtained in laboratory tests and are typical of the product. They do not however constitute sales specifications and should not be regarded as such.



# VIROLOGY STUDY

Virology study as per european standard EN-13697  
on lipophilic enveloped virus such as sars n-Cov

Modified Quantitative Surface Test for the evaluation of residual bactericidal and virucidal efficacy and fungicidal activity of CHEMTEX BIOBUBBLE COATs per EN-13697 standard	
Test Organism: Lipophilic Enveloped Virus	Media: Tryptic soya agar with lecithin and polysorbate 80
Date of Testing: 30.04.2020	Date of completion of Test: 01.08.2020

Sr.No.	Test Organism	Testing day	Reduction in Viral load count (copies/ml))	Remarks
1.	H. Influenzae Standard strain ATCC 1021	1 hr.	Log 4	99.99% virucidal activity observed
		7	Log 4	99.99% virucidal activity observed
		15	Log 4	99.99% virucidal activity observed
		30	Log 4	99.99% virucidal activity observed
		60	Log 3	99.90% virucidal activity observed
		90	Log 3	99.90% virucidal activity observed
2.	HRSV standard strain ATCC 9320	1 hr.	Log 4	99.99% virucidal activity observed
		7	Log 4	99.99% virucidal activity observed
		15	Log 4	99.99% virucidal activity observed
		30	Log 4	99.99% virucidal activity observed
		60	Log 3	99.90% virucidal activity observed
		90	Log 3	99.90% virucidal activity observed

**Remarks:** CHEMTEX BIOBUBBLE COAT sample in undiluted form brings killing/ inactivation of each of the test Lipophilic Enveloped virus species namely H. Influenzae Standard strain ATCC 1021 and HRSV standard strain ATCC 9320 a range of 99.90% to 99.99% after exposing them to plates for ten minutes sprayed with CHEMTEX BIOBUBBLE COAT, till 90-days.

Celebrating  
YEARS  
**50**  
OF TRUST  
1970-2020



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