



An ISO 9001:2015 certified Company

Registration No. 19722

Your trust our strength





QMS20181124

= GOVT. REGISTERED =

ISSUED TO:

Chemtex Speciality Limited

111, Haute Street Corporate Park,86A, Topsia Road South

Kolkata - 700046

REPORT NO:ADV/NN/2020-21/0158 REPORT ISSUE DATE: 06.08.2020 CUSTOMER REFERENCE: Via Email SAMPLE SUBMISSION DATE: 24.04,2020

TEST REPORT SAMPLE DETAILS

SAMPLE MARKED AS	BATCH NO.	GENERIC NAME	DOM	DOE
Quaternary Silane based Retentive Anti-Microbial Coating Brand Name - CHEMTEX BIOBUBBLE COAT Item Code: CBBS20	BSS/RD 137	Trimethoxysilyl Quaternary Ammonium Chloride Compound	20.04.2020	19.04.2022

Modified Quantitative Surface Test for the evaluation of residual bactericidal and virucidal efficacy and fungicidal activity of CHEMTEX BIOBUBBLE COAT as per EN-13697 standard

Test Organism: Gram Negative Bacteria	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 Bacterial count (CFU)	Remarks
1.	Escherichia Coli	1 hr.	Log 4	99.99% bactericidal activity observed
	standard strain	7	Log 4	99.99% bactericidal activity observed
	ATCC 8739	15	Log 4	99.99% bactericidal activity observed
	A	30	Log 4	99.99% bactericidal activity observed
		60	Log 3	99.90% bactericidal activity observed
	8	90	Log 2	99.00% bactericidal activity observed

2.	Klebsiellapneumo	1 hr.	Log 4	99.99% bactericidal activity observed
	niae standard	7	Log 4	99.99% bactericidal activity observed
	strain ATCC	15	Log 4	99.99% bactericidal activity observed
	10081	30	Log 4	99.99% bactericidal activity observed
		60	Log 3	99.90% bactericidal activity observed
		90	Log 2	99.00% bactericidal activity observed

3.	Pseudomonas	1 hr.	Log 4	99.99% þactericidal activity observed
	aeruginosa	7	Log 4	99.99% bactericidal activity observed
	standard strain	15	Log 4	99.99% bactericidal activity observed
	ATCC 27853	30	Log 4	99.99% bactericidal activity observed
		60	Log 3	99.90% bactericidal activity observed
		90	Log 2	99.00% bactericidal activity observed

Remarks: CHEMTEX BIOBUBBLE COATsample in undiluted form brings killing/ inactivation of each of the test Gram negative bacterial species namely Escherichia Coli standard strain ATCC 8739, Klebsiellapneumoniae standard strain ATCC 10081 and Pseudomonas aeruginosa standard strain ATCC 27853 in a range of 99.00% to 99.99% after exposing them to plates for ten minutes sprayed with CHEMTEX BIOBUBBLE COAT, till 90-days.

Analyzed by: P.P Ganguly

For Advanced Analytical Testing Laboratory

(Quality\Manager)



An ISO 9001:2015 certified Company

Registration No. 19722

Your trust our strength





OME20101124

= GOVT. REGISTERED =

ISSUED TO: Chemtex Speciality Limited 111, Haute Street Corporate Park,86A, Topsia Road South Kolkata – 700046 REPORT NO: ADV/NN/2020-21/0158A REPORT ISSUE DATE: 06.08.2020 CUSTOMER REFERENCE: Via Email SAMPLE SUBMISSION DATE: 24.04.2020

TEST REPORT SAMPLE DETAILS

SAMPLE NAME	BATCH NO.	GENERIC NAME	DOM	DOE
Quaternary Silane based Retentive	BSS/RD 137	Trimethoxysilyl	20.04.2020	19.04.2022
Anti-Microbial Coating		Quaternary Ammonium		
Brand Name - CHEMTEX BIOBUBBLE		Chloride Compound		
COAT		•	2 4	
Item Code: CBBS20				

Modified Quantitative Surface Test for the evaluation of residual bactericidal and virucidal efficacy and fungicidal activity o CHEMTEX BIOBUBBLECOAT as per EN-13697 standard				
Test Organism: Gram Positive Bacteria Media: Tryptic soya agar with lecithin and polysorba 80				
Date of Testing: 30.04.2020	Date of completion of Test: 01.08.2020			

Sr.No.	Test Organism	Testing day	Reduction in Bacterial count (CFU)	Remarks
1.	Staphylococcus	1 hr.	Log 4	99.99% bactericidal activity observed
	aureus	7	Log 4	99.99% bactericidal activity observed
	standard strain	15	Log 4	99.99% bactericidal activity observed
	ATCC 6538	30	Log 4	99.99% bactericidal activity observed
		60	Log 3	99.90% bactericidal activity observed
		90	Log 2	99.00% bactericidal activity observed

2.	Bacillus	1 hr.	Log 4	99.99% bactericidal activity observed
	subtilis	7	Log 4	99.99% bactericidal activity observed
	standard strain	15	Log 4	99.99% bactericidal activity observed
	ATCC 6633	30	Log 4	99.99% bactericidal activity observed
		60	Log 3	99.90% bactericidal activity observed
		90	Log 2	99.00% bactericidal activity observed

Remarks: CHEMTEX BIOBUBBLE COATsample in undiluted form brings killing/ inactivation of each of the test Gram positive bacterial species namely Staphylococcus aureus standard strain ATCC 6538 and Bacillus subtilis standard strain ATCC 6633 a range of 99.00% to 99.99% after exposing them to plates for ten minutes sprayed withCHEMTEX BIOBUBBLECOAT, till 90-days.

Analyzed by: P.P Ganguly

For Advanced Analytical Testing Laboratory

(Quality Manager)



Registration No. 19722

An ISO 9001:2015 certified Company

Your trust our strength





OMS20181124

= GOVT. REGISTERED =

ISSUED TO: Chemtex Speciality Limited 111, Haute Street Corporate Park,86A, Topsia Road South Kolkata – 700046 REPORT NO: ADV/NN/2020-21/0158B REPORT ISSUE DATE: 06.08.2020 CUSTOMER REFERENCE: Via Email SAMPLE SUBMISSION DATE: 24.04.2020

TEST REPORT SAMPLE DETAILS

SAMPLE NAME	BATCH NO.	GENERIC NAME	DOM	DOE
Quaternary Silane based Retentive Anti-Microbial Coating Brand Name - CHEMTEX BIOBUBBLE COAT Item Code: CBBS20	BSS/RD 137	Trimethoxysilyl Quaternary Ammonium Chloride Compound	20.04.2020	19.04.2022

Modified Quantitative Surface Test for the evaluation of residual bactericidal and virucidal efficacy and fungicidal activity of CHEMTEX BIOBUBBLE COATas 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	1 hr.	Log 4	99.99% virucidalactivity observed
	Standard	7	Log 4	99.99% virucidalactivity observed
	strain ATCC	15	Log 4	99.99% virucidal activity observed
	1021	30	Log 4	99.99% virucidalactivity observed
	_	60	Log 3	99.90%virucidal activity observed
		90	Log 3	99.90% virucidal activity observed

2.	HRSV	1 hr.	Log 4	99.99% virucidalactivity observed
	standard strain	7	Log 4	99.99% virucidal activity observed
	ATCC 9320	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 COATsample in undiluted form brings killing/ inactivation of each of the test Lipophilic Enveloped virus species namelyH. Influenzae Standard strain ATCC 1021 andHRSVstandard strain ATCC 9320a range of 99.90% to 99.99% after exposing them to plates for ten minutes sprayed withCHEMTEX BIOBUBBLE COAT, till 90-days.

Analyzed by: P.P Ganguly

For Advanced Analytical Testing Laboratory



An ISO 9001:2015 certified Company Registration No. 19722 Your trust our strength





OMS20181124

= GOVT. REGISTERED =

ISSUED TO:

Chemtex Speciality Limited
111, Haute Street Corporate Park,86A, Topsia Road South
Kolkata – 700046

24.04.2020

REPORT NO: ADV/NN/2020-21/0158C REPORT ISSUE DATE: 06.08.2020 CUSTOMER REFERENCE: Via Email SAMPLE SUBMISSION DATE:

TEST REPORT SAMPLE DETAILS

SAMPLE NAME	BATCH NO.	GENERIC NAME	DOM	DOE
Quaternary Silane based Retentive Anti-Microbial Coating Brand Name - CHEMTEX BIOBUBBLE COAT Item Code: CBBS20	BSS/RD 137	Trimethoxysilyl Quaternary Ammonium Chloride Compound	20.04.2020	19.04.2022

Modified Quantitative Surface Test for the evaluation of residual bactericidal and virucidal efficacy and fungicidal activity of CHEMTEX BIOBUBBLE COAT as per EN-13697 standard

Test Organism: Fungus 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 Bacterial count (CFU)	Remarks
1.	Candida	1 hr.	Log 4	99.99% fungicidal activity observed
	albicans	7	Log 4	99.99% fungicidal activity observed
	standard strain	15	Log 4	99.99% fungicidal activity observed
	ATCC 10231	30	Log 4	99.99% fungicidal activity observed
		60	Log 3	99.90% fungicidal activity observed
		90	Log 3	99.90% fungicidal activity observed

Remarks: CHEMTEX BIOBUBBLECOAT sample in undiluted form brings killing/ inactivation of each of the test fungal species namely Candida albicans standard strain ATCC 10231in a range of 99.90% to 99.99% after exposing them to plates for ten minutes sprayed with CHEMTEX BIOBUBBLE COAT, till 90-days.

Analyzed by: P.P Ganguly

For Advanced Analytical Testing Laboratory ical



An ISO 9001:2015 certified Company
Registration No. 19722

Your trust our strength





OMS20181124

= GOVT. REGISTERED =

ISSUED TO: Chemtex Speciality Limited 111, Haute Street Corporate Park,86A, Topsia Road South Kolkata – 700046 REPORT NO: ADV/NN/2020-21/0158D REPORT ISSUE DATE: 06.08.2020 CUSTOMER REFERENCE: Via Email SAMPLE SUBMISSION DATE: 24.04.2020

TEST REPORT SAMPLE DETAILS

SAMPLE NAME	BATCH NO.	GENERIC NAME	DOM	DOE
Quaternary Silane based Retentive Anti-Microbial Coating Brand Name - CHEMTEX BIOBUBBLE COAT Item Code: CBBS20	BSS/RD 137	Trimethoxysilyl Quaternary Ammonium Chloride Compound	20.04.2020	19.04.2022

Modified Quantitative Surface Test for the evaluation of residual bactericidal and virucidal efficacy and fungicidal activity of CHEMTEX BIOBUBBLE COAT as per EN-13697 standard

Test Organism: Environmental isolate 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 Bacterial count (CFU)	Remarks
1.	Bacillus	1 hr.	Log 4	99.99% bactericidal activity observed
	Species(Environment	7	Log 4	99.99% bactericidal activity observed
	al isolate)	15	Log 4	99.99% bactericidal activity observed
		30	Log 4	99.99% bactericidal activity observed
	p.	60	Log 3	99.90% bactericidal activity observed
	2	90	Log 3	99.90% bactericidal activity observed
2.	Staphylococcus	1 hr.	Log 4	99.99% bactericidal activity observed
	Species	7	Log 4	99.99% bactericidal activity observed
	(Environmental	15	Log 4	99.99% bactericidal activity observed
	isolate)	30	Log 4	99.99% bactericidal activity observed
		60	Log 3	99.90% bactericidal activity observed
		90	Log 2	99.00% bactericidal activity observed

Remarks: CHEMTEX BIOBUBBLE COATsample in undiluted form brings killing/ inactivation of each of the environmental isolated species namely Bacillus Species and Staphylococcus Species in a range of 99.00% to 99.99% after exposing them to plates for ten minutes sprayed with CHEMTEX BIOBUBBLE COAT, till 90-days.

Analyzed by: P.P Ganguly

For Advanced Analytical Testing Laboratory

Quality Manager



An ISO 9001:2015 certified Company
Registration No. 19722

Nour trust our strength





OMS20181124

= GOVT. REGISTERED =

ISSUED TO: Chemtex Speciality Limited 111, Haute Street Corporate Park,86A, Topsia Road South Kolkata – 700046 REPORT NO: ADV/NN/2020-21/0158E REPORT ISSUE DATE: 06.08.2020 CUSTOMER REFERENCE: Via Email SAMPLE SUBMISSION DATE: 24.04.2020

TEST REPORT SAMPLE DETAILS

CH NO.	GENERIC NAME	DOM	DOE
		0.00 0.00 0.00	202
RD 137 Tr	rimethoxysilyl Quaternary Ammonium Chloride Compound	20.04.2020	19.04.2022
	•	٥	
	RD 137 T	Ammonium Chloride	Ammonium Chloride

Toxicity Quaternary Silane based Retentive Anti-Microbial Coating (CHEMTEX BIOBUBBLE COAT)

TEST	SPECIES	RESULTS	
Oral LD ₅₀	Rat	>5000 mg/kg (Toxicity Category IV)	
Dermal LD ₅₀	Rabbit	>2000 mg/kg (Toxicity Category III)	
Inhalation LC ₅₀	Rat	>2.0 mg/L (1 hr.) (Toxicity Category IV)	
Eye Irritation	Rat	Moderate Toxicity (Toxicity Category II)	

Remarks: Upon reviewing the available toxicity information, it has concluded that there are no endpoints of concern for repeated oral or dermal exposure to the Trimethoxysilyl Quaternary Ammonium Chloride Compound. This conclusion is based on low toxicity observed in oral, dermal and other developmental studies conducted for Trimethoxysilyl Quaternary Ammonium Chloride Compound. The risk from inhalation exposure has not been characterize and an additional study designed to assess inhalation toxicity over time may be needed. In additions, moderate toxicity has been observed with regard to eye irritation.

Analyzed by: P.P Ganguly

For Advanced Analytical Testing Laboratory