CHT
SMART CHEMISTRY WITH CHARACTER.

HEIQ VIROBLOCK

CERTIFICATES OF COMPETENCE

HeiQ Viroblock NPJ03 – proved efficacy and confirmed safty

source: www.pixabay.com

CERTIFICATE OVERVIEW

1) Antimicrobial Tests

1) AATCC 100 (Staphylococcus aureus and Candida albicans)

2) Antiviral Tests

1) ISO 18184 (H3N2 Human Influenza A)
2) ISO 18184 (Corona Virus 229E)
3) SARS-CoV-2
4) ISO 20743 with Sendai Virus

3) Skin Compability Tests

1) Human Patch Test
2) Extractable Study: Dynamic airflow conditions
3) Cytotoxicity

4) Listings

1) Oeko-Tex
2) ZDHC- Gateway
3) Bluesign
4) INCI cosmetic grade ingredient
5) USDA (pending)

5) Registrations

ANTIMICROBIAL ACTIVITY OF TREATED TEXTILES

AATCC TM 100

CHT
SMART CHEMISTRY
WITH CHARACTER.

DETERMINATION OF ANTIMICROBIAL ACTIVITY - AATCC 100

Customer Report

Wednesday, October 07, 2015

Project Title

Antimicrobial Testing

ID 0915-BOY-01 -- 1 Entry Date 9/24/2015

Project Summary

The **AATCC TM 100** test method is designed to measure the antimicrobial properties of textile or absorbent material incubated with selected microorganisms. The basis of the test methods is the incubation of the microorganism inoculum in contact with the test sample for a duration of up to 24 hours without drying. Following this exposure, the inoculated microorganisms are recovered and the concentration of the organisms is determined. Candida albicans was tested according to the standard method, culturing C. albicans prior to testing was conducted as required by the organism.

The antimicrobial performance is determined by comparison of the recovered organisms from the test samples at time 0, and treated material after selected time points and is reported as a percent value relative to the control sample material.

CHT
SMART CHEMISTRY WITH CHARACTER.

DETERMINATION OF ANTIMICROBIAL ACTIVITY - AATCC 100

Result Table *

Test Method	AATCC 100 Assessment of Antibacterial Finishes on Textile Materials

Sample #	1	TBD Fabric		
			Interval	Result
Inoculum	***C. albicans (10231)***			
	Notes Section			
replicate 1			24 *hr*	99.68 *% Reduction*
replicate 2			24 *hr*	99.91 *% Reduction*
replicate 3			24 *hr*	99.86 *% Reduction*
Inoculum	***S. aureus (6538)***			
	Notes Section			
replicate 1			24 *hr*	99.99 *% Reduction*
replicate 2			24 *hr*	99.99 *% Reduction*
replicate 3			24 *hr*	99.99 *% Reduction*

CHT
SMART CHEMISTRY WITH CHARACTER.

ANTIVIRAL ACTIVITY OF TEXTILE PRODUCTS

ISO 18184, ISO 20743 (modif. for sendai virus)

DETERMINATION OF ANTIVIRAL ACTIVITY - ISO 18184

Nonwoven* material for disposable masks treated with HeiQ Viroblock NPJ03:

ID	Agent	Log reduction	% reduction
LS20-00319-6	H3N2 (Human Influenza A)	4.72	99.99%

The HeiQ ViroblockNPJ03 treated nonwoven material shows **excellent antiviral efficacy!**

CHT
SMART CHEMISTRY WITH CHARACTER.

DETERMINATION OF ANTIVIRAL ACTIVITY - ISO 18184

广微测 Gmicro Testing

广东省微生物分析检测中心

GUANGDONG DETECTION CENTER OF MICROBIOLOGY

分析检测报告

REPORT FOR ANALYSIS

报告编号（Report №.）2020FM03839R06 校验码（Verification Code）：40562378

样品名称 Name of Sample	LS20-00319-6	检测类型 Test Type	委托检测
委托单位 Applicant	瑞士海屹科材料有限公司上海代表处	地 址 Address	上海市徐汇区裕德路 168 号徐汇商务大厦 2011
样品来源 Sample Source	委托方送检	样品数量 Sample Quantity	1 片 1 PIECE OF FABRIC SAMPLE
样品规格和批号 Spec and Lot № of Sample	NON-WOVEN MATERIALS TREATED WITH VIROBLOCK 20% WOF VIROBLOCK 20、FA2040	样品状态和特性 State and Characteristic	片状
接样日期 Sample Received Date	2020-03-03	检测完成日期 Completion Date	2020-04-01
检测依据和方法 Test Standard and Method	ISO 18184:2014		
检测项目 Item Tested	抗病毒活性 ANTIVIRAL EFFICACY		
检测结论 Test Conclusion	该样品所检项目的实测数据见本检测报告续页。 PLEASE FIND IN FOLLOWING PAGES THE TEST RESULT.		
备注 Remarks	生产厂家：瑞士海屹科材料有限公司（由委托方提供）		

签发日期 Issue Date：2020-04-05

（机构盖章 Official Seal）

检验检测专用章

制 表：Editor 审 核：Verifier 批 准：Approver

报告编号（Report №.）：2020FM03839R06

NAME OF VIRUS 病毒名称	EXPERIMENT ID 实验序号	CONTROL CONDITION AT ZERO HOUR 对照样接种孵育 0h 后病毒滴度的对数值（$lgTCID_{50}$/瓶）	CONTROL CONDITION AT 2 HOURS 对照样接种孵育 2h 后病毒滴度的对数值（$lgTCID_{50}$/瓶）	FABRIC SAMPLE AT 2 HOURS 试样接种孵育 2h 后病毒滴度的对数值（$lgTCID_{50}$/瓶）
INFLUENZA H3N2 甲型流感病毒 H3N2 MDCK 细胞	1	6.63	6.42	<1.8
	2	6.59	6.50	<1.8
	3	6.59	6.63	<1.8
$lgTCID_{50}$/瓶 平均数 AVERAGE		6.60	6.52	<1.8
抗病毒活性值 LOG REDUCTION		>4.72		
抗病毒活性率（%） % REDUCTION		>99.99		

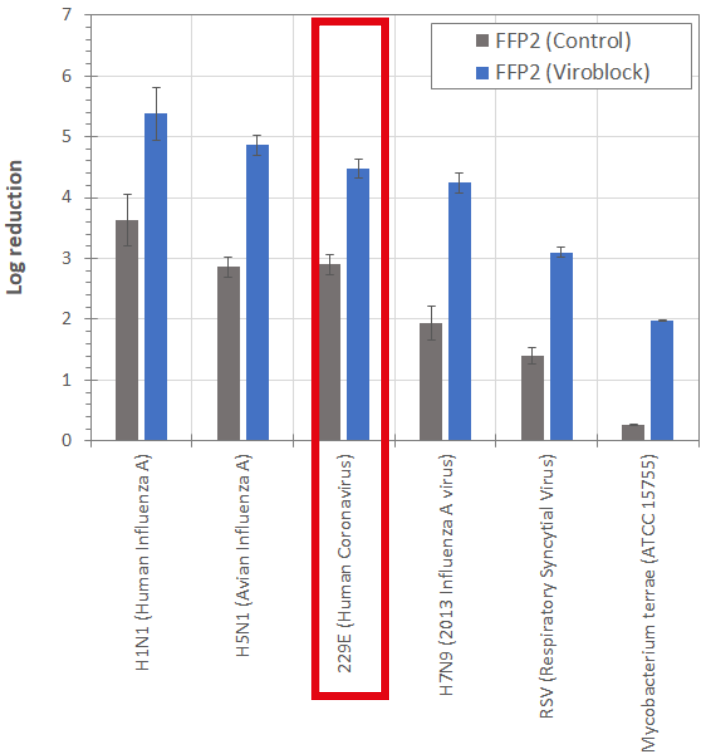
CHT SMART CHEMISTRY WITH CHARACTER.

DETERMINATION OF ANTIVIRAL ACTIVITY - ISO 18184

		Log reduction			% reduction	
Study ID	Agent	Control	HeiQ Viroblock	Δ *	Control	HeiQ Viroblock
798-110	H1N1 (Human Influenza A)	3.63	**5.38**	**>50x**	99.9766%	99.9996%
798-111	H5N1 (Avian Influenza A)	2.86	**4.86**	**100x**	99.862%	99.999%
798-112	229E (Human Coronavirus)	2.90	**4.48**	**>30x**	99.874%	99.997%
798-114	H7N9 (2013 Influenza A)	1.93	**4.24**	**>200x**	98.825%	99.994%
798-115	RSV (Respiratory Syncytial Virus)	1.40	**3.10**	**>50x**	96.02%	99.92%
798-116	Mycobacterium terrae (ATCC 15755)	0.26	**1.98**	**>50x**	45.05%	98.95%

HeiQ Viroblock FFP2 masks* show **greatly (>30 times) improved reduction** in virus infectivity.

Effective against key virus types: H1N1, H5N1, H7N9, Coronavirus (229E), and RSV



CHT SMART CHEMISTRY WITH CHARACTER.

STRONG ANTIVIRAL EFFECT ON SARS-COV-2 (COVID-19)

100% polyester woven treated with HeiQ Viroblock NPJ03

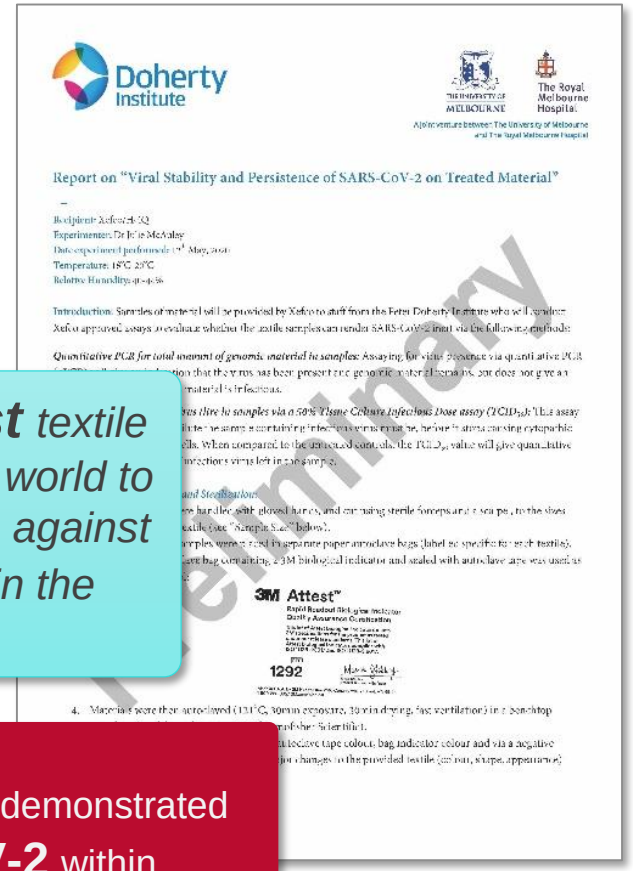
Testing against SARS-CoV-2, an enveloped virus from the coronavirus family that causes COVID-19

Two laboratory test methods were used to assess the residual infectivity of virus remaining on inoculated fabric samples after a contact time of 30 minutes:

	Sample	Avg. Log $TCID_{50}$/ml	Log reduction *	% reduction *
Test A	Inoculum	5.9		
	HeiQ Viroblock treated sample	0.0	5.9	>99.999%

	Sample	Avg. Log $TCID_{50}$/ml	Log reduction *	% reduction *
Test B	Inoculum	5.0		
	HeiQ Viroblock treated sample	1.0	4.0	99.99%

* Reduction relative to inoculum values after 30 minutes


Doherty Institute

The Royal Melbourne Hospital

Report on "Viral Stability and Persistence of SARS-CoV-2 on Treated Material"

Preliminary

3M Attest

1292

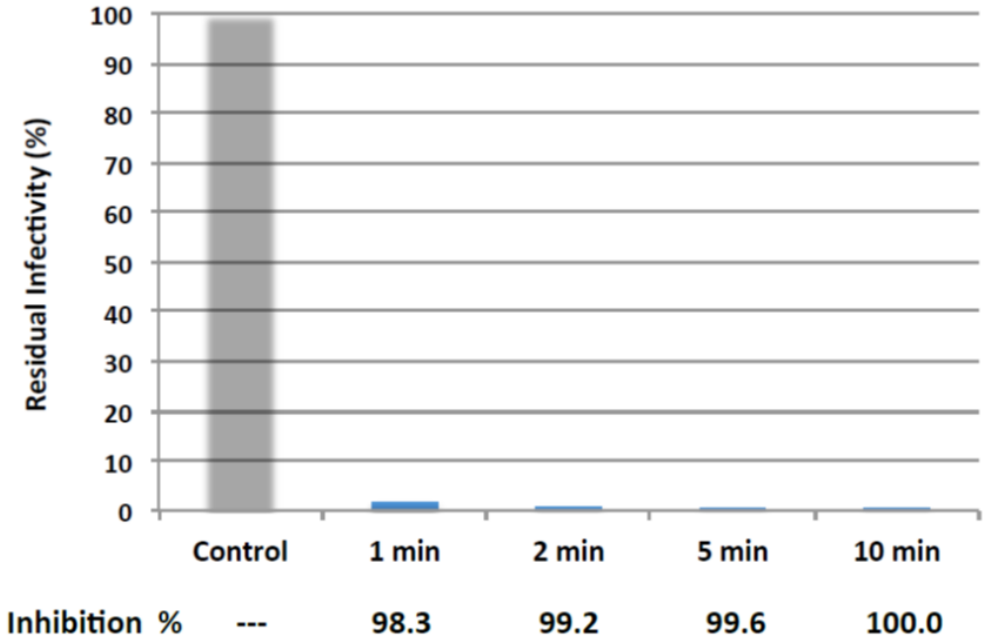
One of the first *textile technologies in the world to be proven effective against SARS-CoV-2 in the laboratory*

ANTIVIRAL effect demonstrated against **SARS-CoV-2** within **30 minutes**

CHT
SMART CHEMISTRY WITH CHARACTER.

INSTANTANEOUS ANTIVIRAL EFFECT ON SENDAI VIRUS

- Nonwoven fabric treated with HeiQ Viroblock NPJ03
- The residual virus infectivity tested according to the modified ISO 20743 method (Sendai virus)



Inhibition %	---	98.3	99.2	99.6	100.0

RAPID ANTIVIRAL effect demonstrated within 2 to 5 minutes

CHT
SMART CHEMISTRY WITH CHARACTER.

SKIN COMPABILITY

Human Patch Test, Dynamic Airflow Test & Cytotoxity

CHT
SMART CHEMISTRY
WITH CHARACTER.

HUMAN PATCH TEST

HeiQ Viroblock NPJ03 treated fabric:

Human Patch Test

Dear Valued Customer,

By means of this letter we inform you that HeiQ Viroblock NPJ03 treated fabric has been DERMATOLOGICALLY TESTED at Farcoderm srl (in collaboration with the University of Pavia) and demonstrated a perfect skin compatibility.

The subsequent test report sets out that the HeiQ Viroblock NPJ03 treated fabric shows to be *"NON IRRITANT"*.

In reference to the test: "Fabric sample 8" is a polypropylene non-woven fabric sample that was finished with the surface treatment "HeiQ Viroblock NPJ03".

HeiQ Materials AG

Mark Mckay
Director of Compliance and Quality

HUMAN PATCH TEST

Farcoderm TESTED WELLNESS

In collaboration with:
University of Pavia
Prof. FULVIO MARZATICO
Laboratory of Pharmacobiochemistry
Pharmacology and Toxicology Division

REPORT ON A HUMAN PATCH TEST

48 hour closed patch test under occlusion

Skin test to evaluate potential skin irritation after contact with a non-woven fabric

HEIQ MATERIALS AG

FABRIC SAMPLE "8"

Table 1 - *Clinical score of skin reactions*

No erythema	0
Light erythema (hardly visible)	1
Clearly visible erythema	2
Moderate erythema	3
Serious erythema (dark red with possible formation of light scars)	4

No oedema	0
Very Light oedema	1
Light oedema	2
Moderate oedema (about 1 mm raised skin)	3
Strong oedema (extended swelling even beyond the application area)	4

Table 2 - *Classification of the medium irritation index (according to the amended Draize classification).*

Mean Irritation Index (IIM)	Product classification
< 0,5	non irritating
from 0.5 to 2.0	slightly irritating
from 2.0 to 5.0	moderately irritating
from 5.0 to 8.0	highly irritating

RESULTS

Summary of the data obtained and evaluation of the product irritation potential

OEDEMA AND ERYTHEMA REACTIONS

Panellist name	Sex	ERYTHEMA 15'	OEDEMA 15'	ERYTHEMA 1h	OEDEMA 1h	ERYTHEMA 24h	OEDEMA 24h
1 D046G	M	0	0	0	0	0	0
2 D004G	F	0	0	0	0	0	0
3 G032T	F	0	0	0	0	0	0
4 P093C	F	0	0	0	0	0	0
5 S030E	F	0	0	0	0	0	0
6 D041L	F	0	0	0	0	0	0
7 S093S	M	0	0	0	0	0	0
8 L025G	M	0	0	0	0	0	0
9 L109C	F	0	0	0	0	0	0
10 P090D	M	0	0	0	0	0	0

MEAN VALUES FOR OEDEMA AND ERYTHEMA

IIM Er 15'	IIM Ed 15'	IIM Er 1h	IIM Ed 1h	IIM Er 24h	IIM Ed 24h
0,00	0,00	0,00	0,00	0,00	0,00

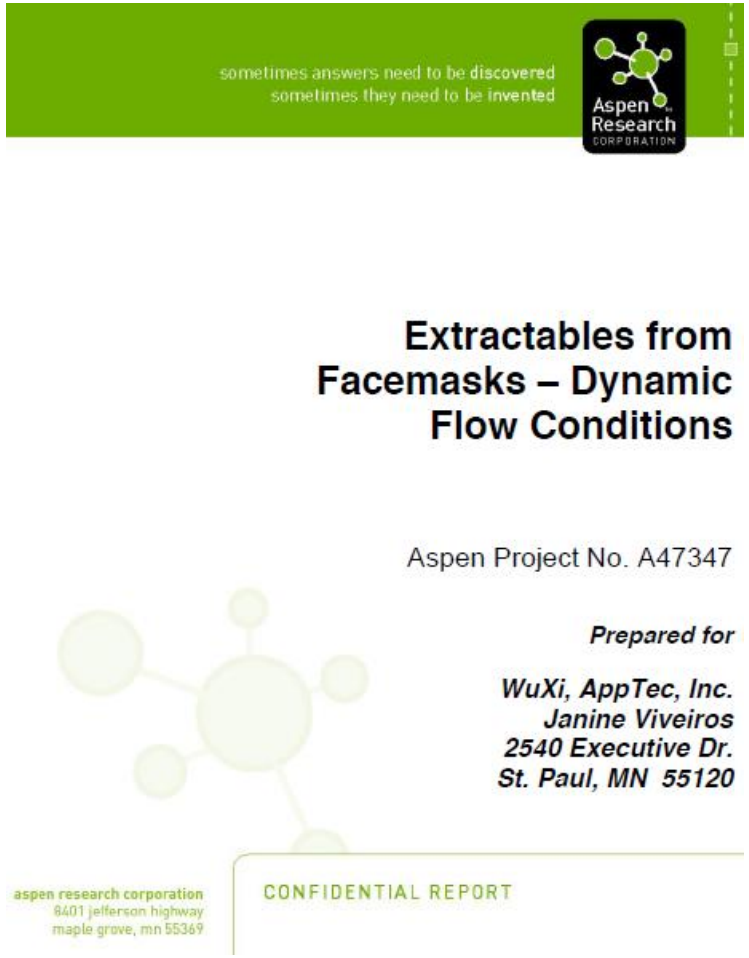
CHT
SMART CHEMISTRY WITH CHARACTER.

EXTRACTABLE STUDY: DYNAMIC AIRFLOW CONDITION

3.2 Summary: Extractables study

- Purpose: Assess potential for FFP2 masks treated with Viroblock to release particulates and/or components of the treatment during conditions of dynamic airflow through the mask.
- Testing was conducted using a custom protocol. Test mask samples were mounted and sealed within a test chamber and subject to a constant airflow for a period of 8 hours. Periodic sampling of the air exiting the mask samples were analysed for total particulates and also prescence of chemical compounds present in the mask treatment.
- Additional analysis was performed to quantify the presence of chemical compounds in the mask treatment.
- **FFP2 masks treated with Viroblock subject to dynamic airflow conditions over a period of 8 hours did not show release of particulates or chemical compounds into the airstream exiting the mask.**

EXTRACTABLE STUDY: DYNAMIC AIRFLOW CONDITION



Samples Tested

Sample Description	ARC ID	Date Received	Date(s) Analyzed
Control FFP2 masks, lot VB-DEV-FEB-2013 (4 masks provided)	47347-5	4/1/13	4/9/13 – 4/10/13
Viroblock Test FFP2 masks, lot VB-DEV-7-FEB-2013 (7 masks provided)	47347-6	4/1/13	4/11/13 – 4/15/13

The results presented in this report apply only to the samples tested.
Unless noted otherwise, the samples were received in good condition.

CHT SMART CHEMISTRY WITH CHARACTER.

CYTOTOXICITY

3.3 Summary: Cytotoxicity

- Purpose: Assess *in vitro* toxicity of FFP2 masks treated with Viroblock towards mammalian cells.
- Method based on an agarose overlay assay according to ISO 10993-5:2009 [6] with L-929 mouse fibroblast cells. Testing conducted under GLP study design and protocol.
- **FFP2 masks treated with Viroblock were concluded to be non-cytotoxic.**

CYTOTOXICITY

FINAL STUDY REPORT

STUDY TITLE:	**ISO Agarose Overlay** **Using L-929 Mouse Fibroblast Cells**
PROTOCOL NUMBER:	140150-17
TEST ARTICLE IDENTIFICATION:	FFP2 facemasks Lot # VB-DEV-7FEB-2013-0
PERFORMING LABORATORY:	WuXi AppTec, Inc. 2540 Executive Drive St. Paul, MN 55120
SPONSOR:	VIROBLOCK SA Chemin des Aulx 18 Plan-les-Ouates CH-1228
STUDY NUMBER:	182077
CLIENT MNEMONIC:	VRB01
RESULT SUMMARY:	The test article is considered **non-cytotoxic** under the conditions of this test.

Table 2: Scoring

Grade	Reactivity	Description of Reactivity Zone
0	None	No detectable zone around or under specimen.
1	Slight	Some malformed or degenerated cells under specimen.
2	Mild	Zone limited to area under specimen.
3	Moderate	Zone extending specimen size up to 1.0 cm.
4	Severe	Zone extending farther than 1.0 cm. beyond specimen.

Table 3: Test Results

Test Article	Cytotoxic Score		
	Plate 1	Plate 2	Plate 3
Test Article	1	1	1
Positive Control	3	3	3
Negative Control	0	0	0
Cell Control	0		

ANALYSIS AND CONCLUSION

The positive control score was '3' and the negative control score was '0' indicating a valid test. The test article was scored at '**1**' and is considered **non-cytotoxic** under the conditions of this test.

LISTINGS

Oeko-Tex, ZDHC Gateway & Bluesign, INIC cosmetic grade ingredient, USDA application pending

CHT
SMART CHEMISTRY
WITH CHARACTER.

OEKO-TEX

- HeiQ Viroblock NPJ03 is listed for Oeko-Tex

https://www.oeko-tex.com/en/apply-here/active-chemical-products/accepted-acps?tx_solr%5Bq%5D=heiQ

Name of the product	Country	Manufacturer	Type of ACP	Type of Chemical	Product class
HeiQ Viroblock NPJ03	CH	HeiQ Materials AG, Bad Zurzach	Products with biological activity	Auxiliary	I-IV

Product class I: Articles for babies and toddlers
Product class II: Articles with direct contact to the skin
Product class III: Articles without direct contact to the skin
Product class IV: Home textiles

Product: HeiQ Viroblock NPJ03

Status: Filed: In Homologation

HeiQ Materials hereby informs customers that for HeiQ Viroblock NPJ03; whilst bluesign approval is not yet finalised this product is now in the process for homologation according to the bluesign® Criteria.

HeiQ anticipates no adverse issues to arise during this process and will update partners immediately once the assessment is completed and the product gains its official bluesign® approval.

HeiQ Materials AG

Mark McKay
Director of Compliance and Quality

HeiQ Materials AG is a bluesign® System Partner

HeiQ Materials AG hereby declares its commitment to the ØZDHC initiative and our intention to support all our clients in adherence to the **Roadmap to Zero Discharge of Hazardous Chemicals**.

Manufacturing Restricted Substances List (MRSL), version 2, Jan 2020.

Declaration

Product: HeiQ Viroblock NPJ03

With regards to the Manufacturing Restricted Substances List; HeiQ Materials AG can state that provided the above product is applied and used according to our recommendations it may be used for manufacture of textiles and articles, which will meet the criteria for compliance with the ZDHC MRSL 2020 limits and restrictions. Listing in the ZDHC Gateway is pending.

HeiQ Materials AG

Mark McKay
Director of Compliance and Quality

INIC COSMETIC GRADE INGREDIENT

Specialities s.r.l.

Via N.Sauro,11 (Loc.Ponte Giurino)
24030 BERBENNO (BG) - Italy
tel +39 035-4195181 fax + 39 035-4824837
info.spe@specialities.it
C.F., p.Iva e Reg.Imp. BG 02310010166
REA n.279484 – Cap.Soc.€ 100.000,00 i.v.
Codice SDI : W7YVJK9

QUALITY SYSTEM CERTIFICATION DNV·GL ISO 9001:2015

Berbenno, 25 June 2020

HeiQ Materials AG
Ruetistrasse 12
8952 Schlieren (Zurich)
Switzerland

Ref: VIROBLOCK NP J03 – INCI COMPONENTS

We declare that all the components of the product VIROBLOCK NP J03 are included in the INCI database.
The documentation is available for specific requests.

Belli Fabrizio

- All components of **HeiQ Viroblock NPJ03** are included in INCI () database
- **HeiQ Viroblock NPJ03** is 100% made of cosmetic ingredients

CHT SMART CHEMISTRY WITH CHARACTER.

BIO-BASED INGREDIENTS (USDA APPLICATION PENDING)

Beta Analytic
TESTING LABORATORY

Beta Analytic Inc
4985 SW 74 Court
Miami, Florida 33155
Tel: 305-667-5167
Fax: 305-663-0964
info@betalabservices.com

ISO/IEC 17025:2005-Accredited Testing Laboratory

Summary of Results - % Biobased Carbon Content
ASTM D6866-20 Method B (AMS)

Certificate Number: 449044561206110513
Validation:

Submitter	Raso Renzo
Company	HeiQ Materials AG
Date Received	June 18, 2020
Date Reported	June 24, 2020
Submitter Label	HeiQ Viroblock NPJ03
RESULT:	72 % Biobased Carbon Content (as a fraction of total organic carbon)
Laboratory Number	Beta-561206
Percent modern carbon (pMC)	71.54 +/- 0.2 pMC
Atmospheric adjustment factor (REF)	100.0; = pMC/1.000

Package received - labeling COC

View of content (1mm x 1mm scale)

Representative sample analyzed (1mm x 1mm scale)

Disclosures: All work was done at Beta Analytic in its own chemistry lab and AMSs. No subcontractors were used. Beta's chemistry laboratory and AMS do not react or measure artificial C 14 used in biomedical and environmental AMS studies. Beta is a C14 tracer-free facility. Validating quality assurance is verified with a Quality Assurance report posted separately to the web library containing the PDF downloadable copy of this report.

Precision on the RESULT is cited as +/- 3% (absolute). The cited precision on the analytical measure (pMC) is 1 sigma (1 relative standard deviation). The reported result only applies to the analyzed material. The accuracy of the RESULT relies on the measured carbon in the analyzed material having been in recent equilibrium with CO2 in the air and/or from fossil carbon (from living more than 40,000 years ago such as petroleum or coal. The RESULT only applies to relative carbon content, not to relative mass content. The RESULT is calculated by adjusting pMC by the applicable "Atmospheric adjustment factor (REF)" cited in this report.

- HeiQ Viroblock NPJ03 is 72% bio-based
- USDA bio-preferred label, application pending

RESULT: 72 % Biobased Carbon Content (as a fraction of total organic carbon)

CHT
SMART CHEMISTRY WITH CHARACTER.

REGISTRATIONS

US EPA, EU BPR, US FDA

CHT
SMART CHEMISTRY
WITH CHARACTER.

REGISTRATIONS

US EPA

- *49403-38-81446*
- *85249-1-81446*

EU BPR

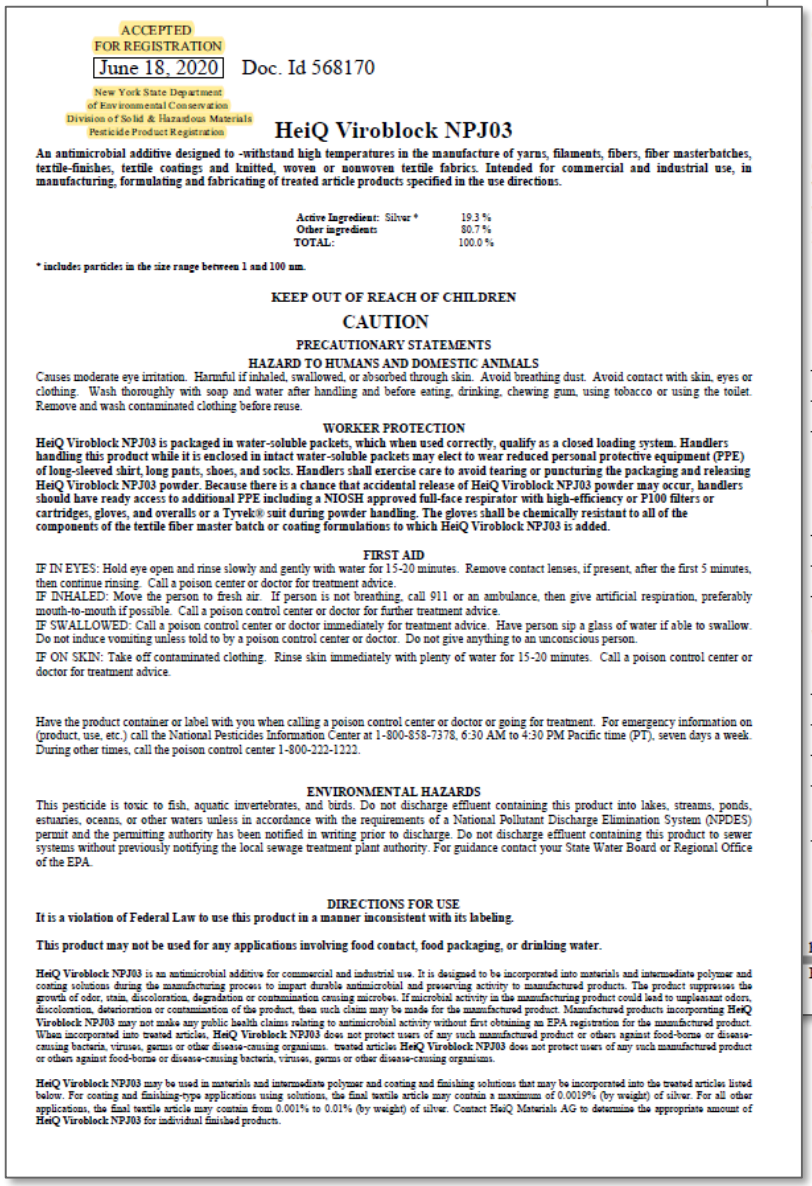
- *N-91819 (D)*

US FDA

FFR Respirators

- *HVP-FFP2-01*

https://www.fda.gov/media/136702/download



ACCEPTED
FOR REGISTRATION
June 18, 2020 Doc. Id 568170
New York State Department
of Environmental Conservation
Division of Solid & Hazardous Materials
Pesticide Product Registration

HeiQ Viroblock NPJ03

An antimicrobial additive designed to -withstand high temperatures in the manufacture of yarns, filaments, fibers, fiber masterbatches, textile-finishes, textile coatings and knitted, woven or nonwoven textile fabrics. Intended for commercial and industrial use, in manufacturing, formulating and fabricating of treated article products specified in the use directions.

Active Ingredient: Silver *	19.3 %
Other ingredients:	80.7 %
TOTAL:	100.0 %

*** includes particles in the size range between 1 and 100 nm.**

KEEP OUT OF REACH OF CHILDREN

CAUTION

PRECAUTIONARY STATEMENTS

HAZARD TO HUMANS AND DOMESTIC ANIMALS

Causes moderate eye irritation. Harmful if inhaled, swallowed, or absorbed through skin. Avoid breathing dust. Avoid contact with skin, eyes or clothing. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet. Remove and wash contaminated clothing before reuse.

WORKER PROTECTION

HeiQ Viroblock NPJ03 is packaged in water-soluble packets, which when used correctly, qualify as a closed loading system. Handlers handling this product while it is enclosed in intact water-soluble packets may elect to wear reduced personal protective equipment (PPE) of long-sleeved shirt, long pants, shoes, and socks. Handlers shall exercise care to avoid tearing or puncturing the packaging and releasing HeiQ Viroblock NPJ03 powder. Because there is a chance that accidental release of HeiQ Viroblock NPJ03 powder may occur, handlers should have ready access to additional PPE including a NIOSH approved full-face respirator with high-efficiency or P100 filters or cartridges, gloves, and overalls or a Tyvek® suit during powder handling. The gloves shall be chemically resistant to all of the components of the textile fiber master batch or coating formulations to which HeiQ Viroblock NPJ03 is added.

FIRST AID

IF IN EYES: Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing. Call a poison center or doctor for treatment advice.
IF INHALED: Move the person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible. Call a poison control center or doctor for further treatment advice.
IF SWALLOWED: Call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to by a poison control center or doctor. Do not give anything to an unconscious person.
IF ON SKIN: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.

Have the product container or label with you when calling a poison control center or doctor or going for treatment. For emergency information on (product, use, etc.) call the National Pesticides Information Center at 1-800-858-7378, 6:30 AM to 4:30 PM Pacific time (PT), seven days a week. During other times, call the poison control center 1-800-222-1222.

ENVIRONMENTAL HAZARDS

This pesticide is toxic to fish, aquatic invertebrates, and birds. Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans, or other waters unless in accordance with the requirements of a National Pollutant Discharge Elimination System (NPDES) permit and the permitting authority has been notified in writing prior to discharge. Do not discharge effluent containing this product to sewer systems without previously notifying the local sewage treatment plant authority. For guidance contact your State Water Board or Regional Office of the EPA.

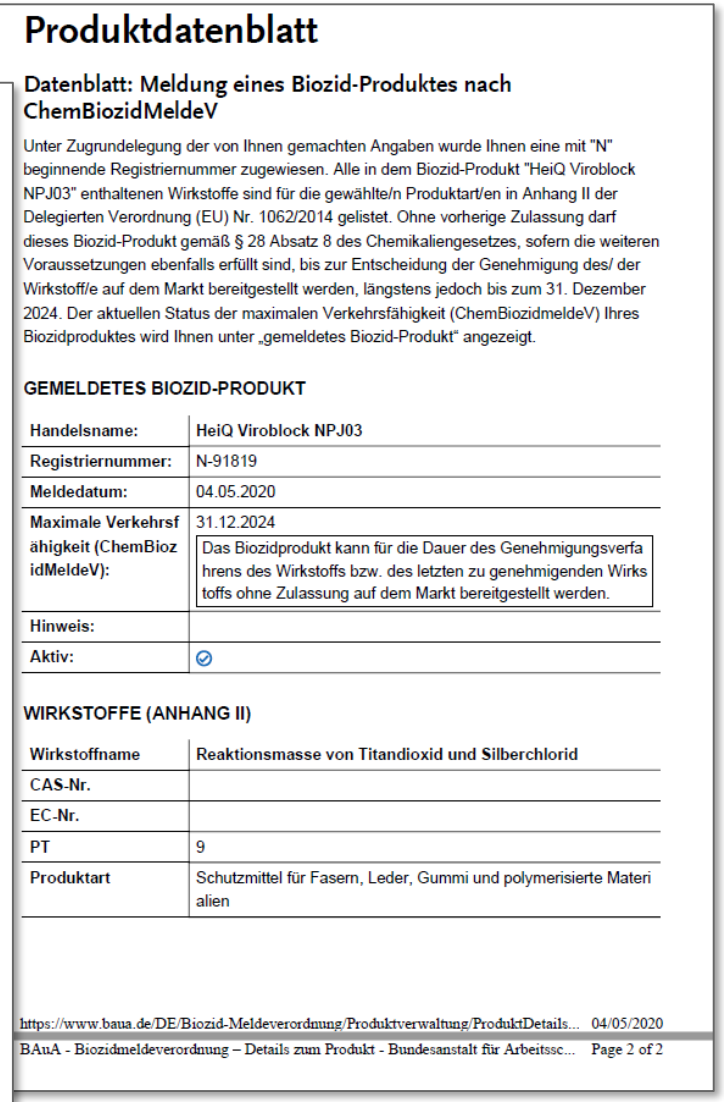
DIRECTIONS FOR USE

It is a violation of Federal Law to use this product in a manner inconsistent with its labeling.

This product may not be used for any applications involving food contact, food packaging, or drinking water.

HeiQ Viroblock NPJ03 is an antimicrobial additive for commercial and industrial use. It is designed to be incorporated into materials and intermediate polymer and coating solutions during the manufacturing process to impart durable antimicrobial and preserving activity to manufactured products. The product suppresses the growth of odor, stain, discoloration, degradation or contamination causing microbes. If microbial activity in the manufacturing product could lead to unpleasant odors, discoloration, deterioration or contamination of the product, then such claim may be made for the manufactured product. Manufactured products incorporating **HeiQ Viroblock NPJ03** may not make any public health claims relating to antimicrobial activity without first obtaining an EPA registration for the manufactured product. When incorporated into treated articles, **HeiQ Viroblock NPJ03** does not protect users of any such manufactured product or others against food-borne or disease-causing bacteria, viruses, germs or other disease-causing organisms. treated articles **HeiQ Viroblock NPJ03** does not protect users of any such manufactured product or others against food-borne or disease-causing bacteria, viruses, germs or other disease-causing organisms.

HeiQ Viroblock NPJ03 may be used in materials and intermediate polymer and coating and finishing solutions that may be incorporated into the treated articles listed below. For coating and finishing-type applications using solutions, the final textile article may contain a maximum of 0.0019% (by weight) of silver. For all other applications, the final textile article may contain from 0.001% to 0.01% (by weight) of silver. Contact HeiQ Materials AG to determine the appropriate amount of **HeiQ Viroblock NPJ03** for individual finished products.



Produktdatenblatt

Datenblatt: Meldung eines Biozid-Produktes nach ChemBiozidMeldeV

Unter Zugrundelegung der von Ihnen gemachten Angaben wurde Ihnen eine mit "N" beginnende Registriernummer zugewiesen. Alle in dem Biozid-Produkt "HeiQ Viroblock NPJ03" enthaltenen Wirkstoffe sind für die gewählte/n Produktart/en in Anhang II der Delegierten Verordnung (EU) Nr. 1062/2014 gelistet. Ohne vorherige Zulassung darf dieses Biozid-Produkt gemäß § 28 Absatz 8 des Chemikaliengesetzes, sofern die weiteren Voraussetzungen ebenfalls erfüllt sind, bis zur Entscheidung der Genehmigung des/ der Wirkstoff/e auf dem Markt bereitgestellt werden, längstens jedoch bis zum 31. Dezember 2024. Der aktuellen Status der maximalen Verkehrsfähigkeit (ChemBiozidmeldeV) Ihres Biozidproduktes wird Ihnen unter „gemeldetes Biozid-Produkt" angezeigt.

GEMELDETES BIOZID-PRODUKT

Handelsname:	HeiQ Viroblock NPJ03
Registriernummer:	N-91819
Meldedatum:	04.05.2020
Maximale Verkehrsfähigkeit (ChemBiozidMeldeV):	31.12.2024 Das Biozidprodukt kann für die Dauer des Genehmigungsverfahrens des Wirkstoffs bzw. des letzten zu genehmigenden Wirkstoffs ohne Zulassung auf dem Markt bereitgestellt werden.
Hinweis:	
Aktiv:	✓

WIRKSTOFFE (ANHANG II)

Wirkstoffname	Reaktionsmasse von Titandioxid und Silberchlorid
CAS-Nr.	
EC-Nr.	
PT	9
Produktart	Schutzmittel für Fasern, Leder, Gummi und polymerisierte Materialien

https://www.baua.de/DE/Biozid-Meldeverordnung/Produktverwaltung/ProduktDetails... 04/05/2020
BAuA - Biozidmeldeverordnung – Details zum Produkt - Bundesanstalt für Arbeitssc... Page 2 of 2

CHT
SMART CHEMISTRY
WITH CHARACTER.