

ISSUING DATE 11-MAR-2021

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REVISION NUMBER 1

1 IDENTIFICATION

Product identifier

Product Name Chitoshield™

Other means of identification

CAS# (Active Ingredient) 9012-76-4

Recommended use of the chemical and restrictions on use

Recommended Use Communicating the natural biostatic properties of Chitosan to hard or soft surfaces.
Restrictions on use N/A

Details of the supplier of the safety data sheet

Supplier Identification Synergy Americas, Inc.
Address 127 Stream Road
Winterport, Maine
04496
USA
Telephone 207.944.3495
E-mail info@synergy-americas.com
Emergency telephone number **1-800-222-1222 (Poison Control)**
Company Emergency Phone Number 207.944.3495

2 HAZARDS IDENTIFICATION

Classification

In accordance with OSHA Standards Code 29 CFR 1910.1200, this product contains no substances which, at their given concentration, are considered to be hazardous to health.

Appearance Clear, amber
Physical state Liquid
Odor Slightly Vinegar-like

GHS Label elements, including precautionary statements

Hazard statements Not classified.

Other information

Not recognized as having any acute toxicity

0 % of the mixture consists of ingredient(s) of unknown toxicity
0 % of the mixture consists of ingredient(s) of unknown acute oral toxicity
0 % of the mixture consists of ingredient(s) of unknown acute dermal toxicity
0 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (gas)
0 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (vapor)
0 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (dust/mist)

3 COMPOSITION/INFORMATION ON INGREDIENTS

Substance Not applicable.

Mixture The product contains no substances which at their given concentration, are considered to be hazardous to health.



4 FIRST AID MEASURES

First aid measures

Inhalation

Eye contact

Skin contact

Ingestion

Remove to fresh air.

Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician.

Wash skin with soap and water.

Clean mouth with water and drink afterwards plenty of water.

Most important symptoms and effects, both acute and delayed

Symptoms

No information available.

Indication of any immediate medical attention and special treatment needed

Note to physicians

Treat symptomatically.

5 FIRE-FIGHTING MEASURES

Suitable extinguishing media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable extinguishing media

CAUTION: Use of water spray when fighting fire may be inefficient.

Specific hazards arising from the chemical

No information available.

Hazardous combustion products

Carbon oxides.

Explosion data

Sensitivity to Mechanical Impact

None.

Sensitivity to Static Discharge

None.

Special protective equipment for fire-fighters

Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.

6 ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal precautions

Avoid contact with eyes.

Methods and material for containment and cleaning up

Methods for containment

Prevent further leakage or spillage if safe to do so.

Methods for cleaning up

Dam up. Soak up with inert absorbent material. Pick up and transfer to properly labeled containers.

7 HANDLING AND STORAGE

Precautions for safe handling

Advice on safe handling

Handle in accordance with good industrial hygiene and safety practice.

Conditions for safe storage, including any incompatibilities

Storage conditions

Keep containers tightly closed in a dry, cool and well-ventilated place

8 EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure limits

This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

Appropriate engineering controls

Engineering controls

Showers

Eyewash stations

Ventilation systems.



Individual protection measures, such as personal protective equipment

Eye/face protection	No special protective equipment required.
Skin and body protection	No special protective equipment required.
Respiratory protection	No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required.
General hygiene considerations	Handle in accordance with good industrial hygiene and safety practice

9 PHYSICAL AND CHEMICAL PROPERTIES
Physical and Chemical Properties

Physical state	Liquid
Appearance	Clear, amber
Odor	Vinegar-like
Color	No information available
Odor Threshold	Not applicable

Property

pH
 Melting/freezing point
 Boiling point/boiling range
 Flash point
 Evaporation rate
 Flammability (solid, gas)
 Flammability limit in Air
 Upper flammability limit
 Lower flammability limit
 Vapor pressure
 Vapor density
 Relative density
 Water solubility
 Solubility(ies)
 Partition coefficient: n-octanol/water
 Autoignition temperature
 Decomposition temperature
 Kinematic viscosity
 Dynamic viscosity

Values

6-7
 No data available
 99 °C / 211 °F
 No data available
 No data available
 No data available
 No data available
 No data available
 No data available
 No data available
 No data available
 1.01
 Liquid
 No data available
 Not Applicable
 No data available
 No data available
 No data available
 5-10 cps @ 25°C

Remarks Method

None known

 None known
 None known
 None known
 None known

 None known
 None known

 None known
 None known
 None known

Other Information

Explosive properties	No information available.
Oxidizing properties	No information available.
Softening point	No information available.
Molecular weight	No information available.
VOC content (%)	No information available.
Liquid density	No information available.
Bulk density	No information available.
Particle size	No information available.
Particle size distribution	No information available.

10 STABILITY AND REACTIVITY

Reactivity	No information available.
Chemical stability	Stable under normal conditions.
Possibility of hazardous reactions	None under normal processing.
Hazardous polymerization	Hazardous polymerization does not occur.
Conditions to avoid	None known based on information supplied.
Incompatible materials	None known based on information supplied.
Hazardous decomposition products	Carbon oxides



11 TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information

Inhalation

Specific test data for the substance or mixture is not available.

Eye contact

Specific test data for the substance or mixture is not available.

Skin contact

Specific test data for the substance or mixture is not available.

Ingestion

Specific test data for the substance or mixture is not available.

Information on toxicological effects

Symptoms

No information available.

Numerical measures of toxicity

Acute Toxicity

Not recognized as having any acute toxicity

0 % of the mixture consists of ingredient(s) of unknown toxicity.

0 % of the mixture consists of ingredient(s) of unknown acute oral toxicity.

0 % of the mixture consists of ingredient(s) of unknown acute dermal toxicity.

0 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (gas).

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0 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (dust/mist).

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Skin corrosion/irritation

No information available.

Serious eye damage/eye irritation

No information available.

Respiratory or skin sensitization

No information available.

Germ cell mutagenicity

No information available.

Carcinogenicity

No information available.

Reproductive toxicity

No information available.

STOT - single exposure

No information available.

STOT - repeated exposure

No information available.

Aspiration hazard

No information available.

12 ECOLOGICAL INFORMATION

Ecotoxicity

The environmental impact of this product has not been fully investigated.

Persistence and degradability

No information available.

Bioaccumulation

There is no data for this product.

Mobility

No information available.

Other adverse effects

No information available.

13 DISPOSAL CONSIDERATIONS

Waste treatment methods

Waste from residues/unused products

Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation.

Contaminated packaging

Do not reuse empty containers.

14 TRANSPORT INFORMATION

DOT

NOT REGULATED

Proper shipping

NON-REGULATED

Name hazard class

N/A

TDG

Not regulated

MEX

Not regulated

ICAO

Not regulated

IATA

Not regulated

Proper shipping name

NON REGULATED

Hazard class

N/A



IMDG/IMO**Hazard Class****RID****ADR****ADN**

Not regulated

N/A

Not regulated

Not regulated

Not regulated

15 REGULATORY INFORMATION**Safety, health and environmental regulations/legislation specific for the substance or mixture****International Regulations****Ozone-depleting substances (ODS)**

Not applicable

Persistent organic pollutants

Not applicable

Export notification requirements

Not applicable

International Inventories**TSCA**

Contact supplier for inventory compliance status.

DSL/NDSL

Contact supplier for inventory compliance status.

EINECS/ELINCS

Contact supplier for inventory compliance status.

ENCS

Contact supplier for inventory compliance status.

KECL

Contact supplier for inventory compliance status.

PICCS

Contact supplier for inventory compliance status.

AICS

Contact supplier for inventory compliance status.

Legend**TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory**DSL/NDSL** - Canadian Domestic Substances List/Non-Domestic Substances List**EINECS/ELINCS** - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances**ENCS** - Japan Existing and New Chemical Substances**KECL** - Korean Existing and Evaluated Chemical Substances**PICCS** - Philippines Inventory of Chemicals and Chemical Substances**AICS** - Australian Inventory of Chemical Substances**US Federal Regulations****SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

Acute health hazard

No

Chronic health hazard

No

Fire hazard

No

Sudden release of pressure hazard

No

Reactive hazard

No

CWA (Clean Water Act)

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

US State Regulations**California Proposition 65**

This product does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know Regulations

This product does not contain any substances above threshold limits that are regulated by state right-to-know.



16 OTHER INFORMATION

NFPA	Health hazards	1	Flammability	0	Instability	0	Physical and Chemical Properties - Personal Protection X
HMIS	Health hazards	1	Flammability	0	Physical hazards	0	

Prepared By
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Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text