

Section 1: Product and company information

Product identifier

Product code	TMI-CHI-7525
Product name	Chitozen
Substance name	N/A
Reach No.	A registration number is not available for this substance as the substance or its uses are exempted from registration, the annual tonnage does not require a registration or the registration is envisaged for a later registration deadline

Relevant identified uses of the substances or mixture and uses advised against

Relevant Identified uses

Main use category	Laboratory use
Professional use spec	R&D use only
Identified used	Laboratory chemicals

Details of the supplier of the safety data sheet

Company	Idylle 68 boulevard de Port-Royal 75005 Paris France
Technical phone	+33636365577
Email address	contact@idylle-labs.com
Emergency phone number	
France	112
Other countries	ORFILA (INRS): + 33 (0)1 45 42 59 59

Section 2: Hazards identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008

Not a hazardous substance or mixture according to Regulation (EC) No 1272/2008.

2.2 Label elements

Labelling according Regulation (EC) No 1272/2008

Not a hazardous substance or mixture according to Regulation (EC) No 1272/2008.

2.3 Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

Section 3: Composition Information on ingredients

Substances

Synonyms :	Chitosan, Deacetylated chitin, Poly(D-glucosamine)
Formula :	C ₁₂ H ₂₄ N ₂ O ₉
CAS-No. :	9012-76-4
EC-No. :	618-480-0

No other components need to be disclosed according to the applicable regulations.

Section 4: First aids measures

Description of first-aid measures

General advice	Consult a physician. Show this safety data sheet to the doctor in attendance.
If inhaled	If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.
In case of skin contact	Wash off with soap and plenty of water. Consult a physician.
In case of eye contact	Flush eyes with water as a precaution. Consult a physician.
If swallowed	Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

Most important symptoms and effect, both acute and delayed

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

Indication of any immediate medical attention and special treatment needed

No data available

Section 5: Firefighting measures

Extinguishing media	<p>Suitable extinguishing media Water Foam Carbon dioxide (CO₂) Dry powder</p> <p>Unsuitable extinguishing media For this substance/mixture no limitations of extinguishing agents are given.</p>
Special hazards arising from the substance or mixture	<p>Carbon oxides, Nitrogen oxides (NO_x) Combustible Development of hazardous combustion gases or vapours possible in the event of fire</p>
Advice for firefighters	Wear self-contained breathing apparatus for firefighting if necessary.
Further information	Suppress (knock down) gases/vapors/mists with a water spray jet.

Section 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures	Use personal protective equipment. Avoid dust formation. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Avoid breathing dust. For personal protection see section 8.
Environmental precautions	No special precautionary measures necessary.
Methods and material for containment and cleaning up	Observe possible material restrictions (see sections 7 and 10). Take up dry. Dispose of properly. Clean up affected area. Avoid generation of dusts.
Reference to other sections	For disposal see section 13

Section 7: Handling and storage

Precautions for safe handling	For precautions see section 2.2
Conditions for safe storage, including any incompatibilities	Store in cool place. Keep container tightly closed in a dry and well-ventilated place. Recommended storage temperature is 15-25 °C
Specific end use	Research use only

Section 8: Exposure controls/personal protection

Control parameters	Components with workplace control parameters
Exposure control	Appropriate engineering controls Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

Personal protective equipment:

Eye/face protection	Safety glasses with side-shields conforming to EN166 Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).
Skin protection	Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands. The selected protective gloves have to satisfy the specifications of Regulation (EU) 2016/425 and the standard EN 374 derived from it.

Full contact
 Material: Nitrile rubber
 Minimum layer thickness: 0,11 mm
 Break through time: 480 min
 Material tested: Dermatril® (KCL 740 / Aldrich Z677272, Size M)
 Splash contact
 Material: Nitrile rubber
 Minimum layer thickness: 0.11 mm
 Break through time: 480 min
 Material tested: Dermatril® (KCL 740 / Aldrich Z677272, Size M)
 data source: KCL GmbH, D-36124 Eichenzell, phone +49 (0)6659 87300,
 e-mail sales@kcl.de, test method: EN374
 If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the CE approved gloves. This recommendation is advisory only and must be evaluated by an industrial hygienist and safety officer familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.

Body Protection

Complete suit protecting against chemicals
 The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection

Required when dusts are generated.
 Recommendations on filtering respiratory protection are based on the following standards: DIN EN 143, DIN 14387 and other accompanying standards relating to the used respiratory protection system.

Control of environmental exposure

No special precautionary measures necessary.

Section 9: Physical and chemical properties

Information on basic physical and chemical properties

Appearance form	Coated coverslip
Color	Uncolored
Odor	None
Odor threshold	No data available
Ph	No data available
Melting point/freezing point	No data available
Melting point/freezing point	No data available
Flash point	No data available
Initial boiling point and range	No data available
Evaporation rate	No data available
Flammability (solid/gas)	No data available
Upper/lower flammability or explosive limits	No data available
Vapor pressure	No data available

Vapor density	No data available
Relative density	No data available
Water solubility	No data available
Partition coefficient: n-octanol/water	No data available
Auto-ignition temperature	No data available
Decomposition temperature	No data available
Viscosity	No data available
Explosive properties	No data available
Oxidizing properties	No data available

Section 10: Stability and reactivity

Reactivity	No data available
Chemical stability	Stable under recommended storage conditions (15 – 25 °C)
Possibility of hazardous reactions	No data available
Conditions to avoid	Avoid moisture and temperature under 15 °C.
Incompatible materials	Strong oxidizing agents
Hazardous decomposition products	Hazardous decomposition products formed under fire conditions. - Carbon oxides, Nitrogen oxides (NOx). In the event of fire: see section 5

Section 11: Toxicological information

Information on toxicological effect

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

Main routes of exposure

Acute toxicity	LD50 Oral – Rat - > 10. 000 mg/kg
Skin corrosion/irritation	Unclassified
Serious eye damage/irritation	Unclassified
Respiratory or skin sensitization	Unclassified
Germ cell mutagenicity	Unclassified
Carcinogenicity	IARC : No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.
Reproductive toxicity	Unclassified

According to Regulation (EC) No. 1907/2006(REACH) with its amendment Regulation (EC) No. 453/2010-830/2015

Specific target organ toxicity (single exposure)	Unclassified
Specific target organ toxicity (repeated exposure)	Unclassified
Aspiration hazard	Unclassified
Potential adverse human health effects and symptoms	Unclassified
Additional Information	RTECS: not available

Section 12: Ecological information

Toxicity	Toxicity to fish: <i>Oncorhynchus mykiss</i> (rainbow trout) – LC50 - 1.73 mg/l - 96 h Toxicity to daphnia and other aquatic invertebrates: EC50 - <i>Daphnia pulex</i> (Water flea) – 13.69 mg/l - 48 h
Persistence and degradability	No data available
Bio-accumulative potential	No data available
Mobility in soil	No data available
Results of PBT and vPvB assessment	This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher
Other adverse effects	No data available

Section 13: Disposal consideration

Waste treatment methods

Product

Dispose of waste in accordance to applicable national, regional, or local regulations.

Contaminated packaging

Dispose of as unused product.

Section 14: Transport Information

ADR / RID / IMDG / IATA / ADN	N/A
UN number	N/A
UN proper shipping name	N/A
Transport hazard class	N/A
Packaging group	N/A

According to Regulation (EC) No. 1907/2006(REACH) with its amendment Regulation (EC) No. 453/2010-830/2015

Environmental hazards N/A

Special precautions for use N/A

Transport in bulk according to Annex II of Marpol and IBC CODE N/A

Section 15: Regulatory information

Safety, health and environmental regulations/legislation specific for the substance or mixture

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

Chemical safety assessment

For this product a chemical safety assessment was not carried out

Section 16: Other Information

Classification and procedure used to establish classification of mixtures according to regulation (EC) 1272/2008 [CLP]:

The foregoing information was gathered by diligent research and / or control and the recommendations are based on prudent application of professional judgment. This information should not be considered as exhaustive and should only be used as an indication. All products and mixtures can present unknown hazards and should be used with caution. Since the Company cannot the methods, volumes or actual conditions of use, the Company will not be held liable for any damage or loss resulting from the handling of the product described herein or from contact therewith. THE INFORMATION IN THIS MATERIAL SAFETY DATA SHEET DO NOT CONSTITUTE A WARRANTY, EXPRESS OR IMPLIED, INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE