

TOKYO BRANCH 8-12, Nihonbashihoncho 2-chome, Chuo-ku, Tokyo, (P.C.103-0023) Japan Phone : +81-3-6667-8251 Fax : +81-3-6667-8250 OSAKA BRANCH 4-26, Sakuragawa 4-chome, Naniwa-ku, Osaka, (P.C. 556-0022) Japan Phone : +81-6-6563-1511 Fax : +81-6-6563-1510 Collagen (Solution)

NARA PLANT 1596-9, Yuzaki, Kawanishi-cho, Shiki-gun, Nara Pref., (P.C. 636-0202) Japan Phone : +81-745-44-1788 Fax : +81-745-44-1681

Issue Date: 2018/10/16

SAFETY DATA SHEET (SDS) per OSHA HazCom 2012 According to 1907/2006/EC, Article 31

Section 1. PRODUCT AND COMPANY IDENTIFICATION

Product Name	: Collagen
Nitta Product	: Cellmatrix Type I-A
Company Name	: Nitta Gelatin Inc.
Address	: 2-22 Futamata, Yao city, Osaka, Japan
Zip Code	: 581-0024
Information department	: Quality Assurance Department
Phone number	: +81-72-949-5381
E-mail	: info-qa@nitta-gelatin.co.jp
Emergency phone number	: +81-72-949-5381

Section 2. HAZARDS IDENTIFICATION

Classification according to Regulation (EC) No 1272/2008:

The substance is not classified as hazardous to health or the environment according to the CLP regulation

Classification according to Directive 67/548/EEC or Directive 1999/45/EC: Not applicable

LABEL ELEMENTS Labeling according to Regulation (EC)No1272/2008

(SYMBOL) None listed

[SIGNAL WORD] None listed

HMIS(Hazardous Materials Identification System) Class : 0~4]

HEALTH	0	
FIRE	1	
REACTIVITY	1	

[Hazard statement]

May cause an allergic skin reaction

[Other hazards]

Results of PBT and vPvB assessment

PBT: Not applicable

vPvB: Not applicable



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Section 3. COMPOSITION / INFORMATION ON INGREDIENTS

CAS number	: N/A
Chemical name	: Collagen
% content	: 0.3% collagen
EC number	: N/A

Impurities and stabilizing additives which are themselves classified and which contribute to the classification of the substance - Not applicable

Section 4. FIRST-AID MEASURES

Inhalation	: Excessive inhalation of dust can mechanically impede respiration. Remove from exposure and supply fresh air. If required provide artificial respiration. Get medical aid if cough or other symptoms appear.
Skin contact	: Wash off with soap and lukewarm water. If skin irritation or rash occurs, get medical attention/advice.
Eye contact	: Even if very small amount contact, rinsing by clean water for at least 15 minutes, and get ophthalmologist's examination. Remove contact lenses, unless it sticks to the eye. Then continue rinsing.
Ingestion	: Product is non-hazardous; however, excessive ingestion at once may block a throat. Rinse mouth with water, give about 250 ml of water to dilute in the stomach, and do not induce to vomit. Receive the doctor's treatment (stomach pump) if other symptoms appear.

Section 5. FIRE FIGHTING PROCEDURES

Extinguishing media	: Water (First aid), Chemical powder, Carbon dioxide, Form, and dry sand. (This product cannot ignite, due to presence of excess water)
Unsuitable extinguishing media	: In case of large fires, do not use water.
General fire hazards	: If this product is involved in a fire, the following can released: Carbon monoxide and carbon dioxide. Nitrogen oxides (NOx)



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and Sulfur oxides (SOx)

Specific extinction method	: Shut off all sources of ignition. Wear proper protective equipment. After extinguishing, keep personal out by roping round until inside of material cools.
Special protective for fire-fighters	: Wear full body protective clothing with breathing apparatus.

Section6. ACCIDENTAL RELEASE MEASURES

Personal precautions, Protective equipment and emergency procedures	: Wear protective goggles, gloves and long-sleeved clothing, when handling.
Environmental precautions	: Avoid release of this material into sewer, watercourse or river.
Removing method	: No special treatment is necessary. In case the product is spilled, vacuum or sweep up the material for disposal. Materials can be disposed of according to local regulations.
CAUTION!	: Surface that may be covered with the product will become extremely slippery upon application of water. Wet spills should be thoroughly flushed with lukewarm water until non-slippery.

Section 7. HANDLING AND STORAGE

Handling : It is recommended to use a dust respirator and goggle, if huge amount of dust formation is expected (usually when handling large quantities).

Storage condition : Keep tightly closed. Store in cool and dry place. Store at 4-8°C.

Section 8. EXPOSURE CONTROL / PERSONAL PROTECTION

Chemical Name	ACGIH	NIOSH	OSHA-Final PELs
Gelatin	None listed	None listed	None listed

Exposure controls	: Using ventilator is recommended when handling is generating high
	particulate.
Control parameters	: Not applicable
Engineering measure	: Not applicable



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Protective Equipment

Respiratory protection	: Respirators (protective mask)
Hand protection	: Gloves (water resistant)
Eye protection	: Normal eyeglasses, normal eyeglasses with side shields, or safety goggles described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.
Skin and body protection	: Long-sleeved clothing (water resistant) and protective boots.
Respirators	: Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms.
Proper measure for health	: Wash hands thoroughly and gargle after handling, before eating and drinking.

Section 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	: Solution
Color	: Colorless and transparent (or slightly translucent)
Odor	: Almost odorless
рН	: 2.8 – 3.2
Boiling point	: Not applicable
Melting point	: Not applicable
Flash point	: Not applicable
Auto ignition temperature (ignition temperature)	: No data
Explosion properties	: No data
Vapor pressure	: No data
Vapor density	: No data
Vapor rate	: No data
Specific gravity (relative density)	: No data
Decomposition temperature	: No data
Solubility	: Soluble in water
n-Octanol / water partition coefficient	: No data

Section 10. STABILITY AND REACTIVITY

Stability

: Stable under normal storage and handling

Possibility of hazardous reactions

: May cause hydrolysis with water, and dry condition without



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	water cause insolubilization
Conditions to avoid	: High temperature, high humidity, incompatible materials, dust generation.
Incompatible material	: No data
Hazardous decomposition products	: Carbon monoxide and carbon dioxide, Nitrogen oxides (NOx), Sulfur oxides (SOx).
Others	: No information

Section 11. TOXICOLOGICAL INFORMATION

Acute toxicity	: No data
LD 50 / LC 50 RTECS	: Not available
Skin corrosion / irritation	: No data
Serious eye damage / eye irritation	: No data
Respiratory / skin sensitization	: No data
Germ cell mutagenicity	: No data
Carcinogenicity	: Not listed by EPA, ACGIH, IARC, NTP, OSHA
	or CA Prop 65
Reproductive toxicity	: No data
Specific target organ toxicity- single exposure	: No data
Specific target organ toxicity- repeated exposure	: No data
Aspiration hazard	: No data
Others	: No data

Section 12. ECOLOGICAL INFORMATION

Eco toxicity	: No data
Fish toxicity	: No data
Environmental fate, persistence and degradability, mobility	: This product does not present long-term ecological problems. It is considered biodegradable
General notes	: Do not allow material to be released in the environment without proper governmental permits.
Water hazard	: Class 1 (Self-assessment)- Slightly hazardous for water. Do not allow undiluted product or large quantities of it to reach ground water, water bodies or sewage system. It will



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cause reduction in dissolved oxygen and could therefore contribute to BOD. Avoid transfer in the environment.

Results of PBT and vPvB assessment

PBT	: Not applicable
vPvB	: Not applicable
Other adverse effects	: No further relevant information available

Section 13. DISPOSAL CONSIDERATIONS

Contents must be disposed of in compliance with the respective national and local regulations. Dispose of contents/container to waste disposing company having the official approval of laws and regulations.

Section 14. TRANSPORT INFORMATION

International regulation	: DOT, ADN IMDG. IATA
UN class of dangerous material in	: Not available
definition of the UN	
UN number	: Not available
Packing group	: Not available
Marine pollution material	: Not available
Domestic regulations	: Follow all regulation on the transport in your country or region
Safety measure and condition on transportation	: protect against tumble, fall, physical damage and direct sunlight during loading to avoid shift in transit
Emergency response guideline number	: Not available
Transport in bulk according to Annex of MARPOL73/78 and the IBC Code	: Not available

Section15. REGULATORY INFORMATION

The fire service act	: Not applicable
Industrial safety and health act	: Not applicable
Safety, health and environmental regulations/legislation specific for the substance or mixture	: North American regulations



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All components of this product are listed in the U.S. Environmental Protection Agency Toxic Substances Control Act Chemical substance Inventory.

All components of this product are listed on the Canadian Domestic Substances List(DSL)

SARA Section 313(specific toxic chemical listings)

: Substance is not listed.

California Proposition 65

Prop 65-Chemicals known to cause cancer	: Substance not listed
Prop 65-Developmental toxicity	: Substance not listed
Prop 65-Developmental toxicity (female)	: Substance not listed
Prop 65-Developmental toxicity (male)	: Substance not listed
Information about limitation of use	: For use only by technically qualified individuals
Australian inventory of Chemical Substances	: Substance not listed
Standard for the Uniform Scheduling of Drug and Poisons	: Substance not listed
Water hazard class	: Water hazard class 1 (Self-assessment)- slightly hazardous for water.

Other regulations, limitations and prohibitive regulations

ELINCS (European List of Notified	: Substance not listed
Chemical Substances)	
Substances of very high concern (SVHC)	: Substance not listed
according to REACH, Article 57	
REACH-Pre-registered substances	: Substance not listed
Chemical safety assessment	: A Chemical Safety Assessment has not been carried out.

Section 16.OTHER INFORMATION

References

- JIS Z 7253-2012
- ACGIH 2000 TLVs and PEIs (2000)
- Japan Society For Occupational Health(JSOH) Recommendations for allowable concentrations (1999)
- CLP Regulation (EC) No. 1272/2008 [CLP/GHS]



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Abbreviations and acronyms

GHS	:Globally Harmonized System of classification and labeling chemicals
HMIS	: Hazardous Material Identification System (USA)
PBT	: Persistance Bioaccumualtion Toxicity
VPvB	: very Persistent and very Bioaccumulative
CAS	: Chemical Abstracts Service (division of the American Chemical Society)
EINECS	: European Inventory of Existing Commercial Chemical Society
ACGIH	: American Conference of Governmental Industrial Hygienists(USA)
OSHA	: Occupational Safety and Health Administration (USA)
IARC	: International Agency for Research on Cancer
EPA	: Environmental Protection Agency (USA)
NTP	: National Toxicology Program (USA)
DOT	: US Department of Transportation
IMDG	: International Maritime Code for Dangerous Goods
IATA	: International Air Transport Association

The above information is given in good faith and to the best of our knowledge.

It is not intended to guarantee specific properties but solely to assist in setting up suitable pre cautionary measures. No guarantee can be given for risks arising from unforeseen circumstance.