

Safety Data Sheet

according to OSHA HCS (29CFR 1910.1200) and WHMIS 2015 Regulations

Revision: May 4, 2021

1 Identification**· Product identifier****· Trade name: Lyophilized Proteins****· Other product identifiers:**

1051 - T-Cell Proliferation Grade Chick Type I Collagen, denatured
1052 - T-Cell Proliferation Grade Bovine Type I Collagen, denatured
1053 - T-Cell Proliferation Grade Porcine Type I Collagen, denatured
1054 - T-Cell Proliferation Grade Rat Type I Collagen, denatured
1055 - T-Cell Proliferation Grade Human Type I Collagen, denatured
1056 - T-Cell Proliferation Grade Mouse Type I Collagen, denatured
1061 - Immunization Grade Chick Type I Collagen
1062 - Immunization Grade Bovine Type I Collagen
1063 - Immunization Grade Porcine Type I Collagen
1064 - Immunization Grade Rat Type I Collagen
1065 - Immunization Grade Human Type I Collagen
1066 - Immunization Grade Mouse Type I Collagen
1067 - Immunization Grade Rabbit Type I Collagen
1068 - Immunization Grade Canine Type I Collagen
1071 - Immunization Grade Chick Type IX Collagen
1072 - Immunization Grade Bovine Type IX Collagen
1073 - Immunization Grade Porcine Type IX Collagen
1075 - Immunization Grade Human Type IX Collagen
1081 - Immunization Grade Chick Type XI Collagen
1082 - Immunization Grade Bovine Type XI Collagen
1083 - Immunization Grade Porcine Type XI Collagen
1085 - Immunization Grade Human Type XI Collagen
1092 - Immunization Grade Bovine Amnion Type V Collagen
1095 - Immunization Grade Human Amnion Type V Collagen
1096 - Immunization Grade Mouse Type V Collagen
1102 - NC1 Fragment of Bovine GBM Type IV Collagen
1104 - NC1 Fragment of Rat Renal Type IV Collagen
1106 - NC1 Fragment of Mouse Renal Type IV Collagen
1303 - Immunization Grade Porcine Type III Collagen
1302 - Immunization Grade Bovine Type III Collagen
1305 - Immunization Grade Human Type III Collagen
2021 - T-Cell Proliferation Grade Chick Type II Collagen, denatured
2022 - T-Cell Proliferation Grade Bovine Type II Collagen, denatured
2023 - T-Cell Proliferation Grade Porcine Type II Collagen, denatured
2024 - T-Cell Proliferation Grade Rat Type II Collagen, denatured
2025 - T-Cell Proliferation Grade Human Type II Collagen, denatured
2026 - T-Cell Proliferation Grade Mouse Type II Collagen, denatured
2027 - T-Cell Proliferation Grade Monkey Type II Collagen, denatured
3022 - Ovalbumin, Low Endotoxin
3033 - House Dust Mite Extract D. pteronyssinus
3040 - House Dust Mite Extract D. farinae
4015 - Dextran Sulfate Sodium
6011 - Pepsin
6108 - Biotinylated Lipopolysaccharide (LPS) from E. coli O111:B4
9004 - Chick Type II Collagen CB11 Fragment
9006 - Human Type II Collagen CB11 Fragment
9007 - Bovine Type II Collagen CB11 Fragment
9017 - Chick Type II Collagen CB9 Fragment
9018 - Chick Type II Collagen CB10 Fragment

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9019 - Chick Type II Collagen CB12 Fragment
9020 - Bovine Type II Collagen CB8 Fragment
9021 - Bovine Type II Collagen CB10 Fragment
9022 - Bovine Type II Collagen CB12 Fragment
9023 - Human Type II Collagen CB10 Fragment
9036 - Chick Type II Collagen CB6 Fragment
9037 - Chick Type II Collagen CB7 Fragment
9047 - Human Type II Collagen CB8 Fragment
9048 - Human Type II Collagen CB9.7 Fragment
9049 - Human Type II Collagen CB12 Fragment
9057 - Mouse Type II Collagen CB11 Fragment
9059 - Bovine Type II Collagen CB9.7 Fragment
9060 - Mouse Type II Collagen CB8 Fragment
9061 - Mouse Type II Collagen CB10 Fragment
9063 - Chick Type II Collagen CB8 Fragment
9065 - Muramyl Dipeptide (MDP)
9070 - Cationized Bovine Serum Albumin, cBSA
9071 - Cationized Ovalbumin, cOVA
10951 - Immunization Grade Human Placenta Type V Collagen
20011 - Immunization Grade Chick Type II Collagen
20021 - Immunization Grade Bovine Type II Collagen
20031 - Immunization Grade Porcine Type II Collagen
20041 - Immunization Grade Rat Type II Collagen
20051 - Immunization Grade Human Type II Collagen
20061 - Immunization Grade Mouse Type II Collagen
20071 - Immunization Grade Goat Type II Collagen
20081 - Immunization Grade Sheep Type II Collagen
30102 - Mouse Serum Anti-OVA IgE Kit Capture Antibody
30112 - OVA
30211 - Ovalbumin
60224 - Papain
60241 - Hemoglobin Assay Kit Hemoglobin Standard
60261 - BPB Protein Assay Kit Standard
60411 - Creatinine Assay Kit Standard
61131 - Human IgG Kit Anti-E. coli LPS Standard
61141 - Human IgA Kit Anti-E. coli LPS Standard
61151 - Human IgG Kit Anti-E. coli Standard
61161 - Human IgA Kit Anti-E. coli Standard
61171 - Human IgG Kit Anti-P. gingivalis LPS Standard
61181 - Human IgA Kit Anti-P. gingivalis LPS Standard
61191 - Human IgG Kit Anti-P. gingivalis Standard
61201 - Human IgA Kit Anti-P. gingivalis Standard
61211 - Human IgG Kit Anti-Lactobacillus casei Standard
61221 - Human IgA Kit Anti-Lactobacillus casei Standard
61231 - Human IgG Kit Anti-PG-PS Standard
61241 - Human IgA Kit Anti-PG-PS Standard
61251 - Human IgG Kit Anti-Salmonella Standard
61261 - Human IgA Kit Anti-Salmonella Standard
61271 - Human IgG Kit Anti-Yeast Extract Standard
61281 - Human IgA Kit Anti-Yeast Extract Standard

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- **Recommended use and restriction on use**
- **Recommended use:** Laboratory chemicals
- **Restrictions on use:** For Research Use Only – Not Human or Therapeutic Use
- **Details of the supplier of the Safety Data Sheet**
- **Manufacturer/Supplier:**
Chondrex, Inc.
16928 Woodinville-Redmond Rd NE Suite B101
Woodinville, WA 98072
USA
425-702-6365
support@chondrex.com
- **Emergency telephone number:**
ChemTel LLC
800-255-3924 (North America)
(+1) 813-248-0585 (International)

2 Hazard(s) identification

- **Classification of the substance or mixture**
The product is not classified as hazardous according to the Globally Harmonized System (GHS).
- **Label elements**
- **GHS label elements** Not regulated.
- **Hazard pictograms:** Not regulated.
- **Signal word:** Not regulated.
- **Hazard statements:** Not regulated.
- **Precautionary statements:** Not regulated.
- **Other hazards** There are no other hazards not otherwise classified that have been identified.

3 Composition/information on ingredients

- **Chemical characterization: Mixtures**
- **Components:** None in reportable quantities.

4 First-aid measures

- **Description of first aid measures**
- **After inhalation:** Supply fresh air; consult doctor in case of complaints.
- **After skin contact:**
Brush off loose particles from skin.
Wash with soap and water.
If skin irritation is experienced, consult a doctor.
- **After eye contact:**
Remove contact lenses if worn.
Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
- **After swallowing:**
Rinse out mouth and then drink plenty of water.

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Do not induce vomiting; immediately call for medical help.

· Most important symptoms and effects, both acute and delayed:

Gastric or intestinal disorders when ingested.

Nausea in case of ingestion.

Slight irritant effect on eyes.

· Indication of any immediate medical attention and special treatment needed:

No relevant information available.

5 Fire-fighting measures**· Extinguishing media****· Suitable extinguishing agents:**CO₂, extinguishing powder or water spray. Fight larger fires with water spray.**· For safety reasons unsuitable extinguishing agents:** None.**· Special hazards arising from the substance or mixture**

Formation of toxic gases is possible during heating or in case of fire.

· Advice for firefighters**· Protective equipment:**

Wear self-contained respiratory protective device.

Wear fully protective suit.

6 Accidental release measures**· Personal precautions, protective equipment and emergency procedures**

Ensure adequate ventilation.

Use personal protective equipment as required.

Avoid formation of dust.

· Environmental precautions Avoid release to the environment.**· Methods and material for containment and cleaning up**

Pick up manually.

Dispose of the collected material according to regulations.

· Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

7 Handling and storage**· Handling****· Precautions for safe handling:**

Open and handle receptacle with care.

Avoid contact with the eyes and skin.

· Information about protection against explosions and fires:

Avoid dust cloud formation. Keep ignition sources away. No smoking.

· Conditions for safe storage, including any incompatibilities**· Requirements to be met by storerooms and receptacles:**

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Store in cool, dry conditions in well sealed receptacles.

Storage area should be dry and well-ventilated.

- **Information about storage in one common storage facility:**

Store away from foodstuffs.

Store away from oxidizing agents.

- **Specific end use(s)** No relevant information available.

8 Exposure controls/personal protection

- **Control parameters**

- **Components with limit values that require monitoring at the workplace:**

The following constituent is the only constituent of the product which has a PEL, TLV or other recommended exposure limit.

- **Exposure controls**

- **General protective and hygienic measures:**

The usual precautionary measures for handling chemicals should be followed.

Keep away from foodstuffs, beverages and feed.

Avoid close or long term contact with the skin.

Avoid contact with the eyes.

Avoid breathing dust.

- **Engineering controls:** No relevant information available.

- **Breathing equipment:** Not required under normal conditions of use.

- **Protection of hands:**



Protective gloves

- **Eye protection:**



Safety glasses

Follow relevant national guidelines concerning the use of protective eyewear.

- **Body protection:** Protective work clothing

- **Limitation and supervision of exposure into the environment** No special requirements.

- **Risk management measures** No special requirements.

9 Physical and chemical properties

- **Information on basic physical and chemical properties**

- **Appearance:**

Form: Powder

Color: Whitish-yellow.

- **Odor:** Odorless

- **Odor threshold:** Not determined.

- **pH-value:** Not applicable.

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· Melting point/Melting range:	Not determined.
· Boiling point/Boiling range:	Not determined.
· Flash point:	Not applicable.
· Flammability (solid, gaseous):	The product is not flammable.
· Auto-ignition temperature:	Not determined.
· Decomposition temperature:	Not determined.
· Danger of explosion:	Product does not present an explosion hazard.
· Explosion limits	
Lower:	Not determined.
Upper:	Not determined.
· Oxidizing properties:	Non-oxidizing.
· Vapor pressure:	Not applicable.
· Density:	
Relative density:	Not determined.
Vapor density:	Not applicable.
Evaporation rate:	Not applicable.
· Solubility in / Miscibility with Water:	Soluble.
· Partition coefficient (n-octanol/water):	Not determined.
· Viscosity	
Dynamic:	Not applicable.
Kinematic:	Not applicable.
· Other information	No relevant information available.

10 Stability and reactivity

- **Reactivity:** No relevant information available.
- **Chemical stability:** Stable under normal temperatures and pressures.
- **Thermal decomposition / conditions to be avoided:**
No decomposition if used and stored according to specifications.
- **Possibility of hazardous reactions**
Reacts with strong acids and alkali.
Reacts with strong oxidizing agents.
As the product is supplied it is not capable of dust explosion; however enrichment with fine dust causes risk of dust explosion.
- **Conditions to avoid** Prevent formation of dust.
- **Incompatible materials** Alkalis.
- **Hazardous decomposition products**
Under fire conditions only:
Carbon monoxide and carbon dioxide

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11 Toxicological information

- **Information on toxicological effects**
- **Acute toxicity:** Based on available data, the classification criteria are not met.
- **LD/LC50 values that are relevant for classification:** None.
- **Primary irritant effect:**
- **On the skin:** Based on available data, the classification criteria are not met.
- **On the eye:** Based on available data, the classification criteria are not met.
- **Sensitization:** Based on available data, the classification criteria are not met.

· IARC (International Agency for Research on Cancer):

None of the ingredients are listed.

· NTP (National Toxicology Program):

None of the ingredients are listed.

· OSHA-Ca (Occupational Safety & Health Administration):

None of the ingredients are listed.

· Probable route(s) of exposure:

Ingestion.
Inhalation.
Eye contact.
Skin contact.

- **Germ cell mutagenicity:** Based on available data, the classification criteria are not met.
- **Carcinogenicity:** Based on available data, the classification criteria are not met.
- **Reproductive toxicity:** Based on available data, the classification criteria are not met.
- **STOT-single exposure:** Based on available data, the classification criteria are not met.
- **STOT-repeated exposure:** Based on available data, the classification criteria are not met.
- **Aspiration hazard:** Based on available data, the classification criteria are not met.

12 Ecological information

- **Toxicity**
- **Aquatic toxicity** No relevant information available.
- **Persistence and degradability** No relevant information available.
- **Bioaccumulative potential:** No relevant information available.
- **Mobility in soil:** No relevant information available.
- **Additional ecological information**
- **General notes:**
Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
- **Other adverse effects** No relevant information available.

13 Disposal considerations

- **Waste treatment methods**
- **Recommendation:**
The user of this material has the responsibility to dispose of unused material, residues and containers in compliance with all relevant local, state and federal laws and regulations regarding treatment, storage

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and disposal for hazardous and nonhazardous wastes.

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- **Uncleaned packagings**
- **Recommendation:** Disposal must be made according to official regulations.

14 Transport information

- | | |
|--|-----------------|
| · UN-Number | |
| · DOT, ADR/RID/ADN, IMDG, IATA | Not regulated. |
| · UN proper shipping name | |
| · DOT, ADR/RID/ADN, IMDG, IATA | Not regulated. |
| · Transport hazard class(es) | |
| · DOT, ADR/RID/ADN, IMDG, IATA | |
| · Class | Not regulated. |
| · Packing group | |
| · DOT, ADR/RID/ADN, IMDG, IATA | Not regulated. |
| · Environmental hazards | |
| · Marine pollutant: | No |
| · Special precautions for user | Not applicable. |
| · Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code | Not applicable. |

15 Regulatory information

- **Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **United States (USA)**
- **SARA**

- **Section 302 (extremely hazardous substances):**

None of the ingredients are listed.

- **Section 313 (Specific toxic chemical listings):**

None of the ingredients are listed.

- **TSCA (Toxic Substances Control Act)**

All ingredients are listed or exempt.

- **Proposition 65 (California)**

- **Chemicals known to cause cancer:**

None of the ingredients are listed.

- **Chemicals known to cause developmental toxicity for females:**

None of the ingredients are listed.

- **Chemicals known to cause developmental toxicity for males:**

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None of the ingredients are listed.

· Chemicals known to cause developmental toxicity:

None of the ingredients are listed.

· EPA (Environmental Protection Agency):

None of the ingredients are listed.

· IARC (International Agency for Research on Cancer):

None of the ingredients are listed.

· Canadian Domestic Substances List (DSL):

All ingredients are listed or exempt.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· Abbreviations and acronyms:

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

CAS: Chemical Abstracts Service (division of the American Chemical Society)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

OSHA: Occupational Safety & Health Administration

· SourcesWebsite, European Chemicals Agency (echa.europa.eu)Website, US EPA Substance Registry Services (ofmpub.epa.gov/sor internet/registry/substreg/home/overview/home.do)Website, Chemical Abstracts Registry, American Chemical Society (www.cas.org)

Patty's Industrial Hygiene, 6th ed., Rose, Vernon, ed. ISBN: 978-0-470-07488-6

Casarett and Doull's Toxicology: The Basic Science of Poisons, 8th Ed., Klaassen, Curtis D., ed., ISBN: 978-0-07-176923-5.

Safety Data Sheets, Individual Manufacturers

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