



# KENNEY & ROSS LIMITED

6493 SHORE ROAD, SHELBURNE, NOVA SCOTIA CANADA B0T 1W0

PHONE: (902) 637-2616 FAX: (902) 637-2511

## SAFETY DATA SHEET

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Product: **HYDROLYZED FISH COLLAGEN**

Revision Date: August 19, 2016

Version: 1.2

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### 1. IDENTIFICATION OF THE SUBSTANCE AND COMPANY

#### 1.1 PRODUCT IDENTIFIER:

Substance Name: HYDROLYZED FISH COLLAGEN

Product Number(s): HFC-15, HFC-300

CAS Number: 68410-45-7

EC Number: 270-45-7

Index Number: -

REACH Number: Exempt

#### 1.2 RELEVANT IDENTIFIED USES OF SUBSTANCE AND USES ADVISED AGAINST

Relevant Identified Uses: Collagen for manufacture of food, cosmetics and nutraceutical products or applications.

Uses Advised Against: None

#### 1.3 DETAILS OF THE SUPPLIER OF THE SAFETY DATA SHEET

Supplier:

Kenney and Ross Limited

6493 Shore Road

Shelburne, Nova Scotia

B0T 1W0 CANADA

Phone: +1-902-637-2616

Fax: +1-902-637-2511

bstoddard@krltd.ca

#### 1.4 EMERGENCY TELEPHONE NUMBER

Company Telephone: +1-902-637-2616

Available only during office hours: 7:00 - 15:00 EST (English only)

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## 2. HAZARDS IDENTIFICATION

### 2.1 CLASSIFICATION OF THE SUBSTANCE

**2.1.1 Classification according to Regulation (EC) No. 1272/2008 (CLP):**

Not a dangerous substance according to GHS.



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## 2.2 LABEL ELEMENTS

Symbol(s): None

Signal Word(s): WARNING

Hazard Statement(s):

H313 May be harmful in contact with skin.

H333 May be harmful if inhaled.

H335 May cause respiratory irritation.

Precautionary Statement(s):

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P301+P330+P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

P303+P361+P353 IF ON SKIN (or hair): Take off Immediately all contaminated clothing.

Rinse SKIN with water/shower.

P304+P341: IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

## 2.3 OTHER HAZARDS:

None known.

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## 3. COMPOSITION / INFORMATION ON INGREDIENTS

### 3.1 SUBSTANCE IDENTIFICATION

Substance Name: HYDROLYZED FISH COLLAGEN

CAS Number: 68410-45-7

EC Number: 270-082-2

Index Number: -

REACH Number: Exempt

Purity: 100%

Synonyms: Collagen, Gelatin hydrolyzates, Hydrolyzed collagen, Hydrolysed collagen, Fish collagen

Stabilizers: None

Hazard Impurities: None



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## 4. FIRST AID MEASURES

### 4.1 DESCRIPTION OF FIRST AID MEASURES

General information: Immediate or emergency medical attention is usually not required following exposure.

Following inhalation: If breathing is difficult, remove patient to fresh air and keep at rest in a position comfortable for breathing.

Following skin contact: Take off Immediately all contaminated clothing. Rinse SKIN with water/shower.

Following eye contact: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Following ingestion: Rinse mouth. Do NOT induce vomiting

Self-protection of the first aider: No special protection required. Use standard protective gloves, eye protection and clothing.

### 4.2 MOST IMPORTANT SYMPTOMS AND EFFECTS, BOTH ACUTE AND DELAYED

Symptoms: None known

Effects: None known

### 4.3 INDICATION OF ANY IMMEDIATE MEDICAL ATTENTION

Notes for Doctor: Immediate or emergency medical attention is usually not required following exposure.

Special treatment: Treat patient as described in Section 4.1.

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## 5. FIREFIGHTING MEASURES

### 5.1 EXTINGUISHING MEDIA

Suitable extinguishing media: Use water spray, foam, dry chemical or carbon dioxide

Unsuitable extinguishing media: None known

### 5.2 SPECIAL HAZARDS ARISING FROM THE SUBSTANCE

Hazardous combustion products: None known

### 5.3 ADVISE FOR FIREFIGHTERS

Use standard firefighting precautions

### 5.4 ADDITIONAL INFORMATION

Flash point: Data not available

Flammability: Not flammable

Upper flammable limit (% by Volume): Not applicable

Lower flammable limit (% by Volume): Not applicable

Auto-ignition temperature (°C): Not applicable

Hazardous combustion products: None

Explosion data: Sensitivity to Impact: None

NFPA Rating: Health 0; Flammability 0; Instability 0



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## 6. ACCIDENTAL RELEASE MEASURES

### 6.1 PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES

#### 6.1.1 For Non-Emergency Personnel:

Protective Equipment: Wear appropriate personal protective equipment, including gloves, safety glasses, and protective clothing to minimize skin exposure. Wear breathing apparatus to minimize inhalation exposure.

Emergency Procedures: Evacuate contaminated area.

#### 6.1.2 For Emergency Responders:

Wear appropriate personal protective equipment, including gloves, safety glasses, and protective clothing to minimize skin exposure. Wear breathing apparatus to minimize inhalation exposure.

### 6.2 ENVIRONMENTAL PRECAUTIONS

Prevent substance from entering drains and other access to waterways.

### 6.3 METHODS AND MATERIAL FOR CONTAINMENT AND CLEAN UP

#### 6.3.1 For containment:

Control substance release. Cover drains or otherwise prevent substance from entering drains. Evacuate and contain area to prevent uncontrolled flow of substance.

#### 6.3.2. For clean up:

Bulk powder can be collected by vacuum or sweeping. Place collected material in suitable container for disposal. Residual powder can be removed by rinsing/mopping with water. Collect wash water for proper disposal as contaminated aqueous waste.

### 6.4 REFERENCE TO OTHER SECTIONS

See Sections 8 and 13.



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## 7. HANDLING AND STORAGE

### 7.1 PRECAUTIONS FOR SAFE HANDLING

#### 7.1.1 Protective measures:

Advice on safe handling: Wear suitable personal protective equipment including eye protection, clothing and gloves.

Fire preventions: Avoid exposure to sources of ignition.

Aerosol and dust generation preventions: Use adequate ventilation to maintain low airborne concentrations.

Environmental precautions: No special precautions required when handled as described.

#### 7.1.2 Advice on general occupation hygiene:

Apply general industrial good hygiene practises. Do not eat, drink or smoke in work area. Wash hands thoroughly after use. Remove contaminated clothing and personal protective equipment upon leaving work area and prior to entering eating areas.

### 7.2 CONDITIONS FOR SAFE STORAGE INCLUDING ANY INCOMPATIBILITIES

Technical measures and storage conditions: Keep container tightly closed in a dry and well-ventilated location. Containers which are opened must be properly resealed and stored upright to prevent spillage.

Packaging materials: Keep cardboard boxes dry and away from moisture. Avoid exposure of polyethylene bag or bulk bag to heat sources or caustic chemicals.

Requirements for storage rooms and vessels: Keep container tightly closed in a dry and well-ventilated location.

Hints on storage assembly:

Storage Class: Non-hazardous

Materials to avoid: Avoid exposure to strongly acidic or strongly basic substances.

### 7.3 SPECIFIC END USES

Recommendations: Collagen for manufacture of food, cosmetics and nutraceutical products or applications.

Specific end uses: Protein additive for cosmetics and nutraceutical products or applications, protein additive for commercial food products, protein supplement for consumer use.



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## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

### 8.1 CONTROL PARAMETERS

#### 8.1.1 Occupational exposure limits

This substance does not contain any hazardous materials with occupational exposure limits established by any region-specific regulatory body.

#### 8.1.2 Biological limit values

Not applicable

#### 8.1.3 Exposure limits at intended use

Not applicable

#### 8.1.4 DNEL/PNEC Values

Not applicable

#### 8.1.5 Risk management measures according to used control banding approach

Not applicable

### 8.2 EXPOSURE CONTROLS

#### 8.2.1 Appropriate engineering controls:

Facilities storing or using the substance should be equipped with an eyewash station. Use adequate ventilation to maintain low airborne concentrations.

#### 8.2.2 Personal protective equipment:

Apply general industrial good hygiene practises.

Eye protection: Safety glasses approved under appropriate regulatory standards such as NIOSH (US) or EN 166 (EU).

Skin protection:

Hand protection: Gloves approved for handling of non-hazardous materials.

Body protection: Coat or work clothes suitable for handling non-hazardous materials.

Other skin protection measures: Follow general industrial good hygiene practises.

Respiratory protection: When handling substance in bulk, use of a dust mask or breathing apparatus is recommended for protection from exposure to dust inhalation.

Thermal hazards: None known

#### 8.2.3 Environmental exposure controls:

Dispose as non-hazardous waste. Avoid bulk exposure to aqueous waste and wastewater streams.

#### 8.2.4 Consumer exposure control:

Measures related to consumer uses of the substance (as such or in mixtures): Substance is intended as a product for consumer use or as an ingredient in products for consumer use. No special precautions required.

Measures related to the service life of the substance in articles: Service life of substance is indefinite when stored as recommended. When used as a product ingredient, follow the product manufacturer's storage recommendations.



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## 9. PHYSICAL AND CHEMICAL PROPERTIES

### 9.1 INFORMATION ON BASIC PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Granular solid

Colour: Light yellow or light amber

Odour: Neutral

Odour threshold: No data available

	Value	Concentration	Method	Temperature	Pressure	Remark
pH	5.0-6.5	10%		30 °C		
Melting point/freezing point	n/d					
Initial boiling point/range	n/d					
Flash point	n/a					
Evaporation rate	n/a					
Flammability (solid)	n/a					
Upper/lower flammability or explosive limits						
Upper explosive limits	n/a					
Lower explosive limits	n/a					
Vapour pressure	n/a					
Vapour density	n/a					
Relative density (g/cc)	0.3	100%		ambient		unpacked
Solubility(ies)	n/d					
Partition coefficient: <i>n</i> -octanol/water	n/d					
Auto-ignition temperature	n/d					
Decomposition temperature	n/d					
Viscosity						
Viscosity, dynamic	n/d					
Viscosity, kinematic (mm <sup>2</sup> /s)	1-3	10%		30 °C		
Explosive properties	n/a					
Oxidizing properties	n/a					

n/a = not applicable      n/d = not determined or data not available

### 9.2 OTHER INFORMATION

No data available



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## 10. STABILITY AND REACTIVITY

### 10.1 REACTIVITY

No data available

### 10.2 CHEMICAL STABILITY

Chemically stable under recommended storage conditions.

### 10.3 POSSIBILITY OF HAZARDOUS REACTIONS

No known hazardous reactions

### 10.4 CONDITIONS TO AVOID

No known hazardous reactions

### 10.5 INCOMPATIBLE MATERIALS

Exposure to strongly acidic or strongly basic materials could result in substance decomposition.

### 10.6 HAZARDOUS DECOMPOSITION PRODUCTS

No known hazardous decomposition products

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## 11. TOXICOLOGICAL INFORMATION

### 11.1 INFORMATION ON TOXICOLOGICAL EFFECTS

Acute toxicity: No data available

Skin corrosion/irritation: No data available

Eye damage/irritation: No data available

Respiratory tract sensitization: No data available

Skin sensitization: No data available

Germ cell mutagenicity: No data available

Carcinogenicity: Not listed as a carcinogen by ACGIH, IARC, NTP, OSHA or California Prop 65

Reproductive toxicity: No data available

Overall assessment on CMR properties: Not applicable

STOT SE: No data available

STOT RE: No data available

Aspiration hazard: No data available





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## 12. ECOLOGICAL INFORMATION

### 12.1 TOXICITY

- Aquatic toxicity: No data available
- Sediment toxicity: No data available
- Terrestrial toxicity: No data available
- Toxicity to soil macroorganisms except arthropods: No data available
- Toxicity to terrestrial arthropods: No data available
- Toxicity to terrestrial plants: No data available
- Toxicity to birds: No data available

### 12.2 PERSISTENCE AND DEGRADABILITY

Substance is readily degraded by many types of bacteria when thoroughly diluted.

### 12.3 BIOACCUMULATIVE POTENTIAL

No data available

### 12.4 MOBILITY IN SOIL

No data available

### 12.5 RESULTS OF PBT AND vPvB ASSESSMENT

Not applicable

### 12.6 OTHER ADVERSE EFFECTS

To the best of our knowledge, the properties of the substance have not been fully evaluated. On available data, the substance is not harmful to the environment.

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## 13. DISPOSAL CONSIDERATIONS

### 13.1 WASTE TREATMENT METHODS

#### 13.1.1 Product / packaging disposal:

Waste codes/waste designations according to EWC/AVV: Not classified  
Packaging: Offer cardboard packaging for recycling. Offer clean polyethylene bags and bulk bags as recycling or dispose according to local regulations.  
Dispose of all materials in a manner consistent with all federal, state and local regulations.

#### 13.1.2 Waste treatment options:

Offer surplus solids and non-recyclable solutions to a licensed waste disposal company.

#### 13.1.3 Sewage disposal information:

Not applicable

#### 13.1.4 Other disposal recommendations:

Dispose of all materials in a manner consistent with all federal, state and local regulations.



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## 14. TRANSPORT INFORMATION

### 14.1 UN NUMBER:

Not regulated as hazardous for transportation under DOT (US), ADR/RID (EU), ADN, IMDG, ICAO-TI or IATA-DGR

### 14.2 UN PROPER SHIPPING NAME

Not applicable

### 14.3 TRANSPORTATION HAZARD CLASS(ES)/LABELS

Not applicable

### 14.4 PACKING GROUP

Not applicable

### 14.5 ENVIRONMENTAL HAZARDS

Not classified

### 14.6 SPECIAL PRECAUTIONS FOR USER

Not classified

### 14.7 TRANSPORT IN BULK ACCORDING TO ANNEX II OF MARPOL 73/78 AND THE IBC CODE

Not classified

### 14.8 ADDITIONAL INFORMATION

Land transport (ADR/RID):

Limited quantity: Not applicable

Special provisions: Not applicable

Tunnel restriction code: Not applicable

Classification code: Not applicable

Transport category: Not applicable

Hazard identification number (Kemler No.) Not applicable

Inland waterway transport (ADN):

Limited quantity: Not applicable

Special provisions: Not applicable

Category: Not applicable

Sea transport (IMDG):

Limited quantity: Not applicable

Special provisions: Not applicable

Marine pollutant: Not applicable

Segregation group: Not applicable

Air transport (ICAO-TI / IATA-DGR):

Limited quantity: Not applicable

Special provisions: Not applicable



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## 15. REGULATORY INFORMATION

### 15.1 SAFETY, HEALTH AND ENVIRONMENTAL REGULATIONS/LEGISLATION SPECIFIC FOR THE SUBSTANCE/MIXTURE

This Safety Data Sheet is provided in compliance with the EC Directive 1907/2006 - 453/2010 and OSHA Hazard Communication Standard 29 CFR 1910.1200. Regulation (EC) No. 1272/2008 on the classification, labelling and packaging of substances and mixtures (CLP Regulation) applies in Europe.

#### 15.1.1 EU Regulations

Authorizations and/or restrictions on use:

Authorizations: Not applicable

Restrictions on use: Not applicable

Other EU regulations:

EU Indication of Danger: Not classified

#### 15.1.2 National Regulations

United States Regulations

Toxic substance control act (TSCA) - USA: Listed

SARA Act of 1986 - USA Section 302: Not applicable; Section 313: Not listed; SARA 311/312: No SARA Hazards

Massachusetts Right to Know: No components subject to this requirement

Pennsylvania and New Jersey Right to Know: Gelatin hydrolyzates CAS No. 68410-45-7

California Prop 65: This product does not contain any chemicals known to the State of California to cause cancer, birth defects or any other reproductive harm.

Canada Regulations

Domestic substances list (DSL) - Canada: Listed

WHMIS - Canada: Not controlled

### 15.2 CHEMICAL SAFETY ASSESSMENT

A chemical safety assessment is not required for this substance.



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## 16. OTHER INFORMATION

### 16.1 INDICATION OF CHANGES

Version 1.2 (August 19, 2016) supersedes version 1.1 (January 1, 2016). The document was updated for the purpose of complying with EU Regulation (EC) No. 1272/2008 (CLP).

### 16.2 ABBREVIATIONS AND ACRONYMS

ACGIH	American Conference of Governmental Industrial Hygienists
CAS	Chemical Abstract Service
CFR	Code of Federal Regulations
CLP	Classification, Labelling, Packaging
DNEL/PNEC	Derived No-Effect Level/Predicted No-Effect Concentration
DOT (US)	Department of Transportation (United States)
EC	European Community
EN 166	European Standard 166
GHS	Globally Harmonized System
IARC	International Agency for Research on Cancer
n/a	not applicable
n/d	not determined / data not available
NIOSH (US)	National Institute for Occupational Safety and Health (United States)
NTP	National Toxicological Program
OSHA	Occupational Safety and Health Administration
REACH	Regulation, Evaluation, Authorization and Restriction of Chemicals
SCOGS	Select Committee on GRAS Substances
STOT RE	Specific Target Organ Toxicity, Repeat Exposure
STOT SE	Specific Target Organ Toxicity, Single Exposure
WHMIS	Workplace Hazardous Materials Information System

### 16.3 KEY LITERATURE REFERENCES AND SOURCES FOR DATA

### 16.4 CLASSIFICATION FOR MIXTURES AND USED EVALUATION METHOD ACCORDING TO REGULATION (EC) 1207/2008 (CLP)

Not applicable

### 16.5 RELEVANT R-, H- AND EUH-PHRASES (NUMBER AND FULL TEXT)

H313 May be harmful in contact with skin.

H333 May be harmful if inhaled.

H335 May cause respiratory irritation.

### 16.6 TRAINING ADVICE

Comply with all information contained in the Safety Data Sheet.



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## 16.7 FURTHER INFORMATION

The information and data included herein are presented according to Kenney and Ross Limited's practises current at the time of preparation hereof, are made available solely for the consideration, investigation and verification of the original recipients hereof and do not constitute a representation or warranty for which Kenney and Ross Limited assumes responsibility. It is the responsibility of a recipient of this information to remain currently informed of chemical hazard information, to design and update its own safety program and to comply with all national, federal, state and local laws and regulations applicable to safety, occupational health, right to know legislation and environmental protection.