

Enabling Arthritis and Inflammation Research Worldwide

Safety Data Sheet

acc. to OSHA HCS (29CFR 1910.1200) and WHMIS 2015 regulations

Printing date: September 22, 2017

Revision: September 22, 2017

Filining date. September 22, 2017	Revision. September 22, 2017
1 Identification	
· Product identifier	
 Trade name: <u>Collagenase Kits – Inhibitor</u> Product code: 30046 CAS Number: 9035-81-8 	
 Recommended use and restriction on use Recommended use: Laboratory chemicals Restrictions on use: For Research Use Only – Not Human or Therap 	peutic Use
 Details of the supplier of the Safety Data Sheet Manufacturer/Supplier: Chondrex, Inc. 16928 Woodinville-Redmond Rd NE Suite B-101 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 Resp. Sens. 1 H334 May cause allergy or asthma symptoms or b Skin Sens. 1 H317 May cause an allergic skin reaction. Combustible Dust May form combustible dust concentrations in 	-
 Label elements GHS label elements The substance is classified and labeled according to the Globally Harn Hazard pictograms: 	nonized System (GHS).
GHS08	
 Signal word: Danger Hazard statements: H334 May cause allergy or asthma symptoms or breathing difficulties i H317 May cause an allergic skin reaction. May form combustible dust concentrations in air. Precautionary statements: P261 Avoid breathing dust. P272 Contaminated work clothing must not be allowed out of the P280 Wear protective gloves and eye protection. P284 In case of inadequate ventilation wear respiratory protection 	e workplace.

(Cont'd. on page 2)

Enabling Arthritis and Inflammation Research Worldwide

Safety Data Sheet

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Printing date: September 22, 2017

Revision: September 22, 2017

Trade name: Collagenase Kits – Inhibitor

(Cont'd. of page 1)

P302+P352 IF ON SKIN: Wash with plenty of water.

P304+P341 If inhaled: If breathing is difficult, remove person to fresh air and keep comfortable for breathing.

P333+P313 If skin irritation or rash occurs: Get medical advice/attention.

- P342+P311 If experiencing respiratory symptoms: Call a POISON CENTER/doctor.
- P363 Wash contaminated clothing before reuse.
- P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

· Additional information: May form combustible dust concentrations in air.

· Other hazards There are no other hazards not otherwise classified that have been identified.

3 Composition/information on ingredients

- · Chemical characterization: Substances
- · CAS No. Description

9035-81-8 trypsin inhibitor

4 First-aid measures

	escription of first aid measures	
	upply fresh air.	
	experiencing respiratory symptoms: Call a POISON CENTER/doctor.	
	mediately wash with water and soap and rinse thoroughly.	
	skin irritation or rash occurs: Get medical advice/attention.	
	ter eye contact:	
	emove contact lenses if worn.	
	nse opened eye for several minutes under running water. If symptoms persist, consult	a doctor.
	ter swallowing:	
	nse out mouth and then drink plenty of water.	
	o not induce vomiting.	
•••	eek immediate medical advice.	
·Me	ost important symptoms and effects, both acute and delayed:	
As	sthma attacks	
	eathing difficulty	
	bughing	
All	lergic reactions	
· Da	anger: Danger of impaired breathing.	
·Ind	dication of any immediate medical attention and special treatment needed:	
Co	ontains soybean trypsin inhibitor. May produce an allergic reaction.	
Se	evere allergic skin reaction, bronchial spasms and anaphylactic shock are possible.	
Me	edical supervision for at least 48 hours.	
	necessary oxygen respiration treatment.	
	eat skin and mucous membrane with antihistamine and corticoid preparations.	
	medical advice is needed, have product container or label at hand.	
		(Cont'd. on page 3)

Page: 2/9

Enabling Arthritis and Inflammation Research Worldwide

Safety Data Sheet

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Printing date: September 22, 2017

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Trade name: Collagenase Kits – Inhibitor

(Cont'd. of page 2)

In cases of irritation to the lungs, initial treatment with cortical steroid inhalants.

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
 Can pose a dust explosion bazard if dispersed in air. Avoid ignition
- Can pose a dust explosion hazard if dispersed in air. Avoid ignition sources.
- Advice for firefighters
- Protective equipment:
- Wear self-contained respiratory protective device.
- Wear fully protective suit.

6 Accidental release measures

 \cdot Personal precautions, protective equipment and emergency procedures

Use personal protective equipment as required. Use respiratory protective device against the effects of fumes/dust/aerosol. Wear protective clothing. Ensure adequate ventilation.

- Ensure adequate ventilation. Environmental precautions
- Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
- Methods and material for containment and cleaning up Pick up mechanically.
- Send for recovery or disposal in suitable receptacles.
- 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:** Use only in well ventilated areas. Prevent formation of dust. Avoid contact with the eyes and skin. Avoid breathing dust.
- [•] Information about protection against explosions and fires:
- Dust can combine with air to form an explosive mixture.

(Cont'd. on page 4)

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(Cont'd. of page 3)

- Conditions for safe storage, including any incompatibilities
 Storage
- **Requirements to be met by storerooms and receptacles:** Storage area should be dry and well-ventilated.
- Information about storage in one common storage facility: Store away from foodstuffs.
- Further information about storage conditions: Keep containers tightly sealed.
- · 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 product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.
 Exposure controls Personal protective equipment: General protective and hygienic measures: The usual precautionary measures for handling chemicals should be followed. Keep away from foodstuffs, beverages and feed. Wash hands before breaks and at the end of work. Do not breathe dust. Avoid contact with the eyes and skin. Engineering controls: Provide adequate ventilation. Breathing equipment: NIOSH or EU approved dust respirator should be used for operations generating dust. Particulate mask should filter at least 99% of airborne particles. Protection of hands:
Protective gloves
 Material of gloves Latex, nitrile or neoprene gloves are recommended. Sensibilization by the components in the glove materials is possible. 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 relevant information available.

(Cont'd. on page 4)

Enabling Arthritis and Inflammation Research Worldwide

Safety Data Sheet

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Printing date: September 22, 2017

Revision: September 22, 2017

Trade name: Collagenase Kits – Inhibitor

(Cont'd. of page 4)

9 Physical and chemical properties				
· Information on basic physical a	and chemical properties			
· Appearance:				
Form:	Powder or flakes			
Color:	White			
· Odor:	Slight.			
· Odor threshold:	Not determined.			
· pH-value:	Not applicable.			
 Melting point/Melting range: 	Not determined.			
 Boiling point/Boiling range: 	Not determined.			
· Flash point:	Not applicable.			
· Flammability (solid, gaseous):	May form combustible dust concentrations in air.			
· Auto-ignition temperature:	Not determined.			
· Decomposition temperature:	Not determined.			
· Danger of explosion:	Can pose a dust explosion hazard if dispersed in air.			
 Explosion limits 				
Lower:	Not determined.			
Upper:	Not determined.			
 Oxidizing properties: 	Non-oxidizing.			
· Vapor pressure:	Not determined.			
· Density:				
Relative density:	Not determined.			
Vapor density:	Not applicable.			
Evaporation rate:	Not applicable.			
 Solubility in / Miscibility with 				
Water:	Partly soluble.			
· Partition coefficient (n-octanol/wat	ter): 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.

(Cont'd. on page 6)

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Safety Data Sheet

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(Cont'd. of page 5)

· Possibility of hazardous reactions

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 No relevant information available.

· Hazardous decomposition products Possible in traces.

11 Toxicological information

- · Information on toxicological effects
- · Acute toxicity:
- · 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: May cause sensitisation by inhalation and skin contact.

· IARC (International Agency for Research on Cancer):

Substance is not listed.

· NTP (National Toxicology Program):

Substance is not listed.

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

Substance is not 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.

(Cont'd. on page 7)

Page: 6/9

Enabling Arthritis and Inflammation Research Worldwide

Safety Data Sheet

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Revision: September 22, 2017

Trade name: Collagenase Kits – Inhibitor

(Cont'd. of page 6)

· Additional ecological information

· General notes:

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

- · Results of PBT and vPvB assessment
- · **PBT:** Not applicable.
- **vPvB:** Not applicable.
- · 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 and disposal for hazardous and nonhazardous wastes.

- · Uncleaned packagings
- Recommendation: Disposal must be made according to official regulations.
- · Recommended cleansing agent: Water, if necessary with cleansing agents.

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

(Cont'd. on page 8)

Page: 7/9

Enabling Arthritis and Inflammation Research Worldwide

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Trade name: Collagenase Kits - Inhibitor

(Cont'd. of page 7)

· Safety hea	Ith and environmental regulations/legislation specific for the substance
mixture	in and environmental regulations/registration specific for the substance
· United States	s (USA)
· SARA	
	(extremely hazardous substances):
Substance is	not listed.
· Section 355	(extremely hazardous substances):
Substance is	not listed.
· Section 313 (Specific toxic chemical listings):
Substance is	not listed.
· TSCA (Toxic	Substances Control Act)
Substance is	not listed.
· Proposition	ර් ර්රි (California)
	nown to cause cancer:
Substance is	not listed.
	nown to cause reproductive toxicity for females:
Substance is	not listed.
· Chemicals ki	nown to cause reproductive toxicity for males:
Substance is	not listed.
· Chemicals k	nown to cause developmental toxicity:
Substance is	not listed.
· Carcinogenio	categories Inmental Protection Agency):
•	
Substance is	
•	ational Agency for Research on Cancer):
Substance is	not listed.
•	ational Institute for Occupational Safety and Health):
Substance is	not listed.
· Canadian Do	mestic Substances List (DSL):

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.

· Date of preparation / last revision September 22, 2017 / -

· Abbreviations and acronyms:

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road IMDG: International Maritime Code for Dangerous Goods

(Cont'd. on page 9)



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Trade name: Collagenase Kits – Inhibitor

(Cont'd. of page 8)

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 PBT: Persistant, Bio-accumulable, Toxique vPvB: very Persistent and very Bioaccumulative NIOSH: National Institute for Occupational Safety and Health OSHA: Occupational Safety & Health Administration Resp. Sens. 1: Respiratory sensitisation - Category 1 Skin Sens. 1: Skin sensitisation - Category 1 Sources Website, 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., Klaasen, Curtis D., ed., ISBN: 978-0-07-176923-5. Safety Data Sheets, Individual Manufacturers SDS Prepared by: ChemTel Inc. 1305 North Florida Avenue Tampa, Florida USA 33602-2902 Toll Free North America 1-888-255-3924 Intl. +01 813-248-0573 Website: www.chemtelinc.com