Enabling Arthritis and Inflammation Research Worldwide

Safety Data Sheet

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

Printing date: September 10, 2018

Revision: September 10, 2018

1 Identification

- Product identifier
- · Trade name: Collagen Dilution Buffer
- · Product code: 9003
- · 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 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 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:

7647-01-0 hydrochloric acid

7-01-0

Met. Corr.1, H290; Skin Corr. 1B, H314; Eye Dam. 1, H318 Acute Tox. 4, H302; STOT SE 3, H335

· Additional information:

For the wording of the listed Hazard Statements, refer to section 16.

For the listed ingredient(s), the identity and/or exact percentage(s) are being withheld as a trade secret.

4 First-aid measures

· Description of first aid measures

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0.1-0.2%



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• After inhalation: Supply fresh air; consult doctor in case of complaints.

· After skin contact:

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.

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: The product is not flammable.

Use fire fighting measures that suit the environment.

- 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.
- · Environmental precautions No special measures required.
- \cdot Methods and material for containment and cleaning up

Wipe up small spills with paper towel and discard.

For larger spills, add sawdust, chalk or other inert binding material, then sweep up and discard.

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

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- · Handling
- Precautions for safe handling: Open and handle receptacle with care.
- · Information about protection against explosions and fires: No special measures required.
- · Conditions for safe storage, including any incompatibilities
- Requirements to be met by storerooms and receptacles: Store in cool, dry conditions in well sealed receptacles. Unsuitable material for receptacle: aluminium.
- · Information about storage in one common storage facility: No relevant information available.
- · Specific end use(s) No relevant information available.

8 Exposure contro	ls/personal	protection
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· Control parameters

· Components with limit values that require monitoring at the workplace:

7647-01-0 hydrochloric acid		
PEL (USA)	Ceiling limit value: 7 mg/m ³ , 5 ppm	
REL (USA)	Ceiling limit value: 7 mg/m³, 5 ppm	
TLV (USA)	Ceiling limit value: 2.98 mg/m ³ , 2 ppm	
EL (Canada)	Ceiling limit value: 2 ppm	
EV (Canada)	Ceiling limit value: 2 ppm	
LMPE (Mexico)	Ceiling limit value: 2 ppm A4	

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 contact with the eyes.

Avoid close or long term contact with the skin.

- · Engineering controls: No relevant information available.
- Breathing equipment: Not required under normal conditions of use.
- Protection of hands: Rubber gloves
- Eye protection:



Safety glasses

Follow relevant national guidelines concerning the use of protective eyewear.

Body protection:

Not required under normal conditions of use.

- Protection may be required for spills.
- · Limitation and supervision of exposure into the environment No special requirements.
- · Risk management measures No special requirements.

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9 Physical and chemical proper	9 Physical and chemical properties		
· Information on basic physical and chemical properties			
· Appearance:			
Form:	Liquid		
Color:	Clear		
· Odor:	Acidic		
[·] Odor threshold:	Not determined.		
· pH-value:	7.4-7.6		
 Melting point/Melting range: 	Not determined.		
 Boiling point/Boiling range: 	Not determined.		
· Flash point:	Not applicable.		
· Flammability (solid, gaseous):	Not applicable.		
· 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 determined.		
· Density:			
Relative density:	Not determined.		
Vapor density:	Not determined.		
Evaporation rate:	Not determined.		
 Solubility in / Miscibility with 			
Water:	Fully miscible.		
· Partition coefficient (n-octanol/water): Not determined.			
· Viscosity			
Dynamic:	Not determined.		
Kinematic:	Not determined.		
 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 No dangerous reactions known.

- · Conditions to avoid Excessive heat.
- · Incompatible materials No relevant information available.

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· Hazardous decomposition products

Possible in traces:

Chlorine

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.

- · Results of PBT and vPvB assessment
- **PBT:** Not applicable.
- · vPvB: Not applicable.
- · Other adverse effects No relevant information available.

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13 Disposal considerations

· Waste treatment methods

· Recommendation:

Small amounts may be diluted with plenty of water and washed away. Dispose of bigger amounts in accordance with Local Authority requirements.

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.

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 II o	f
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 355 (extremely hazardous substances):

None of the ingredients are listed.

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Section 313 (Specific toxic chemical listings):

None of the ingredients are listed.

TSCA (Toxic Substances Control Act)

All ingredients are listed. 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:

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) (Substances not listed.):

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 PBT: Persistant, Bio-accumulable, Toxic vPvB: very Persistent and very Bioaccumulative NIOSH: National Institute for Occupational Safety and Health OSHA: Occupational Safety & Health Administration Met. Corr.1: Corrosive to metals - Category 1 Acute Tox. 4: Acute toxicity - Category 4 Skin Corr. 1B: Skin corrosion/irritation - Category 1B Eye Dam. 1: Serious eye damage/eye irritation - Category 1 STOT SE 3: Specific target organ toxicity (single exposure) - Category 3 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

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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