

Distributor

AMRESCO INC.

6681 Cochran Road

SOLON, OHIO 44139



Revision Date 08-Jan-2016

Revision Number 2

1. PRODUCT AND COMPANY IDENTIFICATION

Product Identifier Product Name

Trypsin 1:250

Other means of identification Product Code(s) Synonyms

0458 No information available

Recommended use of the chemical and restrictions on useRecommended UseFor Further Manufacturing Use Only.Uses advised againstNot for Human or Animal Drug Use

Details of the supplier of the safety data sheet

Company Address VWR International, LLC Radnor Corporate Center 100 Matsonford Road Radnor, PA 19087-8660 Company Phone Number E-mail Address Manufacturer Address VWR International, LLC 28600 Fountain Parkway Solon, Ohio 44139

1.800.829.2805 info@amresco-inc.com

Chemtrec 1-800-424-9300

Emergency Telephone Number Emergency Telephone Number

2. HAZARDS IDENTIFICATION

Classification

OSHA Regulatory Status

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Skin Corrosion/Irritation	Category 2
Serious Eye Damage/Eye Irritation	Category 2
Respiratory Sensitization	Category 1
Specific target organ toxicity (single exposure)	Category 3

Label elements

Emergency Overview

Danger

Hazard statements

H315 - Causes skin irritation

H319 - Causes serious eye irritation

H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled

H335 - May cause respiratory irritation



Appearance while to on-while Finysical State Fowder Out in the information availate	Appearance White to off-white	Physical State Powder	Odor No information available
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Precautionary Statements - Prevention

Wash face, hands and any exposed skin thoroughly after handling Avoid breathing dust/fume/gas/mist/vapors/spray In case of inadequate ventilation wear respiratory protection Use only outdoors or in a well-ventilated area

Precautionary Statements - Response

Specific treatment (see .? on this label) IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing If eye irritation persists: Get medical advice/attention IF ON SKIN: Wash with plenty of water and soap If skin irritation occurs: Get medical advice/attention Take off contaminated clothing and wash it before reuse If experiencing respiratory symptoms: Call a POISON CENTER or doctor IF INHALED: Remove person to fresh air and keep comfortable for breathing

Precautionary Statements - Storage

Store in a well-ventilated place. Keep container tightly closed Store locked up

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)

Not regulated

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Other Information

May be harmful if swallowed

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS-No	EC No.	Weight %	Trade Secret
Trypsin	9002-07-7	232-650-8	95-100	Not applicable

4. FIRST AID MEASURES

First Aid Measures

Eye Contact	Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician.
Skin Contact	Wash off immediately with soap and plenty of water removing all contaminated clothes and shoes.
Inhalation	Move to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen.
Ingestion	Clean mouth with water and afterwards drink plenty of water. Never give anything by mouth to an unconscious person.
Most important symptoms and effects, both acute and delayed	
Most Important Symptoms/Effects	No information available.

Indication of any immediate medical attention and special treatment needed

Notes to Physician Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Dry chemical, CO2, water spray or regular foam.

Unsuitable Extinguishing Media No information available.

Specific Hazards Arising from the Chemical

No information available.

Hazardous Combustion No information available. Products

Explosion Data Sensitivity to Mechanical Impact None. Sensitivity to Static Discharge None.

Protective Equipment and Precautions for Firefighters

As in any fire, wear self-contained breathing apparatus and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions	, protective equipmer	nt and emergency pr	ocedures
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Personal protectionAvoid contact with skin, eyes and clothing. Ensure adequate ventilation.Environmental PrecautionsSee Section 12 for additional Ecological information.Methods and material for containmentand cleaning upMethods for ContainmentPrevent further leakage or spillage if safe to do so.Methods for Cleaning UpAvoid dust formation. Ventilate area and wash spill site after material pickup is complete.

7. HANDLING AND STORAGE

Precautions for Safe Handling

Handling

Handle in accordance with good industrial hygiene and safety practice.

Conditions for safe storage, including any incompatibilities

Storage Keep containers tightly closed in a dry, cool and well-ventilated place.

Incompatible Products

No information available.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

 Exposure Guidelines
 This product does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

 Chemical Name
 ACGIH TLV
 OSHA PEL
 NIOSH IDLH

 Trypsin

 9002-07-7

Appropriate engineering controls

Engineering Measures

Showers

Eyewash stations Ventilation systems.

Individual protection measures, such as personal protective equipment

Eye/Face Protection	Safety glasses with side-shields.	
Skin and Body Protection	Wear protective gloves/clothing.	
Respiratory Protection	If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.	
Hygiene Measures	Handle in accordance with good industrial hygiene and safety practice.	

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical State Appearance Color	Powder White to off-white No information available	Odor Odor Threshold	No information available No information available
Property pH Melting point/freezing point Boiling Point/Range Flash Point (High in °C) Evaporation Rate Flammability (solid, gas) Flammability Limit in Air Upper flammability limit: Lower flammability limit: Vapor pressure Vapor Density Specific Gravity Water Solubility Solubility in other solvents Partition coefficient Autoignition Temperature Decomposition Temperature Kinematic viscosity	Values_ No information available No information available </th <th><u>Remarks • Method</u></th> <th></th>	<u>Remarks • Method</u>	
Dynamic viscosity Explosive Properties Oxidizing Properties Other Information	No information available No information available No information available		
Softening Point Molecular Weight VOC Content Density Bulk Density	No information available N/A No information available No information available No information available		

10. STABILITY AND REACTIVITY

Reactivity No data available

Chemical Stability

Stable under recommended storage conditions. Possibility of Hazardous Reactions None under normal processing. Conditions to Avoid No information available. Incompatible Materials No information available. Hazardous Decomposition Products Hazardous Decomposition Products.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information

Inhalation	May cause irritation of respiratory tract. May cause allergy or asthma symptoms or breathing difficulties if inhaled.	
Eye Contact	Irritating to eyes.	
Skin Contact	Irritating to skin.	
Ingestion	There is no data available for this product.	

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Trypsin	> 5 g/kg (Rat)	-	-
9002-07-7			

Information on toxicological effects

Symptoms

No information available.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Sensitization Mutagenic Effects Carcinogenicity	No information available. No information available. No information available.			
Chemical Name	ACGIH	IARC	NTP	OSHA
Trypsin 9002-07-7			-	
Reproductive Toxicity STOT - single exposure STOT - repeated exposur Target Organ Effects Aspiration hazard	No information available. No information available. No information available. Lungs, Eyes, Skin, Respiratory system. No information available.			

Numerical measures of toxicity - Product Information

The following values are calculated based on chapter 3.1 of the GHS document .

12. ECOLOGICAL INFORMATION

Ecotoxicity

100% of the mixture consists of components(s) of unknown hazards to the aquatic environment

Chemical Name	Algae/aquatic plants	Toxicity to Fish	Crustacea
Trypsin	-	-	-
9002-07-7			

Persistence and Degradability

No information available.

Bioaccumulation/Accumulation

No information available.

Chemical Name	Partition coefficient
Trypsin 9002-07-7	-

Other Adverse Effects

No information available

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Waste Disposal Method Dispose of material in accordance with all federal, state, and local regulations.

Contaminated Packaging

Do not re-use empty containers.

Chemical Name	RCRA - Halogenated Organic Compounds	RCRA - P Series Wastes	RCRA - F Series Wastes	RCRA - K Series Wastes
Trypsin 9002-07-7	-	-	-	-

Chemical Name	California Hazardous Waste Status
Trypsin	-
9002-07-7	

14. TRANSPORT INFORMATION

DOT

Not regulated

IATA

Not regulated

15. REGULATORY INFORMATION

International Inventories	
TSCA	Complies
DSL/NDSL	Complies
EINECS/ELINCS	Complies
ENCS	Does not Comply
IECSC	Complies
KECL	Complies
PICCS	Complies
AICS	Complies

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

AICS - Australian Inventory of Chemical Substances

U.S. Federal Regulations

<u>SARA 313</u>

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

Component	SARA 313 - Threshold Values %
Trypsin 9002-07-7(95-100)	-

SARA 311/312 Hazard Categories

Acute Health Hazard	Yes
Chronic Health Hazard	No
Fire Hazard	No
Sudden Release of Pressure Hazard	No
Reactive Hazard	No

Clean Water Act

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

Trypsin	Chemical Name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
9002-07-7	Trypsin 9002-07-7	-	-	-	-

<u>CERCLA</u>

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material

Chemical Name	Hazardous Substances RQs	Extremely Hazardous Substances RQs	RQ
Trypsin 9002-07-7	-	-	-

U.S. State Regulations

California Proposition 65

This product does not contain any Proposition 65 chemicals.

Chemical Name	California Prop. 65
Trypsin - 9002-07-7	-
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U.S. State Right-to-Know Regulations

Chemical Name	New Jersey	Massachusetts	Pennsylvania
Trypsin	-	-	-
9002-07-7			

U.S. EPA Label Information

EPA Pesticide Registration Number Not regulated

16. OTHER INFORMATION

15-May-2009 08-Jan-2016

Issuing Date Revision Date
Revision Note
No information available
<u>Disclaimer</u>

The above information is believed to be correct but does not purport to be all-inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. VWR International and its Affiliates shall not be held liable for any damage resulting from handling.

End of Safety Data Sheet