

10/31/2023

### Kit Components

Product code	Description
<b>V1062</b>	<b>Chymotrypsin Sequencing Grade</b>
Components:	
V106A	Chymotrypsin Sequencing Grade





## Safety Data Sheet acc. to OSHA HCS

Printing date 10/31/2023

Reviewed on 09/28/2023

### 1 Identification

**Product identifier****Trade name:** Chymotrypsin Sequencing Grade**Article number:** V106A**CAS Number:**

9004-07-3

**EC number:**

232-671-2

**Index number:**

647-011-00-2

**Application of the substance / the mixture** For Laboratory Use**Details of the supplier of the safety data sheet****Manufacturer/Supplier:**

Promega Corporation

2800 Woods Hollow Road

Madison, WI 53711

U.S.A.

1-800-356-9526 or (608)-274-4330

**Information department:** SDS author: [chemicalregulatory@promega.com](mailto:chemicalregulatory@promega.com)**Emergency telephone number:**

For Chemical Emergency Spill, Leak, Fire, Exposure, or Accident Call CHEMTREC Day or Night Within USA and Canada: 1-800-424-9300

Outside USA and Canada: +1 703-527-3887 (collect calls accepted)

### 2 Hazard(s) identification

**Classification of the substance or mixture**

GHS08 Health hazard

Sensitization - Respiratory 1

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



GHS07

Skin Irritation 2

H315 Causes skin irritation.

Eye Irritation 2A

H319 Causes serious eye irritation.

Specific Target Organ Toxicity - Single Exposure 3 H335 May cause respiratory irritation.

**Label elements****GHS label elements**

The substance is classified and labeled according to the Globally Harmonized System (GHS).

(Contd. on page 2)

# Safety Data Sheet

acc. to OSHA HCS

Printing date 10/31/2023

Reviewed on 09/28/2023

Trade name: Chymotrypsin Sequencing Grade

(Contd. of page 1)

**Hazard pictograms**

GHS07 GHS08

**Signal word** *Danger***Hazard-determining components of labeling:***Chymotrypsin***Hazard statements***Causes skin irritation.**Causes serious eye irritation.**May cause allergy or asthma symptoms or breathing difficulties if inhaled.**May cause respiratory irritation.***Precautionary statements***Avoid breathing dust/fume/gas/mist/vapors/spray**Wash thoroughly after handling.**Use only outdoors or in a well-ventilated area.**Wear eye protection / face protection.**[In case of inadequate ventilation] wear respiratory protection.**If on skin: Wash with plenty of water.**IF INHALED: Remove person to fresh air and keep comfortable for breathing.**If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.**Continue rinsing.**Call a poison center/doctor if you feel unwell.**Take off contaminated clothing and wash it before reuse.**If skin irritation occurs: Get medical advice/attention.**If eye irritation persists: Get medical advice/attention.**If experiencing respiratory symptoms: Call a poison center/doctor.**Store in a well-ventilated place. Keep container tightly closed.**Store locked up.**Dispose of contents/container in accordance with local/regional/national/international regulations.***Classification system:****NFPA ratings (scale 0 - 4)***Health = 2**Fire = 0**Reactivity = 0***HMIS-ratings (scale 0 - 4)***Health = \*2**Fire = 0**Reactivity = 0***OSHA Hazard Overview (Criteria according to 29CFR1910.1200):***Irritant**Sensitizer***Primary route(s) of entry:***Dermal**Inhalation***Target Organ(s):** *Not applicable or unknown***Other hazards****Results of PBT and vPvB assessment****PBT:** *Not applicable.*

(Contd. on page 3)

# Safety Data Sheet

acc. to OSHA HCS

Printing date 10/31/2023

Reviewed on 09/28/2023

Trade name: Chymotrypsin Sequencing Grade

vPvB: Not applicable.

(Contd. of page 2)

## 3 Composition/information on ingredients

Chemical characterization: Substances

CAS No. Description

9004-07-3 Chymotrypsin

EC number: 232-671-2

Index number: 647-011-00-2

## 4 First-aid measures

Description of first aid measures

General information:

Immediately remove any clothing soiled by the product.

Take affected persons out into the fresh air.

After inhalation:

Supply fresh air and to be sure call for a doctor.

In case of unconsciousness place patient stably in side position for transportation.

Seek medical treatment in case of complaints.

After skin contact: Immediately wash with water and soap and rinse thoroughly.

After eye contact:

Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

After swallowing: If the patient feels unwell or is concerned, obtain medical advice.

Information for doctor:

Most important symptoms and effects, both acute and delayed Allergic reactions

Indication of any immediate medical attention and special treatment needed

No further relevant information available.

## 5 Fire-fighting measures

Extinguishing media

Suitable extinguishing agents:

CO<sub>2</sub>, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

Special hazards arising from the substance or mixture

None known

No further relevant information available.

Advice for firefighters No special advice.

## 6 Accidental release measures

Personal precautions, protective equipment and emergency procedures

Remove persons from danger area.

Avoid formation of dust.

Wear protective clothing.

Environmental precautions: Do not allow to enter sewers/ surface or ground water.

Methods and material for containment and cleaning up:

Dispose contaminated material as waste according to Section 13.

Pick up mechanically.

Ensure adequate ventilation.

(Contd. on page 4)

# Safety Data Sheet

acc. to OSHA HCS

Printing date 10/31/2023

Reviewed on 09/28/2023

Trade name: Chymotrypsin Sequencing Grade

(Contd. of page 3)

**Reference to other sections**

See Section 7 for information on safe handling.

See Section 13 for disposal information.

## 7 Handling and storage

**Handling:****Precautions for safe handling**

Keep receptacles tightly sealed.

Ensure good ventilation/exhaustion at the workplace.

Work only in fume cabinet.

**Information about protection against explosions and fires:**

Keep respiratory protective device available.

The product is not flammable.

**Conditions for safe storage, including any incompatibilities****Storage:****Requirements to be met by storerooms and receptacles:** Do not store below -20°C. Protected from light.**Information about storage in one common storage facility:** Not required.**Further information about storage conditions:** Keep receptacle tightly sealed.**Specific end use(s)** No further relevant information available.

## 8 Exposure controls/personal protection

**Control parameters****Components with limit values that require monitoring at the workplace:** Not required.**Additional information:** The lists that were valid during the creation were used as basis.**Exposure controls****Personal protective equipment:****General protective and hygienic measures:**

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing.

Wash hands before breaks and at the end of work.

Avoid contact with the eyes.

Avoid contact with the eyes and skin.

Do not eat or drink while working.

**Breathing equipment:**

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.

**Protection of hands:**

Select the glove material considering penetration time, rate of diffusion and degradation time.

**Material of gloves**

Gloves impermeable to the specific chemical substance.

Please observe the instructions regarding permeability and breakthrough time which are provided by the manufacturer/supplier of the gloves. Ensure gloves are suitable for the task which includes, but is not limited to, chemical compatibility, dexterity, operational conditions, user susceptibility, e.g., sensitization effects. Consider specific local conditions under which the product is used such as the danger of cuts and abrasion. Remove gloves with care to avoid skin contamination.

**Eye protection:**

Safety glasses

(Contd. on page 5)

US

# Safety Data Sheet

## acc. to OSHA HCS

Printing date 10/31/2023

Reviewed on 09/28/2023

Trade name: Chymotrypsin Sequencing Grade

(Contd. of page 4)

Use equipment for eye protection tested and approved under government NIOSH standards.

### 9 Physical and chemical properties

#### Information on basic physical and chemical properties

##### General Information

##### Appearance:

Form:	Solid
Color:	Colorless
Odor:	Not determined
Odor threshold:	Not determined.

pH-value: Not applicable.

##### Change in condition

Melting point/Melting range:	Undetermined.
Boiling point/Boiling range:	Undetermined.
Flash point:	Not applicable.

Flammability (solid, gaseous): Product is not flammable.

Decomposition temperature: Not determined.

Ignition temperature: Not determined.

Danger of explosion: Product does not present an explosion hazard.

##### Explosion limits:

Lower:	Not determined.
Upper:	Not determined.
Vapor pressure:	Not applicable.

Density: Not determined.

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.

VOC content: 0.00 %

Solids content: 100.0 %

Other information: No further relevant information available.

### 10 Stability and reactivity

Reactivity: No further relevant information available.

##### Chemical stability

Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.

Possibility of hazardous reactions: No dangerous reactions known.

Conditions to avoid: No further relevant information available.

Incompatible materials: No further relevant information available.

(Contd. on page 6)

# Safety Data Sheet

## acc. to OSHA HCS

Printing date 10/31/2023

Reviewed on 09/28/2023

Trade name: Chymotrypsin Sequencing Grade

Hazardous decomposition products: No dangerous decomposition products known.

(Contd. of page 5)

### 11 Toxicological information

#### Information on toxicological effects

##### Acute toxicity:

LD/LC50 values that are relevant for classification: No data available

##### Primary irritant effect:

on the skin: Causes skin irritation.

on the eye: Irritating effect.

Sensitization: Sensitization possible through inhalation.

Additional toxicological information: The substance is not subject to classification.

#### Carcinogenic categories

##### 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.

### 12 Ecological information

#### Toxicity

Aquatic toxicity: Not harmful to the aquatic environment

#### Persistence and degradability

Not available

No further relevant information available.

#### Bioaccumulative potential

Not known

No further relevant information available.

Mobility in soil No further relevant information available.

#### Ecotoxicological effects:

Remark: Not available

#### Additional ecological information:

General notes: No data available.

#### Results of PBT and vPvB assessment

PBT: Not applicable.

vPvB: Not applicable.

Other adverse effects No further relevant information available.

### 13 Disposal considerations

#### Waste treatment methods

##### Recommendation:

Disposal should be in accordance with applicable regional, national and local laws and regulations.

Refer to Section 7: Handling and Storage and Section 8: Exposure Control/Personal Protection for additional handling information and protection of employees.

(Contd. on page 7)



# Safety Data Sheet

acc. to OSHA HCS

Printing date 10/31/2023

Reviewed on 09/28/2023

Trade name: Chymotrypsin Sequencing Grade

(Contd. of page 6)

Uncleaned packagings:

Recommendation: Disposal must be made according to official regulations.

Recommended cleansing agent: Water, if necessary with cleansing agents.

## 14 Transport information

<b>UN-Number</b>	Not hazardous for transportation
<b>DOT, ADR, ADN, IMDG, IATA</b>	Not applicable
<b>UN proper shipping name</b>	None
<b>DOT, ADR, ADN, IMDG, IATA</b>	Not applicable
<b>Transport hazard class(es)</b>	None
<b>DOT, ADR, ADN, IMDG, IATA Class</b>	Not applicable
<b>Packing group</b>	None
<b>DOT, ADR, IMDG, IATA</b>	Not applicable
<b>Environmental hazards:</b>	
<b>Marine pollutant:</b>	No
<b>Special precautions for user</b>	Not applicable.
<b>Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code</b>	Not applicable.
<b>UN "Model Regulation":</b>	Not applicable

## 15 Regulatory information

Safety, health and environmental regulations/legislation specific for the substance or mixture  
Sara

Section 355 (extremely hazardous substances):

Substance is not listed.

Section 313 (Specific toxic chemical listings):

Substance is not listed.

TSCA (Toxic Substances Control Act) Inventory:

ACTIVE

Hazardous Air Pollutants

Substance is not listed.

Proposition 65

Chemicals known to cause cancer:

Substance is not listed.

Chemicals known to cause reproductive toxicity for females:

Substance is not listed.

Chemicals known to cause reproductive toxicity for males:

Substance is not listed.

(Contd. on page 8)

# Safety Data Sheet

## acc. to OSHA HCS

Printing date 10/31/2023

Reviewed on 09/28/2023

**Trade name: Chymotrypsin Sequencing Grade**

(Contd. of page 7)

**Chemicals known to cause developmental toxicity:**

Substance is not listed.

**New Jersey Right-to-Know List:**

Substance is not listed.

**Pennsylvania Right-to-Know List:**

Substance is not listed.

**Carcinogenicity categories**
**EPA (Environmental Protection Agency)**

Substance is not listed.

**TLV (Threshold Limit Value)**

Substance is not listed.

**NIOSH-Ca (National Institute for Occupational Safety and Health)**

Substance is not listed.

**GHS label elements**

The substance is classified and labeled according to the Globally Harmonized System (GHS).

**Signal word** Danger

**Hazard-determining components of labeling:**

Chymotrypsin

**Hazard statements**

Causes skin irritation.

Causes serious eye irritation.

May cause allergy or asthma symptoms or breathing difficulties if inhaled.

May cause respiratory irritation.

**Precautionary statements**

Avoid breathing dust/fume/gas/mist/vapors/spray

Wash thoroughly after handling.

Use only outdoors or in a well-ventilated area.

Wear eye protection / face protection.

[In case of inadequate ventilation] wear respiratory protection.

If on skin: Wash with plenty of water.

IF INHALED: Remove person to fresh air and keep comfortable for breathing.

If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.

Continue rinsing.

Call a poison center/doctor if you feel unwell.

Take off contaminated clothing and wash it before reuse.

If skin irritation occurs: Get medical advice/attention.

If eye irritation persists: Get medical advice/attention.

If experiencing respiratory symptoms: Call a poison center/doctor.

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

Store locked up.

Dispose of contents/container in accordance with local/regional/national/international regulations.

**National regulations:** No information available

**Water hazard class:** Water hazard class 1 (Self-assessment): slightly hazardous for water.

**Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

US

(Contd. on page 9)

# Safety Data Sheet

## acc. to OSHA HCS

Printing date 10/31/2023

Reviewed on 09/28/2023

Trade name: Chymotrypsin Sequencing Grade

(Contd. of page 8)

### 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.*

#### Department issuing SDS:

Promega Corporation  
Chemical Regulatory Department  
2800 Woods Hollow Road  
Madison, WI  
Ph: (608) 274-4330  
chemicalregulatory@promega.com

#### Contact:

**Date of preparation / last revision** 10/31/2023

#### Abbreviations and acronyms:

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

ADR: Accord relatif au transport international des marchandises dangereuses par route (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

EINECS: European Inventory of Existing Commercial Chemical Substances

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

NFPA: National Fire Protection Association (USA)

HMIS: Hazardous Materials Identification System (USA)

VOC: Volatile Organic Compounds (USA, EU)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

NIOSH: National Institute for Occupational Safety

OSHA: Occupational Safety & Health

TLV: Threshold Limit Value

PEL: Permissible Exposure Limit

REL: Recommended Exposure Limit

Skin Irritation 2: Skin corrosion/irritation – Category 2

Eye Irritation 2A: Serious eye damage/eye irritation – Category 2A

Sensitization - Respiratory 1: Respiratory sensitisation – Category 1

Specific Target Organ Toxicity - Single Exposure 3: Specific target organ toxicity (single exposure) – Category 3

US