

A Geno Technology, Inc. (USA) brand name

# **Safety Data Sheet**

Cat. # BTNM-0022

Cellulase, Aspergillus niger

Size: 25 g





## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Date of issue: 05/18/2016 Revision date: 05/11/2017 Version: 7.1

### **SECTION 1: Identification**

1.1. Identification

Product form : Substance

Substance name : Cellulase, Aspergillus niger

 CAS-No.
 : 9012-54-8

 Product code
 : C025

 Synonyms
 : cellulase

 BIG No
 : F32405

## 1.2. Recommended use and restrictions on use

Use of the substance/mixture : Formulation

#### 1.3. Supplier

Geno Technology, Inc./ G-Biosciences 9800 Page Avenue Saint Louis, 63132-1429 - United States T 800-628-7730 - F 314-991-1504

technical@GBiosciences.com - www.GBiosciences.com

#### 1.4. Emergency telephone number

Emergency number : Chemtrec 1-800-424-9300 (USA/Canada), +1-703-527-3887 (Intl)

#### SECTION 2: Hazard(s) identification

#### 2.1. Classification of the substance or mixture

#### **GHS US classification**

Respiratory sensitization, Category 1 H334 May cause an allergy or asthma symptoms or breathing difficulties if inhaled

Full text of H statements : see section 16

#### 2.2. GHS Label elements, including precautionary statements

#### **GHS US labeling**

Hazard pictograms (GHS US)



Signal word (GHS US) : Danger

Hazard statements (GHS US) : H334 - May cause an allergy or asthma symptoms or breathing difficulties if inhaled

Precautionary statements (GHS US) : P261 - Avoid breathing dust/fume/gas/mist/vapors/spray.

P284 - [In case of inadequate ventilation] wear respiratory protection.

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

comfortable for breathing

P342+P311 - If experiencing respiratory symptoms: Call a poison center or doctor P501 - Dispose of contents/container to hazardous or special waste collection point, in

accordance with local, regional, national and/or international regulation

## 2.3. Other hazards which do not result in classification

No additional information available

#### 2.4. Unknown acute toxicity (GHS US)

Not applicable

## **SECTION 3: Composition/Information on ingredients**

#### 3.1. Substances

Name	Common Name (Synonyms)	Product identifier	%	GHS US classification
Cellulase, Aspergillus niger (Main constituent)	cellulase	(CAS-No.) 9012-54-8	100	Resp. Sens. 1, H334

Full text of hazard classes and H-statements : see section 16

## 3.2. Mixtures

Not applicable

06/28/2019 EN (English US) Page 1

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

#### **SECTION 4: First-aid measures**

#### 4.1. Description of first aid measures

First-aid measures general : Call a poison center/doctor/physician if you feel unwell.

First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing. If experiencing respiratory

symptoms: Call a poison center or a doctor.

First-aid measures after skin contact : Wash skin with plenty of water.

First-aid measures after eye contact : Rinse eyes with water as a precaution.

First-aid measures after ingestion : Call a poison center/doctor/physician if you feel unwell.

#### 4.2. Most important symptoms and effects (acute and delayed)

Symptoms/effects after inhalation : May cause an allergy or asthma symptoms or breathing difficulties if inhaled.

#### 4.3. Immediate medical attention and special treatment, if necessary

Treat symptomatically.

#### **SECTION 5: Fire-fighting measures**

#### 5.1. Suitable (and unsuitable) extinguishing media

Suitable extinguishing media : Water spray. Dry powder. Foam.

#### 5.2. Specific hazards arising from the chemical

No additional information available

#### 5.3. Special protective equipment and precautions for fire-fighters

Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing

apparatus. Complete protective clothing.

#### **SECTION 6: Accidental release measures**

#### 6.1. Personal precautions, protective equipment and emergency procedures

#### 6.1.1. For non-emergency personnel

Emergency procedures : Ventilate spillage area. Avoid breathing dust/fume/gas/mist/vapors/spray.

#### 6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information

refer to section 8: "Exposure controls/personal protection"."

#### 6.2. Environmental precautions

Avoid release to the environment.

#### 6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Mechanically recover the product.

Other information : Dispose of materials or solid residues at an authorized site.

#### 6.4. Reference to other sections

For further information refer to section 13.

#### SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

Precautions for safe handling : Ensure good ventilation of the work station. Wear personal protective equipment. Avoid

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

Hygiene measures : Do not eat, drink or smoke when using this product. Always wash hands after handling the

product.

#### 7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Store in a well-ventilated place. Keep cool.

## **SECTION 8: Exposure controls/personal protection**

#### 8.1. Control parameters

#### Cellulase, Aspergillus niger (9012-54-8)

No additional information available

06/28/2019 EN (English US) 2/6

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

#### 8.2. Appropriate engineering controls

Appropriate engineering controls : Ensure good ventilation of the work station.

Environmental exposure controls : Avoid release to the environment.

#### 8.3. Individual protection measures/Personal protective equipment

#### Hand protection:

Protective gloves

## Eye protection:

Safety glasses

#### Skin and body protection:

Wear suitable protective clothing

#### Respiratory protection:

Wear respiratory protection.

## **SECTION 9: Physical and chemical properties**

#### 9.1. Information on basic physical and chemical properties

Physical state : Solid

Color : No data available : No data available Odor No data available Odor threshold рΗ : No data available Melting point No data available Freezing point : Not applicable Boiling point : No data available Flash point Not applicable Relative evaporation rate (butyl acetate=1) : No data available Flammability (solid, gas) Non flammable. Vapor pressure : No data available Relative vapor density at 20 °C : No data available Relative density : Not applicable Solubility : No data available

Log Pow : -1.3 (Read-across, Equivalent or similar to OECD 107, 20 °C)

Auto-ignition temperature : Not applicable
Decomposition temperature : No data available
Viscosity, kinematic : No data available
Viscosity, dynamic : No data available
Explosion limits : Not applicable
Explosive properties : No data available
Oxidizing properties : No data available

## 9.2. Other information

No additional information available

## **SECTION 10: Stability and reactivity**

#### 10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

## 10.2. Chemical stability

Stable under normal conditions.

## 10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

06/28/2019 EN (English US) 3/6

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

#### 10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7).

#### 10.5. Incompatible materials

No additional information available

#### 10.6. Hazardous decomposition products

Hazardous decomposition products.

#### **SECTION 11: Toxicological information**

#### 11.1. Information on toxicological effects

Acute toxicity (oral) : Not classified
Acute toxicity (dermal) : Not classified
Acute toxicity (inhalation) : Not classified

Cellulase, Aspergillus niger (9012-54-8)	
LD50 oral rat	> 2880 mg/kg body weight (OECD 401: Acute Oral Toxicity, Rat, Male / female, Experimental value, Oral)
LC50 inhalation rat (mg/l)	> 4.86 mg/l air (OECD 403: Acute Inhalation Toxicity, 4 h, Rat, Male / female, Experimental value, Inhalation (aerosol))

Skin corrosion/irritation : Not classified Serious eye damage/irritation : Not classified

Respiratory or skin sensitization : May cause an allergy or asthma symptoms or breathing difficulties if inhaled.

Germ cell mutagenicity : Not classified
Carcinogenicity : Not classified
Reproductive toxicity : Not classified
Specific target organ toxicity – single exposure : Not classified

Specific target organ toxicity – repeated

exposure

: Not classified

Aspiration hazard : Not classified
Viscosity, kinematic : No data available

Symptoms/effects after inhalation : May cause an allergy or asthma symptoms or breathing difficulties if inhaled.

## **SECTION 12: Ecological information**

12.1. Toxicity	
Ecology - general	<ul> <li>The product is not considered harmful to aquatic organisms or to cause long-term adverse effects in the environment.</li> </ul>
Ecology - air	: Not included in the list of fluorinated greenhouse gases (Regulation (EU) No 517/2014). Not classified as dangerous for the ozone layer (Regulation (EC) No 1005/2009).
Ecology - water	: Slightly harmful to crustacea. Slightly harmful to fishes. Slightly harmful to algae.

Cellulase, Aspergillus niger (9012-54-8)		
LC50 fish 1	> 100 mg/l (OECD 203: Fish, Acute Toxicity Test, 96 h, Oncorhynchus mykiss, Semi-static system, Fresh water, Experimental value, GLP)	
EC50 Daphnia 1	> 100 mg/l (OECD 202: Daphnia sp. Acute Immobilisation Test, 48 h, Daphnia magna, Static system, Fresh water, Experimental value, GLP)	
ErC50 (algae)	>= 100 mg/l (OECD 201: Alga, Growth Inhibition Test, 72 h, Pseudokirchneriella subcapitata, Static system Fresh water, Experimental value, GLP)	

## 12.2. Persistence and degradability

Cellulase, Aspergillus niger (9012-54-8)	
Persistence and degradability	Readily biodegradable in water.

#### 12.3. Bioaccumulative potential

Cellulase, Aspergillus niger (9012-54-8)	
Log Pow	-1.3 (Read-across, Equivalent or similar to OECD 107, 20 °C)
Bioaccumulative potential	Not bioaccumulative.

06/28/2019 EN (English US) 4/6

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

#### 12.4. **Mobility in soil**

Cellulase, Aspergillus niger (9012-54-8)	
Surface tension	Data waiving
Ecology - soil	No (test)data on mobility of the substance available.

#### Other adverse effects

No additional information available

### **SECTION 13: Disposal considerations**

#### **Disposal methods**

Waste treatment methods

: Waste treatment methods.

Product/Packaging disposal recommendations

Do not discharge into the sewer. Do not discharge into surface water. Remove waste in accordance with local and/or national regulations. Hazardous waste shall not be mixed together with other waste. Different types of hazardous waste shall not be mixed together if this may entail a risk of pollution or create problems for the further management of the waste. Hazardous waste shall be managed responsibly. All entities that store, transport or handle hazardous waste shall take the necessary measures to prevent risks of pollution or damage to people or animals.

Additional information

Hazardous waste according to Directive 2008/98/EC, as amended by Regulation (EU) No

1357/2014 and Regulation (EU) No 2017/997.

## **SECTION 14: Transport information**

#### **Department of Transportation (DOT)**

In accordance with DOT

Not regulated

#### **Transportation of Dangerous Goods**

Not applicable

#### Transport by sea

Not regulated

#### Air transport

Not regulated

## **SECTION 15: Regulatory information**

#### 15.1. US Federal regulations

### Cellulase, Aspergillus niger (9012-54-8)

Not listed on the United States TSCA (Toxic Substances Control Act) inventory

#### 15.2. International regulations

#### **CANADA**

#### **EU-Regulations**

#### **National regulations**

No additional information available

## 15.3. US State regulations

#### **SECTION 16: Other information**

06/28/2019 EN (English US) 5/6

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Revision date : 05/11/2017

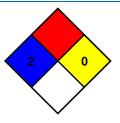
Full text of H-phrases:

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

NFPA health hazard : 2 - Materials that, under emergency conditions, can cause temporary incapacitation or residual injury.

NFPA reactivity : 0 - Material that in themselves are normally stable, even

under fire conditions.



SDS US (GHS HazCom 2012)

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.

06/28/2019 EN (English US) 6/6