



SAFETY DATA SHEET

Carbogen

Section 1. Identification

GHS product identifier : Carbogen
Product code : FGC300Z001OK
Product type : Powder.

Identified uses

Ingredient for use in dietary supplements, food supplements and other nutrition products.

Supplier's details : Innophos LLC.
 680 North 700 West
 North Salt Lake, Utah, USA 84054
 Phone: 1-(801) 299-1661
 Fax: 1-(801) 299-0220
 Email: nutrition.sds.contact@innophos.com

Emergency telephone number (with hours of operation) : CHEMTREC
 Within USA and Canada: 1-800-424-9300
 Outside USA and Canada: +1 703-527-3887 (collect calls accepted) (24/7)

Section 2. Hazards identification

This section of the SDS applies when the product is used or handled above recommended amounts.

OSHA/HCS status : This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

Classification of the substance or mixture : COMBUSTIBLE DUSTS
 RESPIRATORY SENSITIZATION - Category 1
 EYE DAMAGE/IRRITATION-Category 2B
 SKIN CORROSION/IRRITATION-Category 2
 SENSITIZATION-SKIN- Category 1A
 SPECIFIC ORGAN TOXICOTY (Single Exposure)- Category 3

GHS label elements
Hazard pictograms



Signal word : Danger

Hazard statements : May form combustible dust concentrations in air.
 May cause allergy or asthma symptoms or breathing difficulties if inhaled.
 Causes skin irritation
 Causes eye irritation

Precautionary statements

General : Read label before use. Keep out of reach of children. If medical advice is needed, have product container or label at hand.

Prevention : Wear respiratory protection. Avoid breathing dust. Wash thoroughly after handling.

Response : IF INHALED: If breathing is difficult, remove person to fresh air and keep comfortable for breathing. If experiencing respiratory symptoms: Call a POISON CENTER or physician. If skin irritation occurs: Get medical advice/attention. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses and rinse.

Storage : Not applicable.

Section 2. Hazards identification

This section of the SDS applies when the product is used or handled above recommended amounts.

- Disposal** : Dispose of contents and container in accordance with all local, regional, national and international regulations.
- Supplemental label elements** : Keep container tightly closed. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Prevent dust accumulation.
- Hazards not otherwise classified** : Fine dust clouds may form explosive mixtures with air. Handling and/or processing of this material may generate a dust which can cause mechanical irritation of the eyes, skin, nose and throat.

Section 3. Composition/information on ingredients

- Substance/mixture** : Mixture
- Other means of identification** : Not available.

CAS number/other identifiers

- Product code** : FGC300Z001OK

Ingredient name	%	CAS number	Pure Substance Classification
Cellulase	1-5	9012-54-8	Respiratory sensitization- Category 1
Fungal Amylase	1-5	9000-92-4	Respiratory sensitization- Category 1
Hemicellulase	1-5	37288-54-3	Respiratory Sensitization- Category 1
Maltodextrin	60-100	9050-36-6	Not classified.

The exact percentage of the chemical has been withheld as a trade secret.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First aid measures

This section of the SDS applies when the product is used or handled above recommended amounts.

Description of necessary first aid measures

- Eye contact** : In case of contact, immediately flush eyes with water for at least 15 minutes, preferably using an eyewash station. Remove any contact lens as soon as practical to do so. Get immediate medical attention if irritation occurs.
- Inhalation** : Move victim to fresh air. Give artificial respiration if victim is not breathing. Administer oxygen if breathing is difficult.
- Skin contact** : Wash with soap and water for at least 15 minutes. Get immediate medical attention if irritation develops.
- Ingestion** : Do NOT induce vomiting. Rinse mouth. Do not give anything by mouth to an unconscious person.

Most important symptoms/effects, acute and delayed

Potential acute health effects

- Eye contact** : Exposure to airborne concentrations above statutory or recommended exposure limits may cause irritation of the eyes.
- Inhalation** : May cause respiratory sensitization
- Skin contact** : May cause skin irritation.
- Ingestion** : No known significant effects or critical hazards.

Over-exposure signs/symptoms

Section 4. First aid measures

This section of the SDS applies when the product is used or handled above recommended amounts.

- Eye contact** : Adverse symptoms may include the following:
irritation
redness
- Inhalation** : If exposed to excessive levels of dusts or fumes, remove to fresh air and get medical attention if adverse symptoms develop.
- Skin contact** : Wash with soap and water. Get medical attention if irritation develops or persists.
- Ingestion** : If swallowed, DO NOT induce vomiting. Give victim a glass of water or milk. Call a physician or poison control center immediately.
- Indication of immediate medical attention and special treatment needed, if necessary**
- Notes to physician** : All treatments should be based on observed signs and symptoms of distress in the patient. Consideration should be given to the possibility that overexposure to materials other than this product may have occurred.
- Specific treatments** : No specific treatment.
- Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

See toxicological information (Section 11)

Section 5. Fire-fighting measures

Extinguishing media

- Suitable extinguishing media** : Use dry chemical powder.
- Unsuitable extinguishing media** : Do not use water jet or water-based fire extinguishers.

Specific hazards arising from the chemical : Fine dust clouds may form explosive mixtures with air.

Hazardous thermal decomposition products : Decomposition products may include the following materials:
carbon dioxide
carbon monoxide
metal oxide/oxides

Special protective actions for fire-fighters : Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.

Special protective equipment for fire-fighters : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Section 6. Accidental release measures

This section of the SDS applies when the product is used or handled above recommended amounts.

Personal precautions, protective equipment and emergency procedures

- For non-emergency personnel** : Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing dust. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
- For emergency responders** : If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

Section 6. Accidental release measures

This section of the SDS applies when the product is used or handled above recommended amounts.

Environmental precautions : Not applicable.

Methods and materials for containment and cleaning up

Spill : Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Prevent entry into sewers, water courses, basements or confined areas. Avoid dust generation. Do not dry sweep. Vacuum dust with equipment fitted with a HEPA filter and place in a closed, labeled waste container. Avoid creating dusty conditions and prevent wind dispersal. Dispose of via a licensed waste disposal contractor. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

Section 7. Handling and storage

This section of the SDS applies when the product is used or handled above recommended amounts.

Precautions for safe handling

Protective measures : Put on appropriate personal protective equipment (see Section 8). Avoid the creation of dust when handling and avoid all possible sources of ignition (spark or flame). Prevent dust accumulation. Use only with adequate ventilation.

Advice on general occupational hygiene : Normal good industrial hygiene.

Conditions for safe storage, including any incompatibilities : Store in accordance with local regulations. Eliminate all ignition sources. Separate from oxidizing materials. Keep container tightly closed and sealed until ready for use.

Section 8. Exposure controls/personal protection

Proper personal protective equipment should be selected and worn when handling this product, as based on a risk assessment performed by a qualified person.

Control parameters

Occupational exposure limits

None.

Appropriate engineering controls : Handle in accordance with good industrial hygiene and safety practice. Adequate ventilation systems as needed to control concentrations of airborne contaminants below applicable threshold limit values.

Environmental exposure controls : In some cases, dust collection, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

Individual protection measures

Hygiene measures : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye/face protection : Safety glasses with side-shields conforming to EN166 / ANSI Z87 additional eye/face protection may be appropriate.

Section 8. Exposure controls/personal protection

Proper personal protective equipment should be selected and worn when handling this product, as based on a risk assessment performed by a qualified person.

Skin protection

- Hand protection** : Handle with gloves. Gloves must be inspected prior to use to ensure there are no holes or tears. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of gloves after use in accordance with applicable laws and good industry practices. Wash and dry hands.
- Body protection** : Wear appropriate clothing such as long sleeves and/or protective coveralls. The type of protective clothing must be selected according to the type, concentration and amount of the substance(s) at the specific workplace.
- Other skin protection** : Not required under normal conditions of use.
- Respiratory protection** : For nuisance exposures use type P95 (US) or type P1 (EU EN 143) particle respirator. For higher level protection use type P100 (US) or type P3 (EU EN 143) respirator cartridges. Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or symptoms are experienced.

Section 9. Physical and chemical properties

Appearance

- Physical state** : Solid. [Powder.]
- Color** : Off White~Tan.
- Odor** : Characteristic.
- Odor threshold** : Not available.
- pH** : Not available.
- Melting point** : Not available.
- Boiling point** : Not available.
- Flash point** : Not applicable.
- Evaporation rate** : Not applicable.
- Flammability (solid, gas)** : Not available.
- Lower and upper explosive (flammable) limits** : Not available.
- Vapor pressure** : Not applicable.
- Vapor density** : Not applicable.
- Relative density** : Not available.
- Solubility** : Not available.
- Partition coefficient: n-octanol/water** : Not available.
- Auto-ignition temperature** : Not available.
- Decomposition temperature** : Not available.
- Viscosity** : Not applicable.

Section 10. Stability and reactivity

- Reactivity** : No specific test data related to reactivity available for this product or its ingredients.
- Chemical stability** : The product is stable.
- Possibility of hazardous reactions** : Under normal conditions of storage and use, hazardous reactions will not occur.
- Conditions to avoid** : Avoid the creation of dust when handling and avoid all possible sources of ignition (spark or flame). Take precautionary measures against electrostatic discharges. To avoid fire or explosion, dissipate static electricity during transfer by grounding and bonding containers and equipment before transferring material. Prevent dust accumulation.
- Incompatible materials** : Reactive or incompatible with the following materials: oxidizing materials.
- Hazardous decomposition products** : Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

There is no data available.

Irritation/Corrosion

There is no data available.

Sensitization

There is no data available.

Carcinogenicity

There is no data available.

Specific target organ toxicity (single exposure)

There is no data available.

Specific target organ toxicity (repeated exposure)

There is no data available.

Aspiration hazard

There is no data available.

- Information on the likely routes of exposure** : Dermal contact. Eye contact. Inhalation. Ingestion.

Potential acute health effects

- Eye contact** : Exposure to airborne concentrations above statutory or recommended exposure limits may cause irritation of the eyes.

Section 11. Toxicological information

- Inhalation** : No known significant effects or critical hazards.
Skin contact : No known significant effects or critical hazards.
Ingestion : No known significant effects or critical hazards.

Symptoms related to the physical, chemical and toxicological characteristics

- Eye contact** : Adverse symptoms may include the following:
irritation
redness
- Inhalation** : No known significant effects or critical hazards.
Skin contact : No known significant effects or critical hazards.
Ingestion : No known significant effects or critical hazards.

Delayed and immediate effects and also chronic effects from short and long term exposure

Short term exposure

- Potential immediate effects** : No known significant effects or critical hazards.
Potential delayed effects : No known significant effects or critical hazards.

Long term exposure

- Potential immediate effects** : No known significant effects or critical hazards.
Potential delayed effects : No known significant effects or critical hazards.

Potential chronic health effects

- General** : Repeated or prolonged inhalation of dust may lead to chronic respiratory irritation. Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels.
- Carcinogenicity** : No known significant effects or critical hazards.
Mutagenicity : No known significant effects or critical hazards.
Teratogenicity : No known significant effects or critical hazards.
Developmental effects : No known significant effects or critical hazards.
Fertility effects : No known significant effects or critical hazards.

Numerical measures of toxicity

Acute toxicity estimates

There is no data available.

Section 12. Ecological information

Toxicity

There is no data available.

Persistence and degradability

Product is readily biodegradable.

Bioaccumulative potential

Section 12. Ecological information

There is no data available.

Mobility in soil

Soil/water partition coefficient (K_{oc}) : Not available.

Other adverse effects : No known significant effects or critical hazards.

Section 13. Disposal considerations

Disposal methods : The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements.

Section 14. Transport information

	DOT Classification	IMDG	IATA
UN number	Not regulated.	Not regulated.	Not regulated.
UN proper shipping name	-	-	-
Transport hazard class(es)	-	-	-
Packing group	-	-	-
Environmental hazards	No.	No.	No.
Additional information	-	-	-

AERG : Not applicable.

Special precautions for user : **Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code : Not available.

Section 15. Regulatory information

U.S. Federal regulations : **TSCA 8(a) CDR Exempt/Partial exemption:** Not determined
United States inventory (TSCA 8b): All components are listed or exempted.

Clean Air Act Section 112 (b) Hazardous Air Pollutants (HAPs) : Not listed

Clean Air Act Section 602 Class I Substances : Not listed

Clean Air Act Section 602 Class II Substances : Not listed

DEA List I Chemicals (Precursor Chemicals) : Not listed

DEA List II Chemicals (Essential Chemicals) : Not listed

SARA 302/304

Composition/information on ingredients

No products were found.

SARA 304 RQ : Not applicable.

SARA 311/312

Classification : Fire hazard
 Immediate (acute) health hazard

Composition/information on ingredients

Name	%	Fire hazard	Sudden release of pressure	Reactive	Immediate (acute) health hazard	Delayed (chronic) health hazard
Cellulase, Amylase, Hemicellulase	1-5	No.	No.	No.	Yes.	No.

SARA 313

No products were found.

State regulations

Massachusetts : None of the components are listed.

New York : None of the components are listed.

New Jersey : None of the components are listed.

Pennsylvania : None of the componen

California Prop. 65

Bulk product not labeled for Proposition 65 compliance.

International regulations

International lists : **Australia inventory (AICS):** All components are listed or exempted.
China inventory (IECSC): All components are listed or exempted.
Japan inventory: All components are listed or exempted.
Korea inventory: Not determined.
Malaysia Inventory (EHS Register): Not determined.
New Zealand Inventory of Chemicals (NZIoC): All components are listed or exempted.
Philippines inventory (PICCS): Not determined.
Taiwan inventory (CSNN): All components are listed or exempted.

Section 15. Regulatory information

Chemical Weapons : Not listed

**Convention List Schedule
I Chemicals**

Chemical Weapons : Not listed

**Convention List Schedule
II Chemicals**

Chemical Weapons : Not listed

**Convention List Schedule
III Chemicals**

Section 16. Other information

History

Date of issue mm/dd/yyyy : 05/31/2019

Version : 2

Revised Section(s) : Not applicable.

Prepared by : Innophos

Key to abbreviations

: ATE = Acute Toxicity Estimate

BCF = Bioconcentration Factor

GHS = Globally Harmonized System of Classification and Labelling of Chemicals

IATA = International Air Transport Association

IBC = Intermediate Bulk Container

IMDG = International Maritime Dangerous Goods

LogPow = logarithm of the octanol/water partition coefficient

MARPOL 73/78 = International Convention for the Prevention of Pollution From Ships,
1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)

UN = United Nations

Notice to reader

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Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.