

# Safety Data Sheet

## Nodulator Duo SCG

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### 1. Identification

#### Product identifier used on the label

#### Nodulator Duo SCG

#### Recommended use of the chemical and restriction on use

Recommended use\*: Biological beneficial agent

\* The "Recommended use" identified for this product is provided solely to comply with a Federal requirement and is not part of the seller's published specification. The terms of this Safety Data Sheet (SDS) do not create or infer any warranty, express or implied, including by incorporation into or reference in the seller's sales agreement.

#### Details of the supplier of the safety data sheet

Company:  
BASF CORPORATION  
100 Park Avenue  
Florham Park, NJ 07932, USA

Telephone: +1 973 245-6000

#### Emergency telephone number

CHEMTREC: 1-800-424-9300  
BASF HOTLINE: 1-800-832-HELP (4357)

#### Other means of identification

### 2. Hazards Identification

According to Regulation 2012 OSHA Hazard Communication Standard; 29 CFR Part 1910.1200

#### Classification of the product

Acute Tox.	4 (Inhalation - dust)	Acute toxicity
STOT SE	3 (irritating to respiratory system)	Specific target organ toxicity — single exposure
Comb. Dusts	Combustible Dust (1)	Combustible dusts

#### Label elements

Pictogram:

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Signal Word:  
Warning

Hazard Statement:

H332 Harmful if inhaled.  
H335 May cause respiratory irritation.  
May form combustible dust concentration in air.

Precautionary Statements (Prevention):

P271 Use only outdoors or in a well-ventilated area.  
P261 Avoid breathing dust.  
P261 Avoid breathing dust/fume/gas/mist/vapours/spray.

Precautionary Statements (Response):

P312 Call a POISON CENTER or physician if you feel unwell.  
P304 + P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

Precautionary Statements (Storage):

P403 + P233 Store in a well-ventilated place. Keep container tightly closed.  
P405 Store locked up.

Precautionary Statements (Disposal):

P501 Dispose of contents and container to hazardous or special waste collection point.

### Hazards not otherwise classified

#### Labeling of special preparations (GHS):

This product is not combustible in the form in which it is shipped by the manufacturer, but may form a combustible dust through downstream activities (e.g. grinding, pulverizing) that reduce its particle size.

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## 3. Composition / Information on Ingredients

### According to Regulation 2012 OSHA Hazard Communication Standard; 29 CFR Part 1910.1200

Rhizobium leguminosarum

Content (W/W): 0.14 %  
Synonym: No data available.

Bacillus subtilis

CAS Number: 68038-70-0  
Content (W/W): 0.1 %  
Synonym: No data available.

Plaster of Paris (Ca(SO<sub>4</sub>).1/2H<sub>2</sub>O)

CAS Number: 26499-65-0  
Content (W/W): 25.0 - 50.0%  
Synonym: CIRCLE SUPPLY

Raw Peat

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Content (W/W): 3.0 - 5.0%  
Synonym: NutriHold Dry

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### 4. First-Aid Measures

#### Description of first aid measures

##### General advice:

First aid personnel should pay attention to their own safety. If the patient is likely to become unconscious, place and transport in stable sideways position (recovery position). Immediately remove contaminated clothing.

##### If inhaled:

Keep patient calm, remove to fresh air, seek medical attention.

##### If on skin:

Wash thoroughly with soap and water

##### If in eyes:

Wash affected eyes for at least 15 minutes under running water with eyelids held open.

##### If swallowed:

Immediately rinse mouth and then drink 200-300 ml of water, seek medical attention.

#### Most important symptoms and effects, both acute and delayed

Symptoms: Information, i.e. additional information on symptoms and effects may be included in the GHS labeling phrases available in Section 2 and in the Toxicological assessments available in Section 11., (Further) symptoms and / or effects are not known so far

#### Indication of any immediate medical attention and special treatment needed

##### Note to physician

Treatment:

Treat according to symptoms (decontamination, vital functions), no known specific antidote.

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### 5. Fire-Fighting Measures

#### Extinguishing media

Suitable extinguishing media:  
water spray, dry powder, foam

Unsuitable extinguishing media for safety reasons:  
carbon dioxide

#### Special hazards arising from the substance or mixture

Hazards during fire-fighting:

carbon monoxide, carbon dioxide, Hydrogen chloride, nitrogen oxides

The substances/groups of substances mentioned can be released in case of fire.

#### Advice for fire-fighters

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Protective equipment for fire-fighting:

Wear self-contained breathing apparatus and chemical-protective clothing.

### Further information:

Collect contaminated extinguishing water separately, do not allow to reach sewage or effluent systems. Dispose of fire debris and contaminated extinguishing water in accordance with official regulations. In case of fire and/or explosion do not breathe fumes. Keep containers cool by spraying with water if exposed to fire.

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## 6. Accidental release measures

### Personal precautions, protective equipment and emergency procedures

Avoid dust formation. Use personal protective clothing. Avoid contact with the skin, eyes and clothing.

### Environmental precautions

Do not discharge into the subsoil/soil. Do not discharge into drains/surface waters/groundwater.

### Methods and material for containment and cleaning up

For small amounts: Contain with dust binding material and dispose of.

For large amounts: Sweep/shovel up.

Avoid raising dust. Dispose of absorbed material in accordance with regulations. Collect waste in suitable containers, which can be labeled and sealed. Clean contaminated floors and objects thoroughly with water and detergents, observing environmental regulations. Wear suitable protective equipment.

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## 7. Handling and Storage

### Precautions for safe handling

No special measures necessary if stored and handled correctly. Ensure thorough ventilation of stores and work areas. When using do not eat, drink or smoke. Hands and/or face should be washed before breaks and at the end of the shift.

Protection against fire and explosion:

No special precautions necessary. The substance/product is non-combustible. Product is not explosive.

Refer to NFPA 654, Standard for the Prevention of Fire and Dust Explosions from the Manufacturing, Processing, and Handling of Combustible Particulate Solids (2013 Edition) for safe handling.

### Conditions for safe storage, including any incompatibilities

Segregate from foods and animal feeds.

Further information on storage conditions: Keep away from heat. Protect against moisture. Protect from direct sunlight.

Protect product from freezing temperatures

Protect from temperatures below: 2 °C

Changes in the properties of the product may occur if substance/product is stored below indicated temperature for extended periods of time.

Protect from temperatures above: 25 °C

Changes in the properties of the product may occur if substance/product is stored above indicated temperature for extended periods of time.

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### 8. Exposure Controls/Personal Protection

#### Components with occupational exposure limits

Plaster of Paris (Ca(SO <sub>4</sub> ).1/2H <sub>2</sub> O)	OSHA PEL	PEL 5 mg/m <sup>3</sup> Respirable fraction ; PEL 15 mg/m <sup>3</sup> Total dust ; TWA value 5 mg/m <sup>3</sup> Respirable fraction ; TWA value 15 mg/m <sup>3</sup> Total dust ;
	ACGIH TLV	TWA value 10 mg/m <sup>3</sup> Inhalable fraction ;

#### Personal protective equipment

##### **Respiratory protection:**

Wear respiratory protection if ventilation is inadequate. Breathing protection if breathable aerosols/dust are formed. Wear a NIOSH approved (or equivalent) particulate respirator if ventilation is inadequate to control dust.

##### **Hand protection:**

Wear chemical resistant protective gloves., Protective glove selection must be based on the user's assessment of the workplace hazards.

##### **Eye protection:**

Safety glasses with side-shields.

##### **Body protection:**

Body protection must be chosen depending on activity and possible exposure, e.g. head protection, apron, protective boots, chemical-protection suit.

##### **General safety and hygiene measures:**

The statements on personal protective equipment in the instructions for use apply when handling crop-protection agents in final-consumer packing. Wearing of closed work clothing is recommended. Store work clothing separately. Keep away from food, drink and animal feeding stuffs.

### 9. Physical and Chemical Properties

Form:	solid
Odour:	characteristic
Odour threshold:	Not determined due to potential health hazard by inhalation.
Colour:	No data available.
pH value:	The product has not been tested.
Melting point:	The product has not been tested.
Boiling point:	The product has not been tested.
Flash point:	not applicable, the product is a solid
Flammability:	Based on the structure or composition there is no indication of flammability
Lower explosion limit:	As a result of our experience with this product and our knowledge of its composition we do not expect any hazard as long as the product is used appropriately and in accordance with the intended use.
Upper explosion limit:	As a result of our experience with this product and our knowledge of its composition we do not expect any hazard as long as the product is used appropriately and in accordance with the intended use.

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Vapour pressure:	not applicable
Density:	approx. 0.91 g/cm <sup>3</sup> (approx. 20 °C)
Vapour density:	not applicable
Partitioning coefficient n-octanol/water (log Pow):	not applicable
Self-ignition temperature:	Based on its structural properties the product is not classified as self-igniting.
Thermal decomposition:	No decomposition if stored and handled as prescribed/indicated.
Viscosity, dynamic:	not applicable, the product is a solid
Solubility in water:	dispersible
Evaporation rate:	not applicable
Other Information:	The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

## 10. Stability and Reactivity

### Reactivity

No hazardous reactions if stored and handled as prescribed/indicated.

Oxidizing properties:

Based on its structural properties the product is not classified as oxidizing.

### Chemical stability

The product is stable if stored and handled as prescribed/indicated.

### Possibility of hazardous reactions

No hazardous reactions if stored and handled as prescribed/indicated.

### Conditions to avoid

Avoid all sources of ignition: heat, sparks, open flame. Avoid extreme temperatures. Avoid prolonged exposure to extreme heat. Avoid contamination. Avoid electro-static discharge. Avoid prolonged storage. This product may form an explosive mixture if: 1. the dust is suspended in the atmosphere as a dust cloud AND 2. the concentration of the dust is above the lower explosion limit (LEL) AND 3. the limiting oxygen concentration (LOC) is exceeded.

### Incompatible materials

strong acids, strong bases, strong oxidizing agents

### Hazardous decomposition products

Decomposition products:

Hazardous decomposition products: No hazardous decomposition products if stored and handled as prescribed/indicated.

Thermal decomposition:

No decomposition if stored and handled as prescribed/indicated.

## 11. Toxicological information

### Primary routes of exposure

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Routes of entry for solids and liquids are ingestion and inhalation, but may include eye or skin contact. Routes of entry for gases include inhalation and eye contact. Skin contact may be a route of entry for liquefied gases.

### Acute Toxicity/Effects

#### Acute toxicity

Assessment of acute toxicity: The product has not been tested. The statement has been derived from substances/products of a similar structure or composition. Virtually nontoxic after a single ingestion. Of moderate toxicity after short-term inhalation. Virtually nontoxic after a single skin contact.

#### Oral

Type of value: LD50

Species: rat

Value: > 5,000 mg/kg (OECD Guideline 423)

No mortality was observed.

#### Inhalation

Type of value: LC50

Species: rat

Value: 1.9 mg/l (OECD Guideline 403)

Exposure time: 4 h

#### Dermal

Type of value: LD50

Species: rat

Value: > 5,000 mg/kg (OECD Guideline 402)

No mortality was observed.

#### Assessment other acute effects

Assessment of STOT single:

Causes temporary irritation of the respiratory tract.

The product has not been tested. The statement has been derived from the properties of the individual components.

#### Irritation / corrosion

Assessment of irritating effects: The product has not been tested. The statement has been derived from substances/products of a similar structure or composition. Not irritating to the skin. Not irritating to the eyes.

#### Skin

Species: rabbit

Result: non-irritant

Method: OECD Guideline 404

#### Eye

Species: rabbit

Result: non-irritant

Method: OECD Guideline 405

#### Sensitization

Assessment of sensitization: The product has not been tested. The statement has been derived from the properties of the individual components. There is no evidence of a skin-sensitizing potential.

*Information on: Plaster of Paris (Ca(SO<sub>4</sub>).1/2H<sub>2</sub>O)*

*Buehler test*

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*Species: guinea pig*

*Result: Non-sensitizing.*

*Method: OECD Guideline 406*

*The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.*

### Aspiration Hazard

The product has not been tested. The statement has been derived from the properties of the individual components. No aspiration hazard expected.

## Chronic Toxicity/Effects

### Repeated dose toxicity

Assessment of repeated dose toxicity: The product has not been tested. The statement has been derived from the properties of the individual components. No substance-specific organotoxicity was observed after repeated administration to animals.

### Genetic toxicity

Assessment of mutagenicity: The product has not been tested. The statement has been derived from the properties of the individual components. Mutagenicity tests revealed no genotoxic potential.

### Carcinogenicity

Assessment of carcinogenicity: The product has not been tested. The statement has been derived from the properties of the individual components. The results of various animal studies gave no indication of a carcinogenic effect.

### Reproductive toxicity

Assessment of reproduction toxicity: The product has not been tested. The statement has been derived from the properties of the individual components. The results of animal studies gave no indication of a fertility impairing effect.

### Teratogenicity

Assessment of teratogenicity: The product has not been tested. The statement has been derived from the properties of the individual components. Animal studies gave no indication of a developmental toxic effect at doses that were not toxic to the parental animals.

### Other Information

Misuse can be harmful to health.

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## 12. Ecological Information

### Toxicity

#### Aquatic toxicity

Assessment of aquatic toxicity:

There is a high probability that the product is not acutely harmful to aquatic organisms.

The product has not been tested. The statement has been derived from the properties of the individual components.

#### Toxicity to fish

*Information on: Plaster of Paris (Ca(SO<sub>4</sub>). 1/2H<sub>2</sub>O)*

*LC<sub>50</sub> (96 h) > 100 mg/l, Oryzias latipes (OECD Guideline 203)*

*The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.*



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### Aquatic invertebrates

Information on: Plaster of Paris ( $\text{Ca}(\text{SO}_4) \cdot 1/2\text{H}_2\text{O}$ )  
 $\text{LC}_{50}$  (48 h) > 100 mg/l, *Daphnia magna* (OECD Guideline 202, part 1)  
The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

### Aquatic plants

Information on: Plaster of Paris ( $\text{Ca}(\text{SO}_4) \cdot 1/2\text{H}_2\text{O}$ )  
 $\text{EC}_{50}$  (72 h) > 100 mg/l (growth rate), *Selenastrum capricornutum* (OECD Guideline 201)  
The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

## Persistence and degradability

### Assessment biodegradation and elimination (H<sub>2</sub>O)

The product has not been tested. The statement has been derived from the properties of the individual components.

### Assessment biodegradation and elimination (H<sub>2</sub>O)

Information on: Plaster of Paris ( $\text{Ca}(\text{SO}_4) \cdot 1/2\text{H}_2\text{O}$ )

Not applicable for inorganic substances.

## Bioaccumulative potential

### Bioaccumulation potential

not applicable

## Mobility in soil

### Assessment transport between environmental compartments

not applicable

## Additional information

Other ecotoxicological advice:

Do not discharge product into the environment without control.

## 13. Disposal considerations

### **Waste disposal of substance:**

Must be disposed of or incinerated in accordance with local regulations.

### **Container disposal:**

Contaminated packaging should be emptied as far as possible and disposed of in the same manner as the substance/product.

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### 14. Transport Information

**Land transport**  
USDOT

Not classified as a dangerous good under transport regulations

**Sea transport**  
IMDG

Not classified as a dangerous good under transport regulations

**Air transport**  
IATA/ICAO

Not classified as a dangerous good under transport regulations

### 15. Regulatory Information

#### Federal Regulations

**Registration status:**

Fertilizer TSCA, US released / exempt

Chemical TSCA, US blocked / not listed

**EPCRA 311/312 (Hazard categories):** Refer to SDS section 2 for GHS hazard classes applicable for this product.

#### State regulations

State RTK  
PA

CAS Number  
26499-65-0

Chemical name  
Plaster of Paris (Ca(SO<sub>4</sub>).1/2H<sub>2</sub>O)

#### **Safe Drinking Water & Toxic Enforcement Act, CA Prop. 65:**

**WARNING:** This product can expose you to chemicals including PALYGORSKITE FIBERS (> 5 MICROMETERS IN LENGTH), which is known to the State of California to cause cancer. For more information, go to [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov).

### 16. Other Information

**SDS Prepared by:**  
BASF NA Product Regulations  
SDS Prepared on: 2020/03/19

We support worldwide Responsible Care® initiatives. We value the health and safety of our employees, customers, suppliers and neighbors, and the protection of the environment. Our commitment to Responsible Care is integral to conducting our business and operating our facilities in a safe and environmentally responsible fashion, supporting our customers and suppliers in ensuring the safe and environmentally sound handling of our products, and minimizing the impact of our

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operations on society and the environment during production, storage, transport, use and disposal of our products.

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