

Safety Data Sheet

Nemasys®

Revision date : 2021/01/27

Version: 4.0

Page: 1/10

(30655351/SDS_GEN_CA/EN)

1. Identification

Product identifier used on the label

Nemasys®

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 Agricultural Specialities Limited
Unit 1 Harwood Industrial Estate
Harwood Road
Littlehampton
West Sussex
BN17 7AU, UNITED KINGDOM

Contact address:

BASF Canada Inc.
100 Milverton Drive
Mississauga, ON L5R 4H1
CANADA
Telephone: +1 289 360-1300

Emergency telephone number

24 Hour Emergency Response Information

CHEMTREC: 1-800-424-9300
BASF HOTLINE: (800) 454-COPE (2673)

Other means of identification

2. Hazards Identification

According to Hazardous Products Regulations (HPR) (SOR/2015-17)

Classification of the product

No need for classification according to GHS criteria for this product.

Label elements

Safety Data Sheet

Nemasys®

Revision date : 2021/01/27

Page: 2/10

Version: 4.0

(30655351/SDS_GEN_CA/EN)

The product does not require a hazard warning label in accordance with GHS criteria.

Hazards not otherwise classified

Labeling of special preparations (GHS):

The following percentage of the mixture consists of components(s) with unknown hazards regarding the acute toxicity: 97 % dermal

The following percentage of the mixture consists of components(s) with unknown hazards regarding the acute toxicity: 91 % oral

The following percentage of the mixture consists of components(s) with unknown hazards regarding the acute toxicity: 97 % Inhalation - dust

3. Composition / Information on Ingredients

According to Hazardous Products Regulations (HPR) (SOR/2015-17)

calcium silicate

CAS Number: 10101-39-0

Content (W/W): 1.0 - 5.0%

Synonym: Calcium silicate

4. First-Aid Measures

Description of first aid measures

General advice:

Remove contaminated clothing.

If inhaled:

Keep patient calm, remove to fresh air.

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:

Rinse mouth and then drink 200-300 ml of water.

Most important symptoms and effects, both acute and delayed

Symptoms: (Further) symptoms and / or effects are not known so far

Indication of any immediate medical attention and special treatment needed

Note to physician

Treatment: Symptomatic treatment (decontamination, vital functions).

Safety Data Sheet

Nemasys®

Revision date : 2021/01/27

Version: 4.0

Page: 3/10

(30655351/SDS_GEN_CA/EN)

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, nitrogen oxides

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

Advice for fire-fighters

Protective equipment for fire-fighting:

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

Further information:

Keep containers cool by spraying with water if exposed to fire. In case of fire and/or explosion do not breathe fumes. 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.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

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

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.

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. Avoid raising dust.

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:

Avoid dust formation. Dust can form an explosive mixture with air. Prevent electrostatic charge - sources of ignition should be kept well clear - fire extinguishers should be kept handy.

Conditions for safe storage, including any incompatibilities

Safety Data Sheet

Nemasys®

Revision date : 2021/01/27

Page: 4/10

Version: 4.0

(30655351/SDS_GEN_CA/EN)

Segregate from foods and animal feeds.

Further information on storage conditions: Keep away from heat. Protect from direct sunlight. Store protected against freezing.

Storage stability:

Storage temperature: 2 - 5 °C

If an expiry date is mentioned on the packaging/label this takes priority over the statements on storage duration in this safety data sheet.

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.

8. Exposure Controls/Personal Protection

Components with occupational exposure limits

Silicic acid, calcium salt	OSHA PEL	PEL 5 mg/m ³ Respirable fraction ; PEL 15 mg/m ³ Total dust ; TWA value 5 mg/m ³ Respirable fraction ; TWA value 15 mg/m ³ Total dust ;
----------------------------	----------	---

Personal protective equipment

Respiratory protection:

Wear a NIOSH approved (or equivalent) particulate respirator if ventilation is inadequate to control dust.

Hand protection:

impermeable gloves

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:

Wearing of closed work clothing is recommended. Handle in accordance with good industrial hygiene and safety practice. Store work clothing separately. Keep away from food, drink and animal feeding stuffs.

9. Physical and Chemical Properties

Form:	gel, moist
Odour:	perceptible
Odour threshold:	Not determined due to potential health hazard by inhalation.
Colour:	light brown
pH value:	approx. 5 - 7 (20 °C)
Melting temperature:	not applicable

Safety Data Sheet

Nemasys®

Revision date : 2021/01/27
Version: 4.0

Page: 5/10
(30655351/SDS_GEN_CA/EN)

boiling temperature:	not applicable
Flash point:	Non-flammable.
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.
Vapour pressure:	approx. 23.4 hPa (20 °C) Information applies to the solvent.
Density:	approx. 0.48 g/cm3 (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:	If necessary, information on other physical and chemical parameters is indicated in this section.

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

See SDS section 7 - Handling and storage.

Incompatible materials

strong acids, strong bases, strong oxidizing agents

Hazardous decomposition products

Safety Data Sheet

Nemasys®

Revision date : 2021/01/27

Version: 4.0

Page: 6/10

(30655351/SDS_GEN_CA/EN)

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

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: Virtually nontoxic after a single ingestion. Virtually nontoxic by inhalation. Virtually nontoxic after a single skin contact. The product has not been tested. The statement has been derived from the properties of the individual components.

Oral

Type of value: ATE

Value: > 5,000 mg/kg

Information on: Silicic acid, calcium salt

Type of value: LD50

Species: rat

Value: > 5,000 mg/kg (OECD Guideline 401)

No mortality was observed. The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

Inhalation

Type of value: ATE

Value: > 5.0000 mg/l

Determined for dust

Information on: Silicic acid, calcium salt

Type of value: LC50

Species: rat

Value: 2.08 mg/l (similar to OECD guideline 403)

Exposure time: 4 h

No mortality was observed. The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

Dermal

Type of value: ATE

Value: > 5,000 mg/kg

Information on: Silicic acid, calcium salt

Type of value: LD50

Species: rabbit

Value: > 5,000 mg/kg (similar to OECD guideline 402)

Safety Data Sheet

Nemasys®

Revision date : 2021/01/27

Page: 7/10

Version: 4.0

(30655351/SDS_GEN_CA/EN)

No mortality was observed. The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

Assessment other acute effects

Assessment of STOT single:

Based on the available information there is no specific target organ toxicity to be expected after a single exposure.

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

Irritation / corrosion

Assessment of irritating effects: Not irritating to the skin. Not irritating to the eyes. The product has not been tested. The statement has been derived from the properties of the individual components.

Skin

Information on: Silicic acid, calcium salt

Species: rabbit

Result: non-irritant

Method: FHSA Guideline

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

Eye

Information on: Silicic acid, calcium salt

Species: rabbit

Result: non-irritant

Method: FHSA Guideline

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

Sensitization

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

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

Safety Data Sheet

Nemasys®

Revision date : 2021/01/27

Page: 8/10

Version: 4.0

(30655351/SDS_GEN_CA/EN)

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.

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: Silicic acid, calcium salt

LL50 (96 h) > 1,000 mg/l, Salmo gairdneri, syn. O. mykiss (OECD Guideline 203, static)

The details of the toxic effect relate to the nominal concentration.

Aquatic invertebrates

Information on: Silicic acid, calcium salt

EL50 (48 h) >= 10,000 mg/l, Daphnia magna (OECD Guideline 202, part 1, static)

The product has low solubility in the test medium. A saturated solution has been tested. The details of the toxic effect relate to the nominal concentration.

Aquatic plants

Information on: Silicic acid, calcium salt

EL50 (72 h) > 1,000 mg/l (growth rate), Desmodemus subspicatus (OECD Guideline 201, static)

The product has low solubility in the test medium. A saturated solution has been tested. The details of the toxic effect relate to the nominal concentration.

EL10 (72 h) 41 mg/l (growth rate), Desmodemus subspicatus (OECD Guideline 201, static)

The product has low solubility in the test medium. A saturated solution has been tested. The details of the toxic effect relate to the nominal concentration.

Persistence and degradability

Assessment biodegradation and elimination (H2O)

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

Assessment biodegradation and elimination (H2O)

Safety Data Sheet

Nemasys®

Revision date : 2021/01/27

Version: 4.0

Page: 9/10

(30655351/SDS_GEN_CA/EN)

Information on: Silicic acid, calcium salt

Not applicable for inorganic substances.

Bioaccumulative potential

Assessment bioaccumulation potential

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

Assessment bioaccumulation potential

Information on: Silicic acid, calcium salt

Significant accumulation in organisms is not to be expected.

Mobility in soil

Assessment transport between environmental compartments

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

Information on: Silicic acid, calcium salt

Adsorption to solid soil phase is expected.

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.

14. Transport Information

Land transport

TDG

Not classified as a dangerous good under transport regulations

Sea transport

IMDG

Not classified as a dangerous good under transport regulations

Safety Data Sheet

Nemasys®

Revision date : 2021/01/27

Version: 4.0

Page: 10/10

(30655351/SDS_GEN_CA/EN)

Air transport

IATA/ICAO

Not classified as a dangerous good under transport regulations

15. Regulatory Information

Federal Regulations

Registration status:

Fertilizer DSL, CA released / exempt

Crop Protection DSL, CA released / exempt

Chemical DSL, CA blocked / not listed

16. Other Information

SDS Prepared by:

BASF NA Product Regulations

SDS Prepared on: 2021/01/27

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

Nemasys® END OF DATA SHEET