

VICTUS STARTER**NP23106025**

Version 1.1

Revision Date 06/19/2015

Print Date 06/26/2015

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product name : VICTUS STARTER

1.2 Relevant identified uses of the substance or mixture and uses advised againstUse of the Sub-
stance/Mixture : Premix for Animal Feeds**1.3 Details of the supplier of the safety data sheet**

Company : DSM Nutritional Products
45 Waterview Blvd
US-07054-1298 Parsippany

Telephone : (908) 475-7373
Telefax : (908) 475-7406
E-mail address Responsible/issuing person : sds.nutritionalproducts@dsm.com

1.4 Emergency telephone number

Emergency # 1-800-424-9300 (24 HR CHEMTREC)

SECTION 2. HAZARDS IDENTIFICATION**Emergency Overview**

CAUTION	
Appearance	powder
Odour	No information available.

GHS Classification

Combustible dust :
Respiratory sensitisation : Category 1

GHS Label element

Hazard pictograms : 

Signal word : Danger

Hazard statements : May form combustible dust concentrations in air
H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.

Precautionary statements : **Prevention:**
P261 Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.
P285 In case of inadequate ventilation wear respiratory protection.

Response:
P304 + P341 IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing.
P342 + P311 If experiencing respiratory symptoms: Call a

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POISON CENTER or doctor/ physician.

Disposal:

P501 Dispose of contents/ container to an approved waste disposal plant.

Potential Health Effects

Inhalation : May cause allergic respiratory reaction.

Skin : May cause skin irritation.

Eyes : May cause eye irritation.

Aggravated Medical Condition : None known.

Symptoms of Overexposure : No specific symptoms known.

Carcinogenicity:**IARC**

No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

ACGIH

No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

OSHA

No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

NTP

No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

Additional hazards and advice

Risk of dust explosion.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Brief description of the product : Mixture

Hazardous components

Component	CAS-No.	Weight percent
cellulose	9004-34-6	5 - 10
calcium carbonate	471-34-1	1 - 5
glucanase, endo-1,3(4)- β -	62213-14-3	1 - 5
Proteinase, serine	37259-58-8	1 - 5
cellulase	9012-54-8	1 - 5
Xylanase, endo-1,4-	9025-57-4	1 - 5
kaolin	1332-58-7	1 - 5
phosphatase, acid (6-phytase)	9001-77-8	0.1 - 1

SECTION 4. FIRST AID MEASURES

- General advice : Move out of dangerous area.
Show this safety data sheet to the doctor in attendance.
- If inhaled : Move to fresh air.
Consult a physician after significant exposure.
- In case of skin contact : Take off contaminated clothing and shoes immediately.
Wash off with soap and plenty of water.
If symptoms persist, call a physician.
- In case of eye contact : Flush eyes with water as a precaution.
Remove contact lenses.
Protect unharmed eye.
Keep eye wide open while rinsing.
If eye irritation persists, consult a specialist.
- If swallowed : Clean mouth with water and drink afterwards plenty of water.
Do not give milk or alcoholic beverages.
Never give anything by mouth to an unconscious person.
Obtain medical attention.
- Most important symptoms and effects, both acute and delayed : No specific symptoms known.
- Notes to physician : Treat symptomatically.

SECTION 5. FIREFIGHTING MEASURES**Flammable properties**

- Flash point : Not applicable

Fire fighting

- Suitable extinguishing media : Water
Foam

- Further information : Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.
Consider dust explosion hazard.

Protective equipment and precautions for firefighters

- Specific hazards during fire-fighting : None known.

- Special protective equipment for firefighters : In the event of fire, wear self-contained breathing apparatus.

SECTION 6. ACCIDENTAL RELEASE MEASURES

- Personal precautions, protective equipment and emergency measures : Evacuate personnel to safe areas.
Use personal protective equipment.

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- gency procedures Ensure adequate ventilation.
Avoid dust formation.
Avoid breathing dust.
- Environmental precautions : Do not flush into surface water or sanitary sewer system.
Prevent further leakage or spillage if safe to do so.
If the product contaminates rivers and lakes or drains inform
respective authorities.
- Methods and materials for
containment and cleaning up : Pick up and arrange disposal without creating dust.
Keep in suitable, closed containers for disposal.
Avoid formation of dust and aerosols.

SECTION 7. HANDLING AND STORAGE

- Advice on safe handling : Avoid formation of respirable particles.
Avoid exceeding the given occupational exposure limits (see
section 8).
Avoid contact with skin and eyes.
For personal protection see section 8.
Provide sufficient air exchange and/or exhaust in work rooms.
Dispose of rinse water in accordance with local and national
regulations.
Do not breathe vapours/dust.
Smoking, eating and drinking should be prohibited in the ap-
plication area.
- Advice on protection against : Avoid dust formation.
fire and explosion Provide appropriate exhaust ventilation at places where dust
is formed.
Take precautionary measures against static discharges.
- Conditions for safe storage : Store at room temperature.

Keep container tightly closed and dry.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION**Components with workplace control parameters**

Components	CAS-No.	Value type (Form of exposure)	Control param- eters / Permissible concentration	Basis
cellulose	cellulose (Dust from fibres)	TWA	10 mg/m ³	ACGIH
		TWA (Res- pirable)	5 mg/m ³	NIOSH REL
		TWA (total)	10 mg/m ³	NIOSH REL
		TWA (total dust)	15 mg/m ³	OSHA Z-1
		TWA (respir- able fraction)	5 mg/m ³	OSHA Z-1
calcium carbonate	471-34-1	TWA (Res- pirable)	5 mg/m ³	NIOSH REL
		TWA (total)	10 mg/m ³	NIOSH REL

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kaolin	kaolin (Particulates)	TWA (Respirable fraction)	2 mg/m3	ACGIH
		TWA (Respirable)	5 mg/m3	NIOSH REL
		TWA (total)	10 mg/m3	NIOSH REL
		TWA (total dust)	15 mg/m3	OSHA Z-1
		TWA (respirable fraction)	5 mg/m3	OSHA Z-1

Personal protective equipment

- Respiratory protection : In the case of dust or aerosol formation use respirator with an approved filter.
- Hand protection : Glove material: for example nitrile rubber
 Glove material: for example nitrile rubber
 Consider the hazard characteristics of this product and any special workplace conditions when selecting the appropriate type of protective gloves.
- Eye protection : Safety glasses with side-shields
- Skin and body protection : Choose body protection according to the amount and concentration of the dangerous substance at the work place.
- Hygiene measures : When using do not eat or drink.
 When using do not smoke.
 Avoid contact with skin, eyes and clothing.
 Do not breathe dust or spray mist.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES**9.1 Information on basic physical and chemical properties**

- Appearance : powder
- Odour : No information available.
- Odour Threshold : No information available.
- pH : No data available
- Melting point/range : not determined
- Boiling point/boiling range : not determined
- Flash point : Not applicable
- Flammability (solid, gas) : May form combustible dust concentrations in air
- Vapour pressure : Not applicable
- Relative vapour density : Not applicable
- Density : not determined
- Water solubility : not determined
- Partition coefficient: n-octanol/water : Not applicable
- Auto-ignition temperature : No data available

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Thermal decomposition : No data available
Explosive properties : No data available
Oxidizing properties : No data available

9.2 Other information

No data available

SECTION 10. STABILITY AND REACTIVITY

Reactivity : No hazards to be specially mentioned.
Chemical stability : Stable under recommended storage conditions.
Possibility of hazardous reactions : Dust may form explosive mixture in air.
Conditions to avoid : Heat
Incompatible materials : Strong acids and strong bases
Strong oxidizing agents
Hazardous decomposition products : No decomposition if used as directed.

SECTION 11. TOXICOLOGICAL INFORMATION

Acute oral toxicity
cellulose : LD50 (Rat): > 5,000 mg/kg

calcium carbonate : LD50 (Rat): 6,450 mg/kg

glucanase, endo-1,3(4)- β - : LD50 : > 2,000 mg/kg
(OECD Test Guideline 401)

Proteinase, serine : LD50 (Rat): 14,400 mg/kg

cellulase : LD50 (Rat): > 2,880 mg/kg
publicly available data (OECD Test Guideline 401)

Xylanase, endo-1,4- : LD50 : > 2,000 mg/kg
(OECD Test Guideline 401)

phosphatase, acid : LD50 : > 2,000 mg/kg
(OECD Test Guideline 401)

Skin irritation : Prolonged skin contact may cause skin irritation.

Eye irritation : Dust contact with the eyes can lead to mechanical irritation.

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Sensitisation

glucanase, endo-1,3(4)- β - : May cause sensitisation by inhalation.

Proteinase, serine : May cause sensitisation by inhalation.

cellulase : May cause sensitisation by inhalation.

Xylanase, endo-1,4- : May cause sensitisation by inhalation.

phosphatase, acid : May cause sensitisation by inhalation.

Genotoxicity in vitro

phosphatase, acid : not mutagenic (Various test systems)

STOT - single exposure Acute exposure

Proteinase, serine : May cause respiratory irritation.

Experience with human exposure: Skin contact

glucanase, endo-1,3(4)- β - : Prolonged skin contact may cause skin irritation.

Proteinase, serine : May cause skin irritation and/or dermatitis.

cellulase : Prolonged skin contact may cause skin irritation.

Xylanase, endo-1,4- : Prolonged skin contact may cause skin irritation.

phosphatase, acid : Prolonged skin contact may cause skin irritation.

Experience with human exposure: Inhalation

glucanase, endo-1,3(4)- β - : Inhalation may induce sensitization and may cause allergic reactions in sensitized individuals.

Proteinase, serine : Inhalation may induce sensitization and may cause allergic reactions in sensitized individuals.

cellulase : Inhalation may induce sensitization and may cause allergic reactions in sensitized individuals.

Xylanase, endo-1,4- : Inhalation may induce sensitization and may cause allergic reactions in sensitized individuals.

phosphatase, acid : Inhalation may induce sensitization and may cause allergic reactions in sensitized individuals.

SECTION 12. ECOLOGICAL INFORMATION**Toxicity**

No data is available on the product itself.

Persistence and degradability

Biodegradability
phosphatase, acid : Readily biodegradable
(OECD Test Guideline 301)

No data is available on the product itself.

Bioaccumulative potential

Bioaccumulation : No data available

Partition coefficient: n-
octanol/water : Not applicable

Mobility in soil

Distribution among environ-
mental compartments : No data available

Results of PBT and vPvB assessment

Assessment : Not applicable

Other adverse effects

Regulation 40 CFR Protection of Environment; Part 82 Protection of
Stratospheric Ozone - CAA Section 602 Class I Substances
Remarks This product neither contains, nor was manufactured with a
Class I or Class II ODS as defined by the U.S. Clean Air Act
Section 602 (40 CFR 82, Subpt. A, App.A + B).

Additional ecological informa- : There is no data available for this product.
tion

SECTION 13. DISPOSAL CONSIDERATIONS**Disposal methods**

Waste from residues : User must determine if any wastes generated exhibit hazard-
ous characteristics as per 40 CFR Part 261 or other national /
local legislation.

Do not contaminate ponds, waterways or ditches with chemi-
cal or used container.

Do not dispose of waste into sewer.

Offer surplus and non-recyclable solutions to a licensed dis-
posal company.

Contaminated packaging : Dispose of as unused product.
Do not re-use empty containers.

SECTION 14. TRANSPORT INFORMATION**International Regulation****UNRTDG**

Not regulated as a dangerous good

IATA-DGR

Not regulated as a dangerous good

IMDG-Code

Not regulated as a dangerous good

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable for product as supplied.

National Regulations**49 CFR**

Not regulated as a dangerous good

Remarks : Not classified as dangerous in the meaning of transport regulations.

SECTION 15. REGULATORY INFORMATION**TSCA list** : Not relevant

Not relevant

EPCRA - Emergency Planning and Community Right-to-Know Act**CERCLA Reportable Quantity**

This material does not contain any components with a CERCLA RQ.

SARA 304 Extremely Hazardous Substances Reportable Quantity

This material does not contain any components with a section 304 EHS RQ.

SARA 311/312 Hazards : Fire Hazard
Acute Health Hazard**SARA 302** : No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.**SARA 313** : This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.**Clean Air Act**

This product does not contain any hazardous air pollutants (HAP), as defined by the U.S. Clean Air Act Section 12 (40 CFR 61).

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 112(r) for Accidental Release Prevention (40 CFR 68.130, Subpart F).

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 111 SOCM Intermediate or Final VOC's (40 CFR 60.489).

Clean Water Act

This product does not contain any Hazardous Substances listed under the U.S. CleanWater Act, Section 311, Table 116.4A.

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This product does not contain any Hazardous Chemicals listed under the U.S. CleanWater Act, Section 311, Table 117.3.

This product does not contain any toxic pollutants listed under the U.S. Clean Water Act Section 307

Massachusetts Right To Know

sodium sulphate	7757-82-6	70 - 90 %
cellulose	cellulose (Dust from fibres)	5 - 10 %
kaolin	kaolin (Particulates)	1 - 5 %

Pennsylvania Right To Know

sodium sulphate	7757-82-6	70 - 90 %
cellulose	cellulose (Dust from fibres)	5 - 10 %
Dextrin	dextrin	1 - 5 %
kaolin	kaolin (Particulates)	1 - 5 %

New Jersey Right To Know

sodium sulphate	7757-82-6	70 - 90 %
cellulose	cellulose (Dust from fibres)	5 - 10 %
Dextrin	dextrin	1 - 5 %
calcium carbonate	471-34-1	1 - 5 %
glucanase, endo-1,3(4)- β -	62213-14-3	1 - 5 %
kaolin	kaolin (Particulates)	1 - 5 %

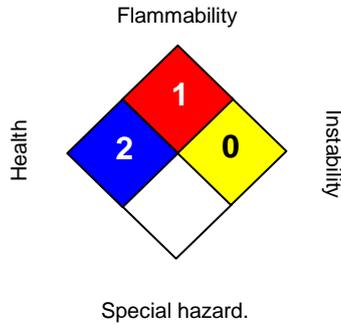
The components of this product are reported in the following inventories:

TSCA	: Not On TSCA Inventory
	: Proteinase, serine
	: xylanase, endo-1,4-
	: Vegetable oil, hydrogenated

SECTION 16. OTHER INFORMATION

Further information

NFPA:



HMIS III:

HEALTH	0*
FLAMMABILITY	1
PHYSICAL HAZARD	0

0 = not significant, 1 =Slight,
2 = Moderate, 3 = High
4 = Extreme, * = Chronic

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

Abbreviations: ACGIH = American Conference of Governmental Industrial Hygienists. CERCLA = Comprehensive Environmental Response, Compensation and Liability Act. CFR = Code of Federal Regulations. CPR = Controlled Products Regulations. DSL = Canadian Domestic Substance List. DOT = Department of Transportation. EINECS = European Inventory of New and Existing Chemical Substances. EPA = Environmental Protection Agency. HCS = Hazardous Communication Standard. HEPA = High Efficiency Particulate Air. HMIS = Hazardous Material Identification System. IARC = International Agency for Research on Cancer. IATA = International Air Transport Association. IMDG = International Maritime Dangerous Good. NFPA = National Fire Protection Association. NIOSH = National Institute of Occupational Safety and Health. NJTSR = New Jersey Trade Secret Registry. NTP = National Toxicology Program. OSHA = Occupational Safety and Health Administration. SARA = Superfund Amendments and Reauthorization Act. TDG = Transportation of Dangerous Goods. TLV = Threshold Limit Value. TSCA = Toxic Substance Control Act. WHMIS = Workplace Hazardous Materials Information System.