

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product name : RONOZYME HIPHOS (GT) 5000

1.2 Relevant identified uses of the substance or mixture and uses advised against

Use 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 Respon-
sible/issuing person : sds.nutritionalproducts@dsm.com

1.4 Emergency telephone number

1-800-424-9300 (24 HR CHEMTREC, CA & US); Outside CA & US +1-703-741-5970
(COLLECT CALLS ACCEPTED)

SECTION 2. HAZARDS IDENTIFICATION**Emergency Overview**

Appearance	powder
Odour	No information available.
Hazard Summary	May cause cancer.

GHS Classification

Combustible dust :

Respiratory sensitisation : Category 1

Carcinogenicity : Category 1A

GHS label elements

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.
H350 May cause cancer.

Precautionary statements : **Prevention:**
P201 Obtain special instructions before use.
P202 Do not handle until all safety precautions have been read and understood.
P261 Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.

RONOZYME HIPHOS (GT) 5000**NP23391025**

Version 1.0

Revision Date 10/14/2016

Date of last issue: -

P281 Use personal protective equipment as required.

Response:

P304 + P341 IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing.

P308 + P313 IF exposed or concerned: Get medical advice/attention.

Storage:

P405 Store locked up.

Disposal:

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

Potential Health Effects

Aggravated Medical Condition : None known.

Symptoms of Overexposure : No specific symptoms known.

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
calcium carbonate	471-34-1	20 - 30
cellulose	9004-34-6	1 - 5
phosphatase, acid (6-phytase)	9001-77-8	0.1 - 1

SECTION 4. FIRST AID MEASURESGeneral 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.

RONOZYME HIPHOS (GT) 5000**NP23391025**

Version 1.0

Revision Date 10/14/2016

Date of last issue: -

Never give anything by mouth to an unconscious person.

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 procedures : Evacuate personnel to safe areas.
Use personal protective equipment.
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).
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

RONOZYME HIPHOS (GT) 5000**NP23391025**

Version 1.0

Revision Date 10/14/2016

Date of last issue: -

regulations.
Do not breathe vapours/dust.
Smoking, eating and drinking should be prohibited in the application area.

Advice on protection against fire and explosion : Avoid dust formation.
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 parameters / Permissible concentration	Basis
cellulose	9004-34-6	TWA	10 mg/m ³	ACGIH
	9004-34-6	TWA (Respirable)	5 mg/m ³	NIOSH REL
	9004-34-6	TWA (total)	10 mg/m ³	NIOSH REL
	9004-34-6	TWA (total dust)	15 mg/m ³	OSHA Z-1
	9004-34-6	TWA (respirable fraction)	5 mg/m ³	OSHA Z-1
quartz (SiO ₂)	14808-60-7	TWA (respirable dust fraction)	0.1 mg/m ³	OSHA P0

Personal protective equipment

Respiratory protection : In the case of dust or aerosol formation use respirator with an approved filter.

Hand protection
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**Information on basic physical and chemical properties**

RONOZYME HIPHOS (GT) 5000**NP23391025**

Version 1.0

Revision Date 10/14/2016

Date of last issue: -

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

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	: No data available
Skin irritation	: Prolonged skin contact may cause skin irritation.

RONOZYME HIPHOS (GT) 5000**NP23391025**

Version 1.0

Revision Date 10/14/2016

Date of last issue: -

Eye irritation	:	Dust contact with the eyes can lead to mechanical irritation.
Sensitisation	:	No data available
Genotoxicity in vitro	:	No data available
Carcinogenicity	:	This information is not available.
IARC		Group 1: Carcinogenic to humans quartz (SiO ₂) 14808-60-7
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.
Reproductive toxicity	:	This information is not available.
STOT - repeated exposure	:	This information is not available.
Experience with human exposure: Skin contact phosphatase, acid	:	Prolonged skin contact may cause skin irritation.
Experience with human exposure: Inhalation 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 : No data available

Bioaccumulative potential

Bioaccumulation : No data available

Partition coefficient: n-octanol/water : Not applicable

Mobility in soil

Distribution among environmental compartments : No data available

Other adverse effects

RONOZYME HIPHOS (GT) 5000**NP23391025**

Version 1.0

Revision Date 10/14/2016

Date of last issue: -

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 information : There is no data available for this product.

SECTION 13. DISPOSAL CONSIDERATIONS**Disposal methods**

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

Do not contaminate ponds, waterways or ditches with chemical or used container.
Do not dispose of waste into sewer.
Offer surplus and non-recyclable solutions to a licensed disposal company.

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

SECTION 14. TRANSPORT INFORMATION**International Regulations****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

RONOZYME HIPHOS (GT) 5000**NP23391025**

Version 1.0

Revision Date 10/14/2016

Date of last issue: -

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
Chronic 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 112 (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 I 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.

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	30 - 50 %
cellulose	9004-34-6	1 - 5 %
quartz (SiO ₂)	14808-60-7	0.1 - 1 %

Pennsylvania Right To Know

sodium sulphate	7757-82-6	30 - 50 %
rice hulls	Not Assigned	20 - 30 %
calcium carbonate	471-34-1	20 - 30 %
cellulose	9004-34-6	1 - 5 %

New Jersey Right To Know

sodium sulphate	7757-82-6	30 - 50 %
rice hulls	Not Assigned	20 - 30 %
calcium carbonate	471-34-1	20 - 30 %
Dextran	9004-54-0	1 - 5 %
cellulose	9004-34-6	1 - 5 %
quartz (SiO ₂)	14808-60-7	0.1 - 1 %

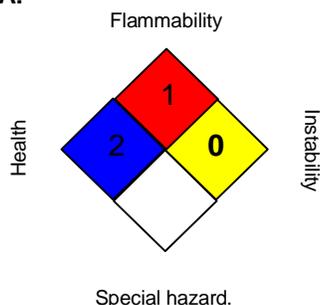
SECTION 16. OTHER INFORMATION

Full text of other abbreviations

AICS - Australian Inventory of Chemical Substances; ANTT - National Agency for Transport by Land of Brazil; ASTM - American Society for the Testing of Materials; bw - Body weight; CMR - Carcinogen, Mutagen or Reproductive Toxicant; CPR - Controlled Products Regulations; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECx - Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; ERG - Emergency Response Guide; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECS - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified; Nch - Chilean Norm; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NOM - Official Mexican Norm; NTP - National Toxicology Program; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TDG - Transportation of Dangerous Goods; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative; WHMIS - Workplace Hazardous Materials Information System

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.

**RONOZYME HIPHOS (GT) 5000****NP23391025**

Version 1.0

Revision Date 10/14/2016

Date of last issue: -

ACGIH = American Conference of Governmental Industrial Hygienists. CFR = Code of Federal Regulations. CPR = Controlled Products Regulations. EPA = Environmental Protection Agency. NIOSH = National Institute of Occupational Safety and Health. OSHA = Occupational Safety and Health Administration. TDG = Transportation of Dangerous Goods. TLV = Threshold Limit Value.

US / EN