

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product name : ROVIMIX® STAY-C® 35

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

Use of the Substance/Mixture : Additive for animal nutrition in premixes and compound 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**

Appearance	powder
Colour	beige
Odour	No information available.

GHS Classification

Combustible dust :

GHS Label element

Signal word : Warning

Hazard statements : May form combustible dust concentrations in air

Potential Health Effects

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

NTP

equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

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

Synonyms : Sodium, calcium ascorbyl-2-phosphate

Brief description of the product : Mixture (preparation) containing active ingredient and auxiliary substance

Hazardous components

Component	CAS-No.	Weight percent
silicon dioxide (amorphous)	7631-86-9	1 - 5

Further ingredients

Component	CAS-No.	Weight percent
Mixture of sodium /calcium ascorbyl-2-phosphate and inorganic components		95 - 100

SECTION 4. FIRST AID MEASURES

General advice : No hazards which require special first aid measures.

If inhaled : Move to fresh air.
If symptoms persist, call a physician.

In case of skin contact : Take off contaminated clothing and shoes immediately.
Wash off with soap and plenty of water.

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.
If symptoms persist, call a physician.

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 fightingSuitable extinguishing media : Water
FoamFurther information : Collect contaminated fire extinguishing water separately. This must not be discharged into drains.
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 MEASURESPersonal precautions, protective equipment and emergency procedures : Use personal protective equipment.
Avoid dust formation.

Environmental precautions : Try to prevent the material from entering drains or water courses.

Methods and materials for containment and cleaning up : Pick up and arrange disposal without creating dust.

SECTION 7. HANDLING AND STORAGEAdvice on safe handling : For personal protection see section 8.
Dispose of rinse water in accordance with local and national regulations.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 : Protect from humidity.
Keep container tightly closed and dry.

Storage temperature : < 77 °F (< 25 °C)

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

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
silicon dioxide (amorphous)	7631-86-9	TWA (Dust)	20 Million particles per cubic foot	OSHA Z-3

Personal protective equipment

- Respiratory protection : No personal respiratory protective equipment normally required.
In case of high dust concentration use a dust mask applicable to local conditions.
- Hand protection : Glove material: for example nitrile rubber
- 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 : Handle in accordance with good industrial hygiene and safety practice.
Wash hands before breaks and at the end of workday.

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

- Appearance : powder
- Colour : beige
- Odour : No information available.
- Odour Threshold : No information available.
- pH : 8 - 9 (ca.30 g/l)
- Melting point/range : ca. 360 °C
with decomposition
- 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 : partly soluble
- Partition coefficient: n-octanol/water : Not applicable
- Auto-ignition temperature : No data available
- Thermal decomposition : Decomposes on heating.
Potential for exothermic hazard

Explosive properties : Not explosive
Oxidizing properties : Not oxidizing

9.2 Other information

Combustibility index for deposited dust : 2 (23 °C)
: 2 (100 °C)

Dust explosion class : The sample could not be ignited under test conditions (Hartmann tube). (Product sample, Median value of the tested sample 0.05 mm, Loss on drying 5 %)

Minimum ignition energy : > 1,000 mJ (Product sample, Median value of the tested sample 0.05 mm, Loss on drying 5 %)
The Minimum ignition energy (MIE) of a dust/air mix depends on the particle size the water content and the temperature of the dust. The finer and the dryer the dust the lower the MIE.
: General remark: The indicated dust explosion characteristics are only valid for this product and are sensitive to the sample's parameters.

Powder volume resistivity : ca. 1E+11 Ohmm (Product sample, Median value of the tested sample 0.05 mm, Loss on drying 5 %)
The material can accumulate static charge and can therefore cause electrical ignition.

Minimum ignition temperature of a dust/air mix : 570 °C (Median value of the tested sample 0.05 mm) determined in the BAM oven

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 : LD50 (Rat): > 5,000 mg/kg
Test performed using a similar product. (OECD Test Guideline

	401)
Skin irritation	: No skin irritation (Rabbit, OECD Test Guideline 404) Test performed using a similar product.
Eye irritation	: No eye irritation (Rabbit, OECD Test Guideline 405) Test performed using a similar product. : Dust contact with the eyes can lead to mechanical irritation.
Sensitisation	: Did not cause sensitization. (Guinea pig, OECD Test Guideline 406) Test performed using a similar product. : no photoallergenic skin reaction (Guinea pig) Test performed using a similar product.
Carcinogenicity	: No indication for carcinogenicity known.
Genotoxicity in vitro	: not mutagenic (Various test systems) Test performed using a similar product.
Reproductive toxicity	: This information is not available.
Teratogenicity	: No indication for teratogenicity known.
STOT - repeated exposure (Chronic exposure)	: This information is not available.

SECTION 12. ECOLOGICAL INFORMATION**Toxicity**

Toxicity to daphnia and other aquatic invertebrates	: Daphnia magna (Water flea) EC50 (48 h) > 100 mg/l Test performed using a similar product.
Toxicity to algae	: Desmodesmus subspicatus (Scenedesmus subspicatus) ErC50 (72 h) > 100 mg/l Test performed using a similar product.

Persistence and degradability

Biodegradability	: Not readily biodegradable. <= 30 % (28 d) (OECD Test Guideline 301F) Test performed using a similar product.
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Bioaccumulative potential

Bioaccumulation : No data available

Partition coefficient: n-octanol/water : Not applicable

Mobility in soil

Distribution among environmental compartments : No data available

Results of PBT and vPvB assessment

Assessment : This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

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 information : May cause long-term adverse effects in the aquatic environment.

SECTION 13. DISPOSAL CONSIDERATIONS**Disposal methods**

Waste from residues : Discharge into the environment must be avoided.
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.

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

Contaminated packaging : Dispose of as unused product.
Do not re-use empty containers.
Empty containers should be taken to an approved waste handling site for recycling or disposal.

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

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

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 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

silicon dioxide (amorphous)	7631-86-9	1 - 5 %
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Pennsylvania Right To Know

Mixture of sodium /calcium ascorbyl-2-phosphate and inorganic components	Not Assigned	90 - 100 %
silicon dioxide (amorphous)	7631-86-9	1 - 5 %

New Jersey Right To Know

SAFETY DATA SHEET



ROVIMIX® STAY-C® 35

0483044

Version 4.0

Revision Date 08/08/2014

Print Date 01/08/2015

Mixture of sodium /calcium ascorbyl-2-phosphate and inorganic components
silicon dioxide (amorphous)

Not Assigned

90 - 100 %

7631-86-9

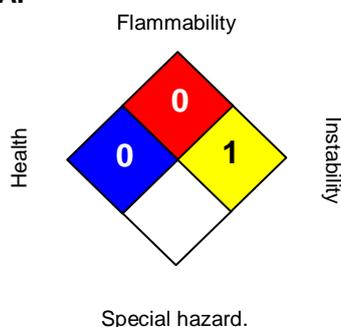
1 - 5 %

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

TSCA

: Not On TSCA Inventory

: Mixture of sodium /calcium ascorbyl-2-phosphate and inorganic components

SECTION 16. OTHER INFORMATION**Further information****NFPA:****HMIS III:**

HEALTH	0
FLAMMABILITY	0
PHYSICAL HAZARD	1

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.