

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006



Rovimix® Hy-D® Solution

5003016

Version 1.0

Revision Date 14.10.2011

Print Date 13.07.2012

1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Product identifier

Trade name : Rovimix® Hy-D® Solution

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

Use of the Substance/Mixture : Additive for animal nutrition to be used in feed

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 : sds.nutritionalproducts@dsm.com
Responsible/issuing person

1.4 Emergency telephone number

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

2. Hazards identification

2.1 Classification of the substance or mixture

Classification (REGULATION (EC) No 1272/2008)

Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008.

Classification (67/548/EEC, 1999/45/EC)

Not a hazardous substance or mixture according to EC-directives 67/548/EEC or 1999/45/EC.

2.2 Label elements

Labelling (REGULATION (EC) No 1272/2008)

Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008.

2.3 Other hazards

None known.

3. Composition/information on ingredients

Brief description of the product : Mixture (preparation) containing active ingredient and auxiliary substances
aqueous dispersion

3.2 Mixtures

Remarks : No dangerous ingredients according to Regulation (EC) No. 1907/2006

Further ingredients

Chemical Name	CAS-No.	Classification	GHS Classification	Concentration
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	EC-No. Registration number			[%]
calcifediol hydrate	63283-36-3 242-990-9	Xn; R22 T; R48/25 R53	Acute Tox. 4; H302 STOT RE 1; H372 Aquatic Chronic 4; H413	> 0 - < 0,1
polyoxyethylene sorbitan monostearate	9005-67-8			>= 1 - < 5

For the full text of the R-phrases mentioned in this Section, see Section 16.

4. First aid measures**4.1 Description of first aid measures**

- General advice : No hazards which require special first aid measures.
- If inhaled : Move to fresh air in case of accidental inhalation of dust or fumes from overheating or combustion.
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 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.

4.2 Most important symptoms and effects, both acute and delayed

- Symptoms : No specific symptoms known.

4.3 Indication of any immediate medical attention and special treatment needed

- Treatment : Treat symptomatically.

5. Firefighting measures**5.1 Extinguishing media**

- Suitable extinguishing media : Alcohol-resistant foam
Dry chemical
Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

5.2 Special hazards arising from the substance or mixture

- Specific hazards during firefighting : None known.

5.3 Advice for firefighters

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

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for firefighters

Further 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.

6. Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Use personal protective equipment.

6.2 Environmental precautions

Do not flush into surface water or sanitary sewer system.

6.3 Methods and materials for containment and cleaning up

Keep in suitable, closed containers for disposal.

6.4 Reference to other sections

For personal protection see section 8.
For disposal considerations see section 13.

7. Handling and storage

7.1 Precautions for safe handling

Advice on safe handling : For personal protection see section 8.
No special handling advice required.
Dispose of rinse water in accordance with local and national regulations.

Advice on protection against fire and explosion : Take precautionary measures against static discharges.

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers : Protect against light.
: Keep container tightly closed and dry.

Advice on common storage : No special restrictions on storage with other products.

Storage temperature : 2 - 30 °C

7.3 Specific end uses

Specific use(s) : not applicable

8. Exposure controls/personal protection

8.1 Control parameters

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Contains no substances with occupational exposure limit values.

8.2 Exposure controls

Personal protective equipment

- | | |
|--------------------------|---|
| Respiratory protection | : No personal respiratory protective equipment normally required. |
| Hand protection | : Glove material: for example nitrile rubber |
| Eye protection | : Safety glasses |
| Skin and body protection | : Protective suit |
| Hygiene measures | : General industrial hygiene practice. |

9. Physical and chemical properties

9.1 Information on basic physical and chemical properties

- | | |
|--|---|
| Appearance | : emulsion |
| Colour | : white - milky |
| Odour | : No information available. |
| Odour Threshold | : No information available. |
| pH | : no data available |
| Melting point/range | : ca. 0 °C |
| Boiling point/boiling range | : not determined |
| Flash point | : > 100 °C |
| Evaporation rate | : not determined |
| Flammability (solid, gas) | : Not classified as supporting combustion according to the transport regulations. |
| Lower explosion limit | : not determined |
| Upper explosion limit | : not determined |
| Vapour pressure | : not determined |
| Relative vapour density | : not applicable |
| Density | : 0,99 g/cm ³ |
| Water solubility | : dispersible |
| Partition coefficient: n-octanol/water | : not applicable |
| Autoignition temperature | : no data available |
| Ignition temperature | : not determined |
| Thermal decomposition | : no data available |
| Viscosity, dynamic | : not determined |
| Explosive properties | : no data available |
| Oxidizing properties | : no data available |

9.2 Other information

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no data available

10. Stability and reactivity

10.1 Reactivity

No hazards to be specially mentioned.

10.2 Chemical stability

Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions

Possible incompatibility with materials listed under section 10.5.

10.4 Conditions to avoid

Heat.

10.5 Incompatible materials

Strong acids and strong bases
Strong oxidizing agents

10.6 Hazardous decomposition products

No decomposition if used as directed.

11. Toxicological information

11.1 Information on toxicological effects

- | | |
|-----------------------------------|---|
| Acute oral toxicity | : LD50 (rat): > 5 000 mg/kg
(calculated from LD50 of components) |
| Skin corrosion/irritation | : Prolonged skin contact may cause skin irritation. |
| Respiratory or skin sensitization | : no data available |
| Germ cell mutagenicity | |
| Genotoxicity in vitro | : no data available |
| Carcinogenicity | : This information is not available. |
| Reproductive toxicity | : This information is not available. |
| STOT - repeated exposure | : This information is not available. |

12. Ecological information

12.1 Toxicity

No data is available on the product itself.

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12.2 Persistence and degradability

Biodegradability : no data available

12.3 Bioaccumulative potential

Bioaccumulation : no data available

Partition coefficient: n-octanol/water : not applicable

12.4 Mobility in soil

Distribution among environmental compartments : no data available

12.5 Results of PBT and vPvB assessment

Assessment : This mixture contains no substance considered to be persistent, bioaccumulating nor toxic (PBT).
: This mixture contains no substance considered to be very persistent nor very bioaccumulating (vPvB).

12.6 Other adverse effects

Additional ecological information : There is no data available for this product.

13. Disposal considerations

13.1 Waste treatment methods

Product : Offer surplus and non-recyclable solutions to a licensed disposal company.

Contaminated packaging : Empty containers should be taken to an approved waste handling site for recycling or disposal.

14. Transport information

14.1 UN number

ADR

Not dangerous goods

RID

Not dangerous goods

IMDG

Not dangerous goods

IATA

Not dangerous goods

14.2 Proper shipping name

ADR

Not dangerous goods

RID

Not dangerous goods

IMDG

Not dangerous goods

IATA

Not dangerous goods

14.3 Transport hazard class

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ADR

Not dangerous goods

RID

Not dangerous goods

IMDG

Not dangerous goods

IATA

Not dangerous goods

14.4 Packing group

ADR

Not dangerous goods

RID

Not dangerous goods

IMDG

Not dangerous goods

IATA

Not dangerous goods

14.5 Environmental hazards

ADR

Not dangerous goods

RID

Not dangerous goods

IMDG

Not dangerous goods

IATA

Not dangerous goods

14.6 Special precautions for user

Not classified as dangerous in the meaning of transport regulations.

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

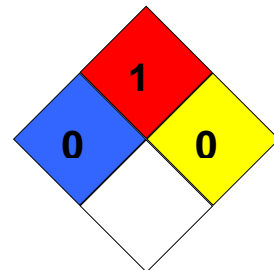
not applicable

15. Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

NFPA Classification

: Health hazard: 0
Fire Hazard: 1
Reactivity Hazard: 0



15.2 Chemical Safety Assessment

not applicable

16. Other information

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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: 67/548/EEC= Dangerous Substances Directive. 1999/45/EC= Dangerous Preparations Directive. Regulation (EC) No. 1272/2008= Regulation on classification, labelling and packaging of substances and mixtures. DNEL= Derived No-Effect Level. PNEC= Predicted No-Effect Concentration. NFPA= National Fire Protection Association (USA). IATA= International Air Transport Association. IMDG= International Maritime Dangerous Goods. RID= International Rule for Transport of Dangerous Substances by Railway; ADR= European Agreement concerning the International Carriage of Dangerous Goods by Road. TWA= Time Weighted Average. STEL= Short term exposure limit.