

009912
DSM
090912

rec-10108

HY-D 62.5mg

#00912

rec 10/08

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Material Safety Data Sheet

ROVIMIX HY-D Solution

1. Product and Company Identification

Product name ROVIMIX HY-D Solution

Product code 50 0301 6

Use - for animal nutrition (liquid premixes, liquid feed)

Company information Enquiries:
 DSM Nutritional Products, Inc.
 45 Waterview Boulevard
 Parsippany, NJ 07054-1298
 United States of America

Phone (973)-257-1063

US Chemtrec phone: (800)-424-9300

2. Hazards identification

Emergency Overview

Form liquid

Color white

Hazard Overview - May cause allergic reactions.
 - May cause birth defects based on information on related materials

Potential Health Effects - Exposure: Ingestion, Skin contact, Eye contact
 - Target Organs: skin, kidneys

- Acute Effects: May cause skin irritation., May cause allergic reactions.

- Chronic Effects: May cause kidney dysfunction or failure.

- Carcinogenicity: formulation not listed by NTP, IARC or OSHA

Additional Health Information - May cause birth defects based on information on related materials.

3. Composition/Information on ingredients

Ingredients	Concentration
25-Hydroxyvitamin D3 CAS: 63283-36-3	< 0.1 %

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Vegetable oils 10-20 %

BHT [stabilizer] < 0.01 %

CAS: 128-37-0

4. First-aid measures

- Eye contact
- rinse immediately with tap water for 10 minutes - open eyelids forcibly
 - consult a physician if irritation persists
- Skin contact
- remove immediately contaminated clothes, wash affected skin with water and soap - do not use any solvents
- Inhalation
- remove the casualty to fresh air and keep him/her calm
 - in the event of symptoms get medical treatment

5. Fire-fighting measures

- Suitable extinguishing media
- water spray jet, dry powder, foam, carbon dioxide
- Flash point (liquid)
- not applicable

6. Accidental release measures

- Methods for cleaning up
- collect spills with inert adsorbent and hand over to waste removal

7. Handling and storage

Storage

- Storage conditions
- protected from light
 - dry, cool and ventilated place
 - for quality reasons under inert gas (e.g. nitrogen)
- Validity
- 5 months, at room temperature

8. Exposure controls/Personal protection

- Engineering Measures
- see 7.

Monitoring

- Threshold value (USA) air
- ACGIH-TLV: 10 mg/m³ (ACGIH)

Personal protective equipment

- Respiratory protection
- in case of open handling or accidental release: particle mask or respirator with independent air supply
- Hand protection
- protective gloves

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Eye protection - safety glasses

*1 referring to: Vegetable oils

9. Physical and chemical properties

Color white

Form liquid

Density 0.99 g/ml

Melting temperature 0 °C

10. Stability and reactivity

Stability - stable under the conditions mentioned in chapter 7

11. Toxicological information

Acute toxicity	- LD ₅₀ ≥ 650 mg/kg (oral, mouse)	*2
	- LD ₅₀ > 320 mg/kg (oral, rat)	*3
Local effects	- skin: slightly irritating (man)	*2
Sensitization	- may be sensitizing (man)	*2
Chronic toxicity	- NOAEL 0.012 mg/kg/d (oral, rat; 180 d)	*3
	- chronic overdosage may lead to formation of renal calculi, bone demineralisation and formation of calcination foci in lung and kidneys up to renal insufficiency	*3
Mutagenicity	- not mutagenic (Ames test)	*3
Reproduction toxicity	- may lead to malformations at dose levels that cause maternal toxicity	*3
Note	- foodstuff, harmless at normal use	*1

*1 referring to: Vegetable oils

*2 referring to: BHT

*3 referring to: 25-Hydroxyvitamin D3

12. Ecological information

Ready biodegradability	- readily biodegradable > 60 %, 28 days (FDA Technical Assistance Document No. 3.11)	*3
Ecotoxicity	- strongly toxic for planktonic crustaceans (Daphnia pulex) EC ₅₀ (48 h) 1.44 mg/l (OECD No. 202)	*2
Air pollution	- observe local/national regulations	
Note	- edible fats and oils have a high specific biochemical oxygen demand; they are generally well biodegradable considering their low water solubility	*1
*1 referring to:	Vegetable oils	
*2 referring to:	BHT	
*3 referring to:	25-Hydroxyvitamin D3	

13. Disposal considerations

Waste from residues	- observe local/national regulations regarding waste disposal
RCRA waste	- not regulated under RCRA

14. Transport information

DOT/TDG Remark:	- Not regulated for transport under DOT, TDG, IATA, or IMDG.
Note	- not classified as hazardous under DOT, IATA, IMDG

15. Regulatory information

- | | |
|----------------------------------|---|
| US Regulations | <ul style="list-style-type: none"> - Law: hazardous chemical reporting: community right-to know - Common name: SARA title 312 - Agency: Environmental Protection Agency EPA - Criteria met: acute, chronic |
| US and CAN hazard classification | <ul style="list-style-type: none"> - No components are listed in the WHMIS IDL. - Some components of this product are not identified on the Canadian Domestic Substance List or the Non-Domestic Substance List. - This product is considered hazardous under the criteria specifies in 29 CFR 1910.1200 (Hazard Communication Standard) but is not a controlled product under the Canadian Controlled Products Act. - None of this products components are listed under SARA Section 302 (40 CFR 355 Appendix A), SARA Section 313 (40 CFR 372.65), or CERCLA (40 CFR 302.4) |
| TSCA Status | <ul style="list-style-type: none"> - Contains ingredient(s) not on the TSCA Inventory |
| Reporting Requirements | <ul style="list-style-type: none"> - The United States Environmental Protection Agency (USEPA) has not established a Reportable Quantity (RQ) for releases of this material. - In New Jersey, report all releases which are likely to endanger the public health, harm the environment or cause a complaint to the NJDEP Hotline (1-877-WARN-DEP) and to local officials. - State and local regulations vary and may impose additional reporting requirements. |

16. Other information

- | | |
|-----------------------|---|
| Canada update | <ul style="list-style-type: none"> - This MSDS has been reviewed on 02/16/2007 for compliance with Canadian regulation |
| Edition documentation | <ul style="list-style-type: none"> - first edition |

Definitions: ACGIH = American Conference of Governmental Industrial Hygienists. CERCLA = Comprehensive Environmental Response, Compensation and Liability Act. CFR = Code of Federal Regulations. DSL = Canadian Domestic Substance List. DOT= Department of Transportation. EINECS = European Inventory of New and Existing Chemical Substances. EPA = Environmental Protection Agency. 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. IOEL = Roche/ DSM developed Internal Occupational Exposure Limit. 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. NA = Not available or Not Applicable. SARA = Superfund Amendments and Reauthorization Act. TLV = Threshold Limit Value. TSCA = Toxic Substance Control Act. WHMIS = Workplace Hazardous Materials Information System.

Disclaimer: The information contained herein is believed to be accurate at the time of publishing and is offered in good faith. This information relates only to the specific material designated and may not be valid for such material in combination with any other materials or in any process. Mixing this product with any other materials may change the characteristics such as flash point, flammability, or health effects. Because the product use is beyond the control of the authoring body, no warranty is given, express or implied.