

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006



ROCOAT® Pyridoxine Hydrochloride 33 1/3%

0429457

Version 1.1

Revision Date 11.09.2012

Print Date 19.06.2014

1. Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

Trade name : ROCOAT® Pyridoxine Hydrochloride 33 1/3%

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

Use of the Substance/Mixture : Ingredient for pharmaceutical products, Ingredient for capsules and/or tablets, For the fortification of foods

1.3 Details of the supplier of the safety data sheet

Company : DSM Nutritional Products (UK) Ltd.
Heanor Gate
αGB061EI0017
Delves Road
GB-DE75 7SG Heanor
Telephone : +441773536500
Telefax : +441773536600
E-mail address : sds.nutritionalproducts@dsm.com
Responsible/issuing person

1.4 Emergency telephone number

+441773536623 / +41628662314

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

Risk of dust explosion.

3. Composition/information on ingredients

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

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 | | | |
|--------------------------|----------------------------------|--|--|---------------|
| pyridoxine hydrochloride | 58-56-0 200-386-2 | | | >= 25 - <= 50 |

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

- General advice : No hazards which require special first aid measures.
- If inhaled : Remove 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 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 : Foam
Dry powder
- Unsuitable extinguishing media : High volume water jet

5.2 Special hazards arising from the substance or mixture

- Specific hazards during firefighting : Formation of corrosive gases by combustion.
Heating or fire can release toxic gas.

5.3 Advice for firefighters

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

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Consider dust explosion hazard.

6. Accidental release measures**6.1 Personal precautions, protective equipment and emergency procedures**

Use personal protective equipment.
Avoid dust formation.

6.2 Environmental precautions

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

6.3 Methods and materials for containment and cleaning up

Sweep up and shovel.

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.

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.

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 : < 25 °C

7.3 Specific end use(s)

Specific use(s) : not applicable

8. Exposure controls/personal protection**8.1 Control parameters**

| Components | CAS-No. | Value (Form of exposure) | Control parameters | Update | Basis |
|--------------------------|---------|--------------------------|---------------------|--------|--------------------|
| pyridoxine hydrochloride | 58-56-0 | TWA | 2 mg/m ³ | | DSM Internal Limit |

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8.2 Exposure controls

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
: For prolonged or repeated contact use protective gloves.
- 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 : free flowing powder
- Colour : white - pale yellow
- Odour : No information available.
- Odour Threshold : No information available.
- pH : no data available
- Melting point/range : ca. 50 °C
- Boiling point/boiling range : not determined
- Flash point : not applicable
- Flammability (solid, gas) : Not classified as supporting combustion according to the transport regulations.
- Vapour pressure : not applicable
- Relative vapor density : not applicable
- Density : not determined
- Water solubility : not determined
- Partition coefficient: n-octanol/water : not applicable
- Auto-ignition temperature : No self ignition observed in the Grewer oven at temperatures below melting point.
- Thermal decomposition : Decomposes on heating.
Potential for exothermic hazard
- Explosive properties : no data available
- Oxidizing properties : no data available

9.2 Other information

- Combustibility index for : 3 (23 °C)

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deposited dust

Dust explosion properties : KSt value: 175 m.bar/s (Milled sample, Median value of the tested sample 0,046 mm; ISO 6184)

Dust explosion class : St1 (Milled sample, Median value of the tested sample 0,046 mm; ISO 6184)

Maximum explosion overpressure : 7,5 bar (Milled sample, Median value of the tested sample 0,046 mm; ISO 6184)

Minimum ignition energy : 10 - 30 mJ (Milled sample, Median value of the tested sample 0,030 mm, EN 13821)

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. 5E+09 Ohmm (Product sample, Median value of the tested sample 0,132 mm)

Minimum ignition temperature of a dust/air mix : ≥ 340 °C (Median value of the tested sample 0,132 mm) determined in the BAM oven

Particle size : ≤ 50 % $\leq 0,075$ mm

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

Exothermic reaction with:
Heating in air.

Dust may form explosive mixture in air.

10.4 Conditions to avoid

Heat.

10.5 Incompatible materials

Strong acids and strong bases
Strong oxidizing agents

10.6 Hazardous decomposition products

Gaseous hydrogen chloride (HCl).
nitrogen oxides (NOx)

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11. Toxicological information**11.1 Information on toxicological effects**

- Acute oral toxicity : LD50 (rat): > 6 600 mg/kg
Test substance: active ingredient
- Skin corrosion/irritation : Prolonged skin contact may cause skin irritation.
- Serious eye damage/eye irritation : None of the components is classified as an irritant.
- Respiratory or skin sensitization : None of the components is classified as a sensitiser.
- Germ cell mutagenicity
- Genotoxicity in vitro : negative (Ames test)
Test substance: active ingredient
- Carcinogenicity : This information is not available.
- Reproductive toxicity : Reduction of fertility, Test substance: active ingredient
LOAEL: 125 mg/kg body weight (rat, male)
- Teratogenicity : Did not show teratogenic effects in animal experiments.
Test substance: active ingredient
(rat, Oral)
- STOT - repeated exposure : This information is not available.
- Experience with human exposure : RDA (Recommended Daily Allowance) ca. 2,0 mg
Test substance: active ingredient
- Experience with human exposure: Skin contact : May be slightly irritating, especially on damp skin.
- Experience with human exposure: Ingestion : Chronic overdose may provoke the following symptoms:
: Reversible peripheral sensory neuropathy

12. Ecological information**12.1 Toxicity**

- Toxicity to algae : Desmodesmus subspicatus (green algae)
EbC50 (72 h) 5,3 mg/l
Test substance: Active ingredient
(OECD Test Guideline 201)

12.2 Persistence and degradability

- Biodegradability : Readily biodegradable.
94 % (28 d)

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(OECD Test Guideline 301E)
Test substance: active ingredient

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
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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

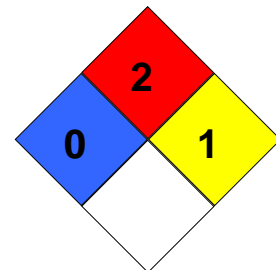
no data available

15. Regulatory information

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

NFPA Classification

: Health hazard: 0
Fire Hazard: 2
Reactivity Hazard: 1



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.