

MATERIAL SAFETY DATA SHEET-v4

Product Pepsin digestion reagent

Cat. no. R011R.0000

**Pan
Path**

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

Identification of the product

Name : Pepsin digestion reagent

Product code : R011R.0000

Produced and Marketed by

PanPath B.V.

Science Park Amsterdam

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2. COMPOSITION AND INFORMATION ON INGREDIENTS

- Pepsin A from Porcine Stomach Mucosa (CAS-No. 9001-75-6; Molecular weight 34.5)

Dry pepsin is not injured by heating to 100°C. The activity of pepsin in solutions is destroyed by heating above 70°C or by alkalies

3. IDENTIFICATION OF HAZARDS AND EFFECTS

Conditions to avoid

Excess heat.

Substances to avoid

No data available.

Hazardous combustion or decomposition products

Hazardous reactions are not known when used appropriately.

Fire and explosion hazards

Substance itself does not burn.

4. FIRST AID MEASURES

EXPOSURE	SYMPTOMS	FIRST AID MEASURES
Inhalation	abdominal cramps, sickness, dizziness, headache, vomiting	Fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Consult doctor if feeling unwell.
Eye contact	red, irritating	Flush with copious amounts of water with the eyelid held wide open. Summon eye specialist.
Skin contact	red, irritating	Wash with copious amounts of water. Remove contaminated clothing.
Ingestion	abdominal cramps, sickness, dizziness, headache, vomiting	Make victim drink plenty of water, induce vomiting. Summon doctor.

5. FIRE FIGHTING MEASURES

Suitable extinguishing media : water spray, carbon dioxide, dry chemical powder or appropriate foam.

Special fire fighting procedure : wear self contained breathing apparatus and protective clothing to prevent contact with eyes and skin.

6. ACCIDENTAL RELEASE MEASURES

Take up with liquid-absorbent material. Forward for disposal and clean up affected area.

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7. HANDLING & STORAGE INFORMATION

Handling information

Keep closed when not in use. Wear suitable protective clothing when handling fluid. Preferably handle in a chemical fume hood. When heating the solution use sealable jar placed in water bath or incubator. Do not warm by direct heating. Make sure temperature does not exceed 130 °C.

Storage information

Store at 2-8 °C.

8. PERSONAL PRECAUTIONS & PROTECTION

Personal precautions

The usual precautions taken when handling chemicals should be observed. Refer to product data sheet for recommended specific use. Do not inhale vapors, do not get in eyes, on skin or clothing. Wash hands thoroughly after handling.

Personal protection

Respiratory protection : required when vapors/aerosols are generated. Preferably work in a chemical fume hood or wear adequate mask with filter (according to DIN 3181 for vapors of organic compounds).

Skin protection : Required. Wear suitable protective clothing and gloves.

Eye protection : Required. Wear safety glasses or goggles.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	slightly hygroscopic powder	Flashing point:	no data available
Color:	white or yellowish-white	Explosion limits	no data available
Odor:	odorless	Vapor pressure (20°C):	no data available
pH	no data available	Relative density:	no data available
Isoelectric point:	PH_1.0	Solubility in water:	freely soluble in water with more or less opalescence
Viscosity _{dynamic} (20°C):	no data available	log P(o/w):	no data available
Boiling range:	no data available		
Melting point:	no data available		
Autoflammability:	no data available		

10. STABILITY & REACTIVITY

Stability

The product is stable when stored under the recommended conditions.

Reactivity

No reaction with water.

11. TOXICOLOGICAL INFORMATION

Toxicological information

Long term unprotected exposure may have effect on fertility (post implantation mortality) embryo or fetus (fetotoxicity and fetal death) or lead to liver damage. Preparation is moderately irritating to skin and mucous membranes.

Acute effects

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May be harmful by inhalation, ingestion or skin absorption. Vapor or mist is irritating to the eyes, mucous membranes and upper respiratory tract. Causes skin irritation.

Chronic effects

May cause birth defects.

12. ECOLOGICAL INFORMATION

Biologic degradation : no data available.

Behavior in environmental compartments : no data available.

Ecotoxic effects : when led in properly, no impairments in the function of adapted biological waste-water-treatment plants are to be expected.

13. DISPOSAL CONSIDERATIONS

Product: there are no uniform EC regulations for the disposal of chemicals or residues. Chemical residues generally count as special waste. The disposal of the latter is regulated in the EC member countries through corresponding laws and regulations. We recommend that you contact either the authorities in charge or approved waste disposal companies which will advise you on how to dispose of special waste.

Packaging: disposal in accordance with local provisions. Contaminated packages should be treated the same as the product itself.

14. TRANSPORT INFORMATION

This product is not subject to current regulations for transportation of hazardous goods.

15. REGULATORY INFORMATION

Labeling according to ECC directives.

<u>R</u>	<u>S</u>	<u>SYMBOL</u>
36/37/38, 42	22, 24, 26, 36/37	Xn

Label precautionary statements: harmful by inhalation, in contact with skin and if swallowed. May cause birth defects. Irritating to eyes, respiratory system and skin.

16. ADDITIONAL INFORMATION (IF APPLICABLE)

The information contained herein is based on the present state of our knowledge. It characterizes the product with regard to the appropriate safety precautions. It does not represent a guarantee of the properties of the product. We make no warranty express or implied, with respect to the information and assume no liability. Product users should determine the suitability of this information for their own uses.