



**Material Safety  
Data Sheet**  
MSDS-MPK02-EN

Creation: January 2013  
Date of review: Aug 2022  
Version: 05

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**SECTION 1: Identification of the substance/mixture and of the company/undertaking**

**1.1. Product identifier**

Product name: MucoPAPII

Catalogue number: MPK02

REACH Number: A registration number is not available for this substance as the substance or its uses are exempted from registration, the annual tonnage does not require a registration or the registration is envisaged for a later registration deadline.

CAS number: -

CE number: -

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

Recommended use: cystic fibrosis newborn screening

**1.3. Details of the supplier of the material safety data sheet**

Company: DYNABIO S.A.  
Luminy Biotech Entreprises  
163, avenue de Luminy - Case 922  
13288 Marseille Cedex 9  
FRANCE

Telephone: +33 4 86 94 85 04 (Monday to Friday 9 am – 5 pm)

E-mail address: [communication@dynabio.eu](mailto:communication@dynabio.eu)

**1.4. Emergency telephone number**


Land	Center	Phone number
Austria	Vergiftungsinformationszentrale	+43 1 406 43 43

**SECTION 2: Hazards identification**

**2.1. Classification of the substance or mixture**

Components	CAS number	Hazard statement
Standard hPAP Range / Internal Controls	/	Is not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008.
Anti-hPAP biotinylated antibodies		
Avidin-peroxidase conjugate		
Chromogenic substrate		
Tween 20		
PBS tablet		
8 x 12 coated well plate		
Sulfuric acid 5%	7664-93-9	H290 - may be corrosive to metals

**2.2. Label elements**

Components	Pictogram	Hazard statement
Standard hPAP Range/ Internal Controls	/	Is not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008.
Anti-hPAP biotinylated antibodies		
Avidin-peroxidase conjugate		
Chromogenic substrate		
Tween 20		
PBS tablet		
8 x 12 coated well plate		
Sulfuric acid 5%		H290 - may be corrosive to metals

**2.3. Other hazards**

This 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.

Biological hazard

This kit contains bovine hemoglobin with which the standard range and controls are formulated. This kit also contains rabbit serum with which antibodies are formulated. The biotinylated antibodies, the avidin-peroxidase, the ranges and controls as well as the plates contain bovine serum albumin.

Serum of animal origin could be infectious and must be considered as a potential biohazard. No known test method can offer assurance that products derived from animals will not be infectious.

SECTION 3: Composition/information on ingredients

**3.2. Mixtures**

No components need to be disclosed according to the applicable regulations except the acid solution.

Component	Concentration	CAS number	Hazard classes and categories	ATE, LCS Factor and/or M Factor
Sulfuric acid	5%	7664-93-9	Met. Corr. 1 - H290 Skin Corr. 1A - H314	Skin Irrit. 2; H315: 5 % ≤ C < 15 % Eye Irrit. 2; H319: 5 % ≤ C < 15 %

As a reminder:

H290 - May be corrosive to metals

H314 - Causes severe skin burns and eye damage

H315 - Causes skin irritation

H319 - Causes serious eye irritation

SECTION 4: First aid measures

**4.1. Description of first aid measures**

**General advice**

See a doctor. Show this safety data sheet to the doctor in attendance.

**Inhalation**

Remove victim to fresh air. If breathing becomes difficult, give oxygen. If breathing stops, administer artificial respiration. Call a physician.

**Skin Contact**

Flush with copious amounts of water and wash with soap and water for at least 15 minutes. Remove contaminated clothing and shoes. Call a physician if irritation or discomfort develops.

**Eye Contact**

Flush with copious amounts of water for at least 15 minutes. Check for and remove contact lenses. Assure adequate flushing by separating the eyelids. Call a physician.

**Ingestion**

If swallowed, wash out mouth with water provided person is conscious. Call a physician or poison control. DO NOT induce vomiting. Give nothing to eat or drink.

**4.2. Most important symptoms and effects, both acute and delayed**

No other important information available

#### **4.3. Indication of any immediate medical attention and special treatment needed**

Data not available

### **SECTION 5: Firefighting measures**

#### **5.1. Extinguishing media**

Suitable extinguishing media: use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

#### **5.2. Special hazards arising from the substance or mixture**

In case of fire, risk of release of sulfur oxides, carbon monoxide, carbon dioxide.

#### **5.3. Advice for firefighters**

Wear self-contained breathing apparatus for firefighting if necessary.

### **SECTION 6: Accidental release measures**

#### **6.1. Personal precautions, protective equipment and emergency procedures**

Use personal protective equipment (see section 8). Avoid dust formation. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Avoid breathing dust.

#### **6.2. Environmental precautions**

Do not let product enter drains.

#### **6.3. Methods and material for containment and cleaning up**

Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

#### **6.4. Reference to other sections**

For disposal see section 13.

### **SECTION 7: Handling and storage**

#### **7.1. Precautions for safe handling**

Avoid contact with skin and eyes. Wash hands after handling all materials. Do not drink, eat, smoke, or apply make-up. Do no pipette with the mouth. Avoid formation of dust and aerosols. Provide appropriate exhaust ventilation at places where dust is formed. For precautions see section 2.2.

## **7.2. Conditions for safe storage, including any incompatibilities**

Keep container tightly closed in a dry and well-ventilated place. Recommended storage temperature +2°C - +8 °C

## **7.3. Specific end use(s)**

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated.

## **SECTION 8: Exposure controls/personal protection**

### **8.1. Control parameters**

It does not contain substances with occupational exposure limit values.

### **8.2. Exposure controls**

#### **Appropriate engineering controls**

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

#### **Personal protective equipment**

##### **Eye/face protection**

Use equipment for eye protection (Safety glasses with side-shields) tested and approved under appropriate government standards such as NIOSH (US) or EN 166.

##### **Skin protection**

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands. The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN374 derived from it.

##### **Body Protection**

Impervious clothing, the type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

**SECTION 9: Physical and chemical properties**

**9.1. Information on basic physical and chemical properties**

(a) Appearance

Components	Physical state	Color
Standard hPAP Range / Internal Controls	Paper	White with brown spots
Anti-hPAP biotinylated antibodies	Solid	Brown
Avidin-peroxidase conjugate	Solid	Pearly white
Chromogenic substrate (TMB)	Liquid	Very light yellow
Sulfuric acid 5%	Liquid	Transparent
Tween 20 (10%)	Liquid	Yellow
PBS tablet	Solid	White
8 x 12 coated well plate	Plastic	Transparent

(b) Odour No data available

(c) Odour threshold No data available

(d) pH

Components	pH
Range / Internal Control	No data available
Anti-hPAP biotinylated antibodies	
Dilution buffer	
Avidin-peroxidase conjugate	
Chromogenic substrate (TMB)	
Tween 20 (10%)	
PBS tablet	
8 x 12 coated well plate	
Sulfuric acid 5%	

(e) Melting point/freezing point No data available

(f) Initial boiling point and boiling range No data available

(g) Flash point Not applicable

(h) Evaporation rate No data available

(i) Flammability (solid, gas) No data available

(j) Upper/lower flammability or explosive limits No data available

(k) Vapour pressure No data available

(l) Vapour density No data available

(m) Relative density No data available

(n) Solubility Soluble in water

(o) Partition coefficient: n-octanol/water No data available

(p) Auto-ignition temperature No data available

(q) Decomposition temperature No data available

(r) Viscosity No data available

(s) Explosive properties No data available

(t) Oxidizing properties No data available

## 9.2. Other information

No data available

### SECTION 10: Stability and reactivity

#### 10.1. Reactivity

Sulfuric acid can be corrosive to metals.

#### 10.2. Chemical stability

Stable under recommended storage conditions.

#### 10.3. Possibility of hazardous reactions

No data available

#### 10.4. Conditions to avoid

No data available

#### 10.5. Incompatible materials

Sulfuric acid is incompatible with metals.

#### 10.6. Hazardous decomposition products

If involved in a fire, poisonous gas may be produced by the packaging material.

### SECTION 11: Toxicological information

#### 11.1. Information on toxicological effects

- |  |   |
|--|---|
| (a) acute toxicity                                   | No data available for components except sulfuric acid. Acute oral toxicity: LD50 > 2140 mg/kg - Rat - (Merck KGaA) Acute inhalation toxicity: LC50 = 375 mg/m <sup>3</sup> - Rat - (IUCLID) |
| (b) skin corrosion/irritation                        | No data available   |
| (c) serious eye damage/irritation                    | No data available   |
| (d) respiratory or skin sensitization                | No data available   |
| (e) germ cell mutagenicity                           | No data available   |
| (f) carcinogenicity                                  | 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.                                     |
| (g) reproductive toxicity                            | No data available   |
| (h) Specific target organ toxicity-single exposure   | No data available   |
| (i) Specific target organ toxicity-repeated exposure | No data available   |

(j) aspiration hazard  
(k) Additional Information

No data available  
RTECS: Not available  
To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

## SECTION 12: Ecological information

### 12.1. Toxicity

Do not empty into drains.

### 12.2. Persistence and degradability

No data available

### 12.3. Bioaccumulative potential

No data available

### 12.4. Mobility in soil

The product is water soluble, and may spread in water systems. Will likely be mobile in the environment due to its water solubility. Highly mobile in soils.

### 12.5. Results of PBT and vPvB assessment

This 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.

### 12.6. Other adverse effects

No data available

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

Must not be released to the environment.  
Dispose of in accordance with local regulations and directive on waste and hazardous waste.  
Contaminated packaging: dispose of as unused product.

## SECTION 14: Transport information

### 14.1. UN number

ADR/RID: -

IMDG: -

IATA: -



**14.2. UN proper shipping name**

ADR/RID: Not dangerous goods

IMDG: Not dangerous goods

IATA: Not dangerous goods

**14.3. Transport hazard classes**

ADR/RID: -

IMDG: -

IATA: -

**14.4. Packing group**

ADR/RID: -

IMDG: -

IATA: -

**14.5. Environmental hazards**

ADR/RID: no

IMDG Marine pollutant: no

IATA: no

**14.6. Special precautions for user**

No data available

**SECTION 15: Regulatory information**

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

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

**15.2. Chemical safety assessment**

For this product a chemical safety assessment was not carried out.

**SECTION 16: Other information**

**Document**

**Creation Date** January 2013

**Revision Date** May 2022

**Revision Summary**

February 2017 - Version 2: Proofreading of the document

March 2019 - Version 3: Added review date and version information (§1.4)

May 2022 - Version 4: Formatting according to regulation CE n°1907/2006

August 2022 - version 5: change of contacts: email addresses and website address (section 1.3)

**Legend**

**ADR** - European Agreement Concerning the International Carriage of Dangerous Goods by Road

**CAS** - Chemical Abstracts Service

**CE / EC** – Communauté Européenne or European Community

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**IARC** - International Agency for Research on Cancer

**ICAO/IATA** - International Civil Aviation Organization/International Air Transport Association

**IMO/IMDG** - International Maritime Organization/International Maritime Dangerous Goods Code

**NIOSH** - National Institute for Occupational Safety and Health

**PBT** - Persistent, Bioaccumulative, Toxic

**vPvB** - very Persistent, very Bioaccumulative

**RTECS** - Registry of Toxic Effects of Chemical Substances

**UE / EU** – Union Européenne or European Union

**Further information**

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The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Dynabio S.A. shall not be held liable for any damage resulting from handling or from contact with the above product.

**End of Material Safety Data Sheet**