

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

Date of issue: 06.11.2014

Version 1.0

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

### 1.1 Product identifier

Catalogue No. 636068  
 Product name PureProteome™ Protein G Magnetic Beads  
 REACH Registration Number This product is a mixture. REACH Registration Number see section 3.

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

Identified uses Biochemical research/analysis  
 For additional information on uses please refer to the Merck Chemicals portal ([www.merckgroup.com](http://www.merckgroup.com)).

### 1.3 Details of the supplier of the safety data sheet

Responsible Department LS-QHC \* e-mail: [prodsafe@merckgroup.com](mailto:prodsafe@merckgroup.com)  
 Regional representation Merck Chemicals Ltd \* Boulevard Industrial Park \* Padge Road \* Beeston \* Nottingham \* NG9 2JR \* Tel. 01159 430840 \* [information@merckchem.co.uk](mailto:information@merckchem.co.uk).

1.4 Emergency telephone number +49 (0) 6151 722440

## SECTION 2. Hazards identification

### 2.1 Classification of the substance or mixture

This mixture is not classified as dangerous according to European Union legislation.

### 2.2 Label elements

#### Labelling (REGULATION (EC) No 1272/2008)

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

Safety data sheet available on request.

### 2.3 Other hazards

None known.

## SECTION 3. Composition/information on ingredients

Chemical nature Mixture  
 Aqueous solution

### 3.1 Substance

Not applicable

### 3.2 Mixture

#### Hazardous components (REGULATION (EC) No 1272/2008)

*Chemical Name (Concentration)*

CAS-No.	Registration number	Classification
Benzyl alcohol (>= 1 % - < 10 %)		
100-51-6	01-2119492630-38-	Acute toxicity, Category 4, H332

Substance does not meet the criteria for PBT or vPvB according to Regulation (EC) No 1907/2006, Annex XIII.

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XXXX Acute toxicity, Category 4, H302

For the full text of the H-Statements mentioned in this Section, see Section 16.

**Hazardous components (1999/45/EC)**

*Chemical Name (Concentration)*

CAS-No.	Classification
Benzyl alcohol (>= 1 % - < 10 %)	
100-51-6	Xn, Harmful; R20/22

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

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**SECTION 4. First aid measures**

**4.1 Description of first aid measures**

After inhalation: fresh air.

In case of skin contact: Take off immediately all contaminated clothing. Rinse skin with water/shower.

After eye contact: rinse out with plenty of water.

After swallowing: make victim drink water (two glasses at most). Consult doctor if feeling unwell.

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

We have no description of any toxic symptoms.

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

No information available.

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**SECTION 5. Firefighting measures**

**5.1 Extinguishing media**

*Suitable extinguishing media*

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

*Unsuitable extinguishing media*

For this substance/mixture no limitations of extinguishing agents are given.

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

Not combustible.

Ambient fire may liberate hazardous vapours.

**5.3 Advice for firefighters**

*Special protective equipment for firefighters*

In the event of fire, wear self-contained breathing apparatus.

*Further information*

none

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**SECTION 6. Accidental release measures**

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

Advice for non-emergency personnel: Do not breathe vapours, aerosols. Evacuate the danger area, observe emergency procedures, consult an expert.

Advice for emergency responders:

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Protective equipment see section 8.

### 6.2 Environmental precautions

No special precautionary measures necessary.

### 6.3 Methods and materials for containment and cleaning up

Observe possible material restrictions (see sections 7 and 10). Take up with liquid-absorbent material (e.g. Chemizorb®). Dispose of properly. Clean up affected area.

### 6.4 Reference to other sections

Indications about waste treatment see section 13.

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## SECTION 7. Handling and storage

### 7.1 Precautions for safe handling

*Advice on safe handling*

Observe label precautions.

*Hygiene measures*

Change contaminated clothing. Wash hands after working with substance.

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

*Storage conditions*

Tightly closed.

Recommended storage temperature see product label.

### 7.3 Specific end use(s)

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

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## SECTION 8. Exposure controls/personal protection

### 8.1 Control parameters

Contains no substances with occupational exposure limit values.

#### Derived No Effect Level (DNEL)

*Benzyl alcohol (100-51-6)*

Worker DNEL, acute	Systemic effects	inhalation	450 mg/m <sup>3</sup>
Worker DNEL, acute	Systemic effects	dermal	47 mg/kg Body weight
Worker DNEL, longterm	Systemic effects	inhalation	90 mg/m <sup>3</sup>
Worker DNEL, longterm	Systemic effects	dermal	9.5 mg/kg Body weight
Consumer DNEL, acute	Systemic effects	oral	25 mg/kg Body weight
Consumer DNEL, acute	Systemic effects	inhalation	95.5 mg/m <sup>3</sup>
Consumer DNEL, acute	Systemic effects	dermal	28.5 mg/kg Body weight
Consumer DNEL, longterm	Systemic effects	oral	5 mg/kg Body weight
Consumer DNEL, longterm	Systemic effects	inhalation	19.1 mg/m <sup>3</sup>
Consumer DNEL, longterm	Systemic effects	dermal	5.7 mg/kg Body weight

#### Predicted No Effect Concentration (PNEC)

*Benzyl alcohol (100-51-6)*

PNEC Fresh water 1 mg/l

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PNEC Fresh water sediment	5.27 mg/kg
PNEC Marine water	0.1 mg/l
PNEC Marine sediment	0.527 mg/kg
PNEC Soil	0.456 mg/kg
PNEC Sewage treatment plant	39 mg/l
PNEC Aquatic intermittent release	2.3 mg/l

## 8.2 Exposure controls

### Engineering measures

Technical measures and appropriate working operations should be given priority over the use of personal protective equipment.

See section 7.1.

### Individual protection measures

Protective clothing needs to be selected specifically for the workplace, depending on concentrations and quantities of the hazardous substances handled. The chemical resistance of the protective equipment should be enquired at the respective supplier.

#### *Eye/face protection*

Safety glasses

#### *Hand protection*

not required

#### *Respiratory protection*

Not required; except in case of aerosol formation.

### Environmental exposure controls

No special precautionary measures necessary.

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## SECTION 9. Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

Form	suspension
Colour	brown
Odour	very faint aromatic
Odour Threshold	5.5 ppm
pH	8.5
Melting point	No information available.
Boiling point	No information available.
Flash point	No information available.



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Evaporation rate	No information available.
Flammability (solid, gas)	No information available.
Lower explosion limit	No information available.
Upper explosion limit	No information available.
Vapour pressure	No information available.
Relative vapour density	No information available.
Density	1.1 g/cm <sup>3</sup>
Relative density	No information available.
Water solubility	No information available.
Partition coefficient: n-octanol/water	No information available.
Auto-ignition temperature	No information available.
Decomposition temperature	No information available.
Viscosity, dynamic	No information available.
Explosive properties	Not classified as explosive.
	Not classified as explosive.
Oxidizing properties	none
	none

**9.2 Other data**

none

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**SECTION 10. Stability and reactivity**

**10.1 Reactivity**

See section 10.3

**10.2 Chemical stability**

The product is chemically stable under standard ambient conditions (room temperature) .

**10.3 Possibility of hazardous reactions**

Dangerous reactions are not expected handling the product according to its intended use.

**10.4 Conditions to avoid**

no information available

**10.5 Incompatible materials**

no information available

**10.6 Hazardous decomposition products**

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no information available

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**SECTION 11. Toxicological information**

**11.1 Information on toxicological effects**

**Mixture**

*Acute oral toxicity*

Acute toxicity estimate: > 2,000 mg/kg

Calculation method

*Acute inhalation toxicity*

Acute toxicity estimate: > 20 mg/l; 4 h ; vapour

Calculation method

*Acute dermal toxicity*

This information is not available.

*Skin irritation*

This information is not available.

*Eye irritation*

This information is not available.

*Sensitisation*

This information is not available.

*Germ cell mutagenicity*

This information is not available.

*Carcinogenicity*

This information is not available.

*Reproductive toxicity*

This information is not available.

*Teratogenicity*

This information is not available.

*Specific target organ toxicity - single exposure*

This information is not available.

*Specific target organ toxicity - repeated exposure*

This information is not available.

*Aspiration hazard*

This information is not available.

**11.2 Further information**

Handle in accordance with good industrial hygiene and safety practice.

**Components**

*Benzyl alcohol*

*Acute oral toxicity*

LD50 Rat: 1,620 mg/kg

*Skin irritation*

Rabbit

Result: No irritation

OECD Test Guideline 404

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*Sensitisation*

Maximisation Test (GPMT)  
Result: negative  
Method: OECD Test Guideline 406

*Repeated dose toxicity*

Rat  
male and female  
Oral  
91 d  
NOAEL: 400 mg/kg

*Germ cell mutagenicity*

*Genotoxicity in vitro*  
Ames test  
Salmonella typhimurium  
Result: negative  
Method: OECD Test Guideline 471

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**SECTION 12. Ecological information**

**Mixture**

**12.1 Toxicity**

No information available.

**12.2 Persistence and degradability**

No information available.

**12.3 Bioaccumulative potential**

No information available.

**12.4 Mobility in soil**

No information available.

**12.5 Results of PBT and vPvB assessment**

Substance(s) in the mixture do(es) not meet the criteria for PBT or vPvB according to Regulation (EC) No 1907/2006, Annex XIII, or a PBT/vPvB assessment was not conducted.

**12.6 Other adverse effects**

Discharge into the environment must be avoided.

**Components**

*Benzyl alcohol*

*Toxicity to fish*

LC50 *Lepomis macrochirus* (Bluegill sunfish): 10 mg/l; 96 h (IUCLID)

*Toxicity to daphnia and other aquatic invertebrates*

Immobilization EC50 *Daphnia magna* (Water flea): 230 mg/l; 48 h  
OECD Test Guideline 202

*Toxicity to algae*

IC5 *Scenedesmus quadricauda* (Green algae): 640 mg/l; 96 h (IUCLID) (maximum permissible toxic concentration)

static test EC50 *Pseudokirchneriella subcapitata* (green algae): 700 mg/l; 72 h  
OECD Test Guideline 201

*Biodegradability*

92 - 96 %; 14 d; aerobic  
OECD Test Guideline 301C  
Readily biodegradable.

*Biochemical Oxygen Demand (BOD)*

1,550 mg/g (5 d)  
(Lit.)

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*Theoretical oxygen demand (ThOD)*

2,515 mg/g  
(IUCLID)

*Ratio BOD/ThBOD*

BOD5 62 %  
(Lit.)

*Ratio COD/ThBOD*

96 %  
(Lit.)

*Partition coefficient: n-octanol/water*

log Pow: 1.05 (20 °C)  
(experimental)  
Bioaccumulation is not expected.

Substance does not meet the criteria for PBT or vPvB according to Regulation (EC) No 1907/2006, Annex XIII.

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**SECTION 13. Disposal considerations**

*Waste treatment methods*

Waste material must be disposed of in accordance with the Directive on waste 2008/98/EC as well as other national and local regulations. Leave chemicals in original containers. No mixing with other waste. Handle uncleaned containers like the product itself.

See [www.retrologistik.com](http://www.retrologistik.com) for processes regarding the return of chemicals and containers, or contact us there if you have further questions.

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**SECTION 14. Transport information**

**Land transport (ADR/RID)**

14.1 - 14.6 Not classified as dangerous in the meaning of transport regulations.

**Inland waterway transport (ADN)**

Not relevant

**Air transport (IATA)**

14.1 - 14.6 Not classified as dangerous in the meaning of transport regulations.

**Sea transport (IMDG)**

14.1 - 14.6 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 relevant

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**SECTION 15. Regulatory information**

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

*EU regulations*

Major Accident Hazard 96/82/EC  
Legislation Directive 96/82/EC does not apply

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Regulation (EC) No 1005/2009 on substances that deplete the ozone layer not regulated

Regulation (EC) No 850/2004 of the European Parliament and of the Council of 29 April 2004 on persistent organic pollutants and amending Directive 79/117/EEC not regulated

Regulation (EC) No 689/2008 concerning the export and import of dangerous chemicals not regulated

Substances of very high concern (SVHC) This product does not contain substances of very high concern according to Regulation (EC) No 1907/2006 (REACH), Article 57 above the respective regulatory concentration limit of  $\geq 0.1\%$  (w/w).

#### National legislation

Storage class 10 - 13

## 15.2 Chemical Safety Assessment

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

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## SECTION 16. Other information

### Full text of H-Statements referred to under sections 2 and 3.

H302 Harmful if swallowed.

H332 Harmful if inhaled.

### Full text of R-phrases referred to under sections 2 and 3

R20/22 Harmful by inhalation and if swallowed.

### Training advice

Provide adequate information, instruction and training for operators.

### Labelling (67/548/EEC or 1999/45/EC)

### Key or legend to abbreviations and acronyms used in the safety data sheet

Used abbreviations and acronyms can be looked up at [www.wikipedia.org](http://www.wikipedia.org).

Millipore Ref. LSKMAGG02

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*The information contained herein is based on the present state of our knowledge. It characterises the product with regard to the appropriate safety precautions. It does not represent a guarantee of any properties of the product.*