

SAFETY DATA SHEET according to Regulation (EC) No. 1907/2006

Revision Date 05.12.2017

Version 2.4

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

1.1 Product identifier	
Catalogue No.	101236
Product name	Agarose for analytical nucleic acid electrophoresis
REACH Registration Number	A registration number is not available for this substance as the substance or its use are exempted from registration according to Article 2 REACH Regulation (EC) No 1907/2006, the annual tonnage does not require a registration or the registration is envisaged for a later registration deadline.
CAS-No.	9012-36-6
1.2 Relevant identified uses of th	e substance or mixture and uses advised against
Identified uses	Reagent for analysis For additional information on uses please refer to the Merck Chemicals
	portal (www.merckgroup.com).
1.3 Details of the supplier of the s	safety data sheet
Company	Merck KGaA * 64271 Darmstadt * Germany * Phone:+49 6151 72-0
Responsible Department	LS-QHC * e-mail: prodsafe@merckgroup.com
1.4 Emergency telephone number	Please contact the regional company representation in your country.

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SECTION 2. Hazards identification

2.1 Classification of the substance or mixture

This substance 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.

2.3 Other hazards

None known.

SECTION 3. Composition/information on ingredients

 Chemical nature
 Gelling polysaccharide derived from agar-agar.

 3.1 Substance
 EC-No.

 EC-No.
 232-731-8

 Remarks
 No disclosure requirement according to Regulation (EC) No. 1907/2006.

3.2 Mixture

Not applicable

SECTION 4. First aid measures

4.1 Description of first aid measures

After inhalation: fresh air.

After skin contact: wash off with plenty of water. Remove contaminated clothing.

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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

Diarrhoea

4.3 Indication of any immediate medical attention and special treatment needed

No information available.

SECTION 5. Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media Water, Foam, Carbon dioxide (CO2), Dry powder

Unsuitable extinguishing media

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

5.2 Special hazards arising from the substance or mixture

Combustible material, Development of hazardous combustion gases or vapours possible in the event of fire.

5.3 Advice for firefighters

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

SECTION 6. Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Advice for non-emergency personnel: Avoid inhalation of dusts. Evacuate the danger area, observe emergency procedures, consult an expert.

Advice for emergency responders: Protective equipment see section 8.

6.2 Environmental precautions

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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 dry. Dispose of properly. Clean up affected area. Avoid generation of dusts.

6.4 Reference to other sections

Indications about waste treatment see section 13.

SECTION 7. Handling and storage

7.1 Precautions for safe handling

Advice on safe handling Observe label precautions.

Hygiene measures Wash hands before breaks and at the end of workday.

7.2 Conditions for safe storage, including any incompatibilities

Storage conditions Tightly closed. Dry.

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.

SECTION 8. Exposure controls/personal protection

8.1 Control parameters

8.2 Exposure controls

Engineering measures

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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

full contact:

splash contact:

Glove material:	Nitrile rubber
Glove thickness:	0,11 mm
Break through time:	> 480 min
Glove material:	Nitrile rubber
Glove thickness:	0,11 mm

Break through time:

The protective gloves to be used must comply with the specifications of EC Directive 89/686/EEC and the related standard EN374, for example KCL 741 Dermatril® L (full contact), KCL 741 Dermatril® L (splash contact).

The breakthrough times stated above were determined by KCL in laboratory tests acc. to EN374 with samples of the recommended glove types.

> 480 min

This recommendation applies only to the product stated in the safety data sheet<(>,<)> supplied by us and for the designated use. When dissolving in or mixing with other substances and under conditions deviating from those stated in EN374 please contact the supplier of CE-approved gloves (e.g. KCL GmbH, D-36124 Eichenzell, Internet: www.kcl.de).

Respiratory protection

required when dusts are generated.

Recommended Filter type: Filter P 1 (acc. to DIN 3181) for solid particles of inert substances

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The entrepeneur has to ensure that maintenance, cleaning and testing of respiratory protective devices are carried out according to the instructions of the producer. These measures have to be properly documented.

SECTION 9. Physical and chemical properties

9.1 Information on basic physical and chemical properties

Form	solid
Colour	white
Odour	odourless
Odour Threshold	No information available.
рН	at 10 g/l 50 °C neutral
Melting point	60 - 90 °C
Boiling point	No information available.
Flash point	No information available.
Evaporation rate	No information available.
Flammability (solid, gas)	No information available.
Lower explosion limit	No information available.
Upper explosion limit	No information available.

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Vapour pressure	No information available.
Relative vapour density	No information available.
Density	No information available.
Relative density	No information available.
Water solubility	at 20 °C slightly soluble
	at 100 °C soluble
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	No information available.
Oxidizing properties	No information available.
9.2 Other data	
Bulk density	ca.700 kg/m3

SECTION 10. Stability and reactivity

10.1 Reactivity

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The following applies in general to flammable organic substances and mixtures: in correspondingly fine distribution, when whirled up a dust explosion potential may generally be assumed.

10.2 Chemical stability

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

10.3 Possibility of hazardous reactions

no information available

10.4 Conditions to avoid

no information available

10.5 Incompatible materials

no information available

10.6 Hazardous decomposition products

no information available

SECTION 11. Toxicological information

11.1 Information on toxicological effects

Acute oral toxicity

absorption

Acute inhalation toxicity This information is not available.

Acute dermal toxicity

This information is not available.

Skin irritation

This information is not available.

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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

*A*fter absorption: Diarrhoea Further data:

However, when the product is handled appropriately, hazardous effects are unlikely to occur. Handle in accordance with good industrial hygiene and safety practice.

SECTION 12. Ecological information

12.1 Toxicity

No information available.

12.2 Persistence and degradability

No information available.

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12.3 Bioaccumulative potential

No information available.

12.4 Mobility in soil

No information available.

12.5 Results of PBT and vPvB assessment

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted.

101236

12.6 Other adverse effects

Additional ecological information

No ecological problems are to be expected when the product is handled and used with due care and attention.

SECTION 13. Disposal considerations

Waste treatment methods

See www.retrologistik.com for processes regarding the return of chemicals and containers, or contact us there if you have further questions.

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)

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Product name	duct name Agarose for analytical nucleic acid electrophoresis	
14.1 - 14.6		dangerous in the meaning of transport
	regulations.	
-	ording to Annex II of MAR	POL 73/78 and the IBC Code
Not relevant		
SECTION 15. Regulatory inform	nation	
15.1 Safety, health and enviro	onmental regulations/legis	slation specific for the substance or mixture
EU regulations		
Major Accident Hazard	SEVESO III	
Legislation	Not applicable	
Regulation (EC) No 1005/2	009 on substances that	not regulated
deplete the ozone layer		
Regulation (EC) No 850/20	04 of the European	not regulated
Parliament and of the Council of 29 April 2004 on		
persistent organic pollutant	s and amending	
Directive 79/117/EEC		
Substances of very high co	ncern (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 ≥ 0.1 % (w/w).
National legislation		
Storage class	10 - 13	

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

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SECTION 16. Other information

Training advice

Provide adequate information, instruction and training for operators.

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.

Regional representation

This information is given on the authorised Safety Data Sheet for your country.

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.