

Date Printed 12.08.2019 Version number 1 Revision Date 12.08.2019

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

· 1.1 Product identifier

· Trade name: Agar 100 resin

· Article number: AGR1043, AGR1044, AGR1045

· CAS Number: 25038-04-4

• 1.2 Relevant identified uses of the substance or mixture and uses advised against Laboratory chemicals, Manufacture of substances.

- · Application of the substance / the preparation: No further relevant information.
- · 1.3 Details of the supplier of the safety data sheet
- · Supplier.

Agar Scientific Ltd
Parsonage Lane
Stansted CM24 8GF
United Kingdom
sales@agarscientific.com

sales@agarscientific.com Tel: +44 (0) 1279 813 519

- · Further information obtainable from: Technical Support
- · 1.4 Emergency telephone number: 24 hours: +44 (0)1856 407333

## **SECTION 2: Hazards identification**

- · 2.1 Classification of the substance or mixture
- · Classification according to Regulation (EC) No 1272/2008



GHS08 health hazard

Resp. Sens. 1 H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.



Skin Irrit. 2 H315 Causes skin irritation.

Eye Irrit. 2 H319 Causes serious eye irritation. STOT SE 3 H335 May cause respiratory irritation.

- · 2.2 Label elements
- Labelling according to Regulation (EC) No 1272/2008

The substance is classified and labelled according to the CLP regulation.

· Hazard pictograms





GHS07 GHS08

- · Signal word Danger
- · Hazard statements

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.

H335 May cause respiratory irritation.

· Precautionary statements

P261 Avoid breathing dust/fume/gas/mist/vapours/spray.
P280 Wear protective gloves / eye protection / face protection.

(Contd. on page 2)



Date Printed 12.08.2019 Version number 1 Revision Date 12.08.2019

Trade name: Agar 100 resin

(Contd. of page 1)

P284 [In case of inadequate ventilation] wear respiratory protection.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact

lenses, if present and easy to do. Continue rinsing.

P405 Store locked up.

P501 Dispose of contents/container in accordance with local/regional/national/

international regulations.

· 2.3 Other hazards

· Results of PBT and vPvB assessment

· **PBT:** Not applicable. · **vPvB:** Not applicable.

## **SECTION 3: Composition/information on ingredients**

· 3.1 Chemical characterisation: Substances

· CAS No. Description 25038-04-4 Agar 100 resin

## **SECTION 4: First aid measures**

- · 4.1 Description of first aid measures
- · General information:

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

After inhalation:

No adverse effects are anticipated from inhalation.

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

After skin contact:

Wash with water and soap and rinse thoroughly.

Wash off with soap and plenty of water. Consult a physician.

· After eye contact:

Rinse opened eye under running water. If symptoms persist, consult a doctor.

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

After swallowing:

Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

4.2 Most important symptoms and effects, both acute and delayed

No further relevant information available.

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

No further relevant information available.

## **SECTION 5: Firefighting measures**

### · 5.1 Extinguishing media

Flash point: 106°C Auto-ignition point: 270°C

Suitable extinguishing agents:

Use fire extinguishing methods suitable to surrounding conditions.

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

5.2 Special hazards arising from the substance or mixture

Carbon oxides, Hydrogen chloride gas.

5.3 Advice for firefighters

Keep containers tightly closed. Closed containers may rupture when exposed to extreme heat. Use water spray to keep fire exposed containers cool.

(Contd. on page 3)



Date Printed 12.08.2019 Version number 1 Revision Date 12.08.2019

Trade name: Agar 100 resin

(Contd. of page 2)

Protective equipment: Wear self contained breathing apparatus for fire fighting if necessary.

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

### · 6.1 Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas.

## 6.2 Environmental precautions:

Do not allow to enter sewers/ surface or ground water.

Do not let product enter drains.

### 6.3 Methods and material for containment and cleaning up:

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Dispose contaminated material as waste according to item 13.

Ensure adequate ventilation.

Soak up with inert absorbent material and dispose of as hazardous waste. Keep in suitable, closed containers for disposal.

#### 6.4 Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

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

#### · 7.1 Precautions for safe handling

Ensure good ventilation/exhaustion at the workplace.

Avoid contact with skin and eyes. Avoid inhalation of vapour or mist. Normal measures for preventive fire protection.

#### · Information about fire - and explosion protection:

Wear positive pressure self-contained breathing apparatus

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

Store in cool place. Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Heat sensitive.

- · Storage:
- · Requirements to be met by storerooms and receptacles: Store in a cool location.
- · Information about storage in one common storage facility: Not required.
- · Further information about storage conditions:

Keep container tightly sealed.

Store in cool, dry conditions in well sealed receptacles.

· 7.3 Specific end use(s) No further relevant information available.

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

- · Additional information about design of technical facilities: No further data; see item 7.
- · 8.1 Control parameters
- · Ingredients with limit values that require monitoring at the workplace: Not required.
- Additional information: The lists valid during the making were used as basis.
- · 8.2 Exposure controls
- · Personal protective equipment:
- · General protective and hygienic measures:

Keep away from foodstuffs, beverages and feed.

Remove all soiled and contaminated clothing

Wash hands before breaks and at the end of work.

(Contd. on page 4)



Date Printed 12.08.2019 Version number 1 Revision Date 12.08.2019

Trade name: Agar 100 resin

(Contd. of page 3)

Avoid contact with the eyes and skin.

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

## Respiratory protection:

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.

Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

### · Protection of hands:



#### Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

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 EN 374 derived from it.

#### · Material of gloves

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.

Full contact

Material: Nitrile rubber

Minimum layer thickness: 0.11 mm Break through time: 480 min

Splash contact

Material: Nitrile rubber

Minimum layer thickness: 0.11 mm Break through time: 480 min

If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the CE approved gloves. This recommendation is advisory only and must be evaluated by an industrial hygienist and safety officer familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.

### Penetration time of glove material

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

### · Eye protection:



Tightly sealed goggles

Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

(Contd. on page 5)



Date Printed 12.08.2019 Version number 1 Revision Date 12.08.2019

Trade name: Agar 100 resin

· Body protection:

(Contd. of page 4)

Complete suit protecting against chemicals, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

· Limitation and supervision of exposure into the environment Do not let product enter drains.

## **SECTION 9: Physical and chemical properties**

9.1 Information on basic physical and chemical properties

· General Information

· Appearance:

Form: Viscous
Colour: Light yellow
Odour: Epoxy

· Odour threshold: Not determined.

· **pH-value:** Not determined.

· Change in condition

Melting point/freezing point: Undetermined. Initial boiling point and boiling range: Undetermined.

· Flash point: 106 °C

· Flammability (solid, gas): Not applicable.

Decomposition temperature: Not determined.

· Auto-ignition temperature: Not determined.

• **Explosive properties:** Product does not present an explosion hazard.

Heating may cause an explosion.

· Explosion limits:

Lower:Not determined.Upper:Not determined.

Vapour pressure: Not determined.
 Density at 20 °C: 1.22 g/cm³

Relative density

Vapour density

Not determined.

Not determined.

Not determined.

Not determined.

· Solubility in / Miscibility with

water at 20 °C: 30 g/l

· Partition coefficient: n-octanol/water: Not determined.

· Viscosity:

**Dynamic:** Not determined. **Kinematic:** Not determined.

• 9.2 Other information No further relevant information available.

## **SECTION 10: Stability and reactivity**

- · 10.1 Reactivity No further relevant information available.
- 10.2 Chemical stability Stable under recommended storage conditions.
- Thermal decomposition / conditions to be avoided:

No decomposition if used according to specifications.

- 10.3 Possibility of hazardous reactions No dangerous reactions known.
- · 10.4 Conditions to avoid Heat.

(Contd. on page 6)



Date Printed 12.08.2019 Version number 1 Revision Date 12.08.2019

Trade name: Agar 100 resin

(Contd. of page 5)

• 10.5 Incompatible materials: Strong oxidising agents.

• 10.6 Hazardous decomposition products: No dangerous decomposition products known.

## **SECTION 11: Toxicological information**

- · 11.1 Information on toxicological effects
- · Acute toxicity Based on available data, the classification criteria are not met.

### · LD/LC50 values relevant for classification:

Oral LD50 500 mg/kg (rat)

Dermal LD50 >12,000 mg/kg (rabbit)

Skin corrosion/irritation

Causes skin irritation.

· Serious eye damage/irritation

Causes serious eye irritation.

· Respiratory or skin sensitisation

May cause allergy or asthma symptoms or breathing difficulties if inhaled.

· Additional toxicological information:

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

- · CMR effects (carcinogenity, mutagenicity and toxicity for reproduction)
- · Germ cell mutagenicity Based on available data, the classification criteria are not met.
- · Carcinogenicity Based on available data, the classification criteria are not met.
- · Reproductive toxicity Based on available data, the classification criteria are not met.
- · STOT-single exposure

May cause respiratory irritation.

- · STOT-repeated exposure Based on available data, the classification criteria are not met.
- · Aspiration hazard Based on available data, the classification criteria are not met.

## **SECTION 12: Ecological information**

- · 12.1 Toxicity
- Aquatic toxicity: No further relevant information available.
- 12.2 Persistence and degradability No further relevant information available.
- 12.3 Bioaccumulative potential No further relevant information available.
- · 12.4 Mobility in soil No further relevant information available.
- Additional ecological information:
- · General notes:

Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

- 12.5 Results of PBT and vPvB assessment
- · **PBT:** Not applicable.
- · vPvB: Not applicable.
- · 12.6 Other adverse effects No further relevant information available.

## **SECTION 13: Disposal considerations**

- · 13.1 Waste treatment methods
- Recommendation

Must not be disposed together with household garbage. Do not allow product to reach sewage system.

Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material.

(Contd. on page 7)



Date Printed 12.08.2019 Version number 1 Revision Date 12.08.2019

Trade name: Agar 100 resin

(Contd. of page 6)

· **Recommendation:** Disposal must be made according to official regulations.

SECTION 14: Transport information		
14.1 UN-Number ADR, ADN, IMDG, IATA	Void	
14.2 UN proper shipping name ADR, ADN, IMDG, IATA	Not dangerous goods Void	
14.3 Transport hazard class(es)		
ADR, ADN, IMDG, IATA Class	Void	
14.4 Packing group ADR, IMDG, IATA	Void	
14.5 Environmental hazards: Marine pollutant:	No	
14.6 Special precautions for user	Not applicable.	
14.7 Transport in bulk according to An of Marpol and the IBC Code	nex II Not applicable.	
UN "Model Regulation":	Void	

## **SECTION 15: Regulatory information**

- · 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
- · Directive 2012/18/EU
- · Named dangerous substances ANNEX I Substance is not listed.
- · REGULATION (EC) No 1907/2006 ANNEX XVII Conditions of restriction: 3
- · 15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

### **SECTION 16: Other information**

This information is based on our present knowledge and should assist the user with the safe handling of this material when properly applied. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- Department issuing SDS: Sales department
- · Contact:

sales@agarscientific.com Tel: +44 (0) 1279 813 519

· Abbreviations and acronyms:

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

CAS: Chemical Abstracts Service (division of the American Chemical Society)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic vPvB: very Persistent and very Bioaccumulative

Skin Irrit. 2: Skin corrosion/irritation – Category 2

Eye Irrit. 2: Serious eye damage/eye irritation - Category 2

Resp. Sens. 1: Respiratory sensitisation – Category 1

(Contd. on page 8)





**Date Printed 12.08.2019** Version number 1 **Revision Date 12.08.2019** 

Trade name: Agar 100 resin

STOT SE 3: Specific target organ toxicity (single exposure) – Category 3  $\cdot$  \* Data compared to the previous version altered.

(Contd. of page 7)