

Date Printed 15.06.2022 Version number 1 Revision Date 15.06.2022

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

· 1.1 Product identifier

Trade name: ProbeMet Conductive Moulding Powder

· Article number: AGB8785

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

No further relevant information available.

· Application of the substance / the preparation: Mounting medium

· 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 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



Aquatic Chronic 1 H410 Very toxic to aquatic life with long lasting effects.



Acute Tox. 4 H302 Harmful if swallowed. 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 product is classified and labelled according to the CLP regulation.

· Hazard pictograms





GHS07 GHS09

· Signal word Warning

· Hazard-determining components of labelling:

Phenol, 4,4'-(1-methylethylidene)bis[2,6-dibromo-, polymer with 2-(chloromethyl)oxirane and 4,4'-(1-methylethylidene)bis[phenol]

Carbon black

2,4,6-tris(dimethylaminomethyl)phenol

· Hazard statements

H302 Harmful if swallowed.

H315 Causes skin irritation.

H319 Causes serious eye irritation.

(Contd. on page 2)



Date Printed 15.06.2022 Version number 1 Revision Date 15.06.2022

Trade name: ProbeMet Conductive Moulding Powder

(Contd. of page 1)

H335 May cause respiratory irritation.

H410 Very toxic to aquatic life with long lasting effects.

· Precautionary statements

P101 If medical advice is needed, have product container or label at hand.

P102 Keep out of reach of children.

P103 Read carefully and follow all instructions.

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

P301+P312 IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.

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**

#### · 3.2 Chemical characterisation: Mixtures

· Description: Mixture of substances listed below with nonhazardous additions.

· Dangerous components:			
CAS: 7440-50-8 EINECS: 231-159-6	copper  Aquatic Chronic 2, H411	40-60%	
CAS: 60676-86-0 EINECS: 262-373-8	Silica, fused substance with a Community workplace exposure limit	30-40%	
CAS: 26265-08-7	5-08-7 Phenol, 4,4'-(1-methylethylidene)bis[2,6-dibromo-, polymer with 2-(chloromethyl)oxirane and 4,4'-(1-methylethylidene)bis[phenol]		
CAS: 90-72-2 EINECS: 202-013-9	2,4,6-tris(dimethylaminomethyl)phenol Skin Corr. 1B, H314;  Acute Tox. 4, H302; Eye Irrit. 2, H319; Skin Sens. 1B, H317; Aquatic Chronic 3, H412	0-1%	
CAS: 1333-86-4 EINECS: 215-609-9	Carbon black Self-heat. 2, H252; Carc. 1A, H350	0-0.5%	
CAS: 13463-67-7 EINECS: 236-675-5	titanium dioxide & Carc. 2, H351	0-0.5%	

<sup>·</sup> Additional information: For the wording of the listed hazard phrases refer to section 16.

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

#### · 4.1 Description of first aid measures

#### · General information:

Immediately remove any clothing soiled by the product.

Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.

- · After inhalation: No adverse effects are anticipated from inhalation.
- · After skin contact: Wash with water and soap and rinse thoroughly.
- After eye contact: Rinse opened eye under running water. If symptoms persist, consult a doctor.
- After swallowing:

Call for a doctor immediately.

Do NOT induce vomiting. Clean mouth with water and drink afterwards plenty of water. Never give anything by mouth to an unconscious person. Call a physician

(Contd. on page 3)



Date Printed 15.06.2022 Version number 1 Revision Date 15.06.2022

Trade name: ProbeMet Conductive Moulding Powder

(Contd. of page 2)

4.2 Most important symptoms and effects, both acute and delayed Burning sensation

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
- · Suitable extinguishing agents: Use fire extinguishing methods suitable to surrounding conditions.
- 5.2 Special hazards arising from the substance or mixture

Thermal decomposition can lead to release of irritating and toxic gases and vapours.

- · 5.3 Advice for firefighters
- · Protective equipment:

Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protective equiptment

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

· 6.1 Personal precautions, protective equipment and emergency procedures

Avoid contact with skin, eyes or clothing. Ensure adequate ventilation. Use personal protective equipment as required. Evacuate personnel to safe areas

**6.2 Environmental precautions:** 

Do not allow product to reach sewage system or any water course.

Inform respective authorities in case of seepage into water course or sewage system.

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

6.3 Methods and material for containment and cleaning up:

Dispose contaminated material as waste according to item 13.

Ensure adequate ventilation.

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.
- · Information about fire and explosion protection: No special measures required.
- · 7.2 Conditions for safe storage, including any incompatibilities
- · Storage:
- Requirements to be met by storerooms and receptacles:

Keep containers tightly closed in a dry, cool and well-ventilated place. Keep out of the reach of children. Store locked up.

- · Information about storage in one common storage facility: Not required.
- · Further information about storage conditions: Keep container tightly sealed.
- · 7.3 Specific end use(s) No further relevant information available.

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

- · 8.1 Control parameters
- · Additional information about design of technical facilities: No further data; see item 7.
- Ingredients with limit values that require monitoring at the workplace:

#### 7440-50-8 copper

WEL Short-term value: 2\*\* mg/m³
Long-term value: 0.2\* 1\*\* mg/m³

\*fume \*\*dusts and mists (as Cu)

(Contd. on page 4)



Date Printed 15.06.2022 Version number 1 Revision Date 15.06.2022

Trade name: ProbeMet Conductive Moulding Powder

(Contd. of page 3)

60676-86-0 Silica, fused				
WEL	Long-term value: 0.08 mg/m³			

fused respirable dust

#### 1333-86-4 Carbon black

WEL Short-term value: 7 mg/m³ Long-term value: 3.5 mg/m³

#### 13463-67-7 titanium dioxide

WEL Long-term value: 10\* 4\*\* mg/m³
\*total inhalable \*\*respirable

- · 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.

Avoid contact with the eyes and skin.

#### 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.

· 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

#### 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. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

#### 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

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

- · 9.1 Information on basic physical and chemical properties
- · General Information
- · Appearance:

Form: Solid

**Colour:** According to product specification

Odour: Characteristic

(Contd. on page 5)



Date Printed 15.06.2022 Version number 1 Revision Date 15.06.2022

Trade name: ProbeMet Conductive Moulding Powder

	(Contd. of page	
· Odour threshold:	Not determined.	
· pH-value:	Not applicable.	
<ul> <li>Change in condition</li> <li>Melting point/freezing point:</li> <li>Initial boiling point and boiling range</li> </ul>	Undetermined.: Undetermined.	
· Flash point:	Not applicable.	
· Flammability (solid, gas):	Not determined.	
· Decomposition temperature:	Not determined.	
· Auto-ignition temperature:	Product is not selfigniting.	
· Explosive properties:	Product does not present an explosion hazard.	
· Explosion limits: Lower: Upper:	Not determined. Not determined.	
· Vapour pressure:	Not applicable.	
<ul><li>Density:</li><li>Relative density</li><li>Vapour density</li><li>Evaporation rate</li></ul>	Not determined. Not determined. Not applicable. Not applicable.	
· Solubility in / Miscibility with water:	Insoluble.	
· Partition coefficient: n-octanol/water:	Not determined.	
· Viscosity: Dynamic: Kinematic:	Not applicable. Not applicable.	
· Solvent content:		
Solids content:	100.0 %	
· 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
- · 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 No further relevant information available.
- · 10.5 Incompatible materials: No further relevant information available.
- · 10.6 Hazardous decomposition products: No dangerous decomposition products known.

## **SECTION 11: Toxicological information**

- · 11.1 Information on toxicological effects
- · Acute toxicity

Harmful if swallowed.

(Contd. on page 6)



Date Printed 15.06.2022 Version number 1 Revision Date 15.06.2022

Trade name: ProbeMet Conductive Moulding Powder

(Contd. of page 5)

· LD/LC50 values relevant for classification:

1333-86-4 Carbon black

Oral LD50 10,000 mg/kg (rat)

- · Specific symptoms in biological assay:
- Skin corrosion/irritation

Causes skin irritation.

· Serious eye damage/irritation

Causes serious eye irritation.

- · Respiratory or skin sensitisation Based on available data, the classification criteria are not met.
- Additional toxicological information:
- 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.

Also poisonous for fish and plankton in water bodies.

- 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.

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

## **SECTION 14: Transport information**

- · 14.1 UN-Number
- · ADR, IMDG, IATA Void
- · 14.2 UN proper shipping name
- · ADR, IMDG, IATA Void

(Contd. on page 7)



Date Printed 15.06.2022 Version number 1 **Revision Date 15.06.2022** 

Trade name: ProbeMet Conductive Moulding Powder

		(Contd. of page 6)
· 14.3 Transport hazard class(es)		
· ADR, ADN, IMDG, IATA · Class	Void	
· 14.4 Packing group · ADR, IMDG, IATA	Void	
· 14.5 Environmental hazards:	Not applicable.	
· 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 None of the ingredients is listed.
- · Seveso category E1 Hazardous to the Aquatic Environment
- · Qualifying quantity (tonnes) for the application of lower-tier requirements 100 t
- · Qualifying quantity (tonnes) for the application of upper-tier requirements 200 t
- 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.

#### Relevant phrases

H252 Self-heating in large quantities; may catch fire.

H302 Harmful if swallowed.

H314 Causes severe skin burns and eye damage.

H317 May cause an allergic skin reaction.

H318 Causes serious eye damage.

H319 Causes serious eye irritation.

H350 May cause cancer.

H351 Suspected of causing cancer.

H411 Toxic to aquatic life with long lasting effects.

H412 Harmful to aquatic life with long lasting effects.

### Department issuing SDS: Sales department

Contact:

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

## Abbreviations and acronyms:

ADR: Accord relatif au transport international 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

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

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

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

(Contd. on page 8)



Date Printed 15.06.2022

**Version number 1** 

**Revision Date 15.06.2022** 

Trade name: ProbeMet Conductive Moulding Powder

(Contd. of page 7)

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

Self-heat. 2: Self-heating substances and mixtures - Category 2

Acute Tox. 4: Acute toxicity - Category 4

Skin Corr. 1B: Skin corrosion/irritation - Category 1B

Skin Irrit. 2: Skin corrosion/irritation – Category 2
Eye Dam. 1: Serious eye damage/eye irritation – Category 1
Eye Irrit. 2: Serious eye damage/eye irritation – Category 2

Skin Sens. 1: Skin sensitisation - Category 1 Skin Sens. 1B: Skin sensitisation - Category 1B Carc. 1A: Carcinogenicity – Category 1A
Carc. 2: Carcinogenicity – Category 2
STOT SE 3: Specific target organ toxicity (single exposure) – Category 3

Aquatic Chronic 1: Hazardous to the aquatic environment - long-term aquatic hazard - Category 1 Aquatic Chronic 2: Hazardous to the aquatic environment - long-term aquatic hazard - Category 2 Aquatic Chronic 3: Hazardous to the aquatic environment - long-term aquatic hazard - Category 3

\* Data compared to the previous version altered.