

Date Printed 24.02.2022

**Version number 1** 

**Revision Date 24.02.2022** 

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

- · 1.1 Product identifier
- · Trade name: EpoMet G Moulding Powder
- · Article number: AGB8784
- 1.2 Relevant identified uses of the substance or mixture and uses advised against Mounting material for metallographic specimens.
- · Product category

EpoMet® G is a high hardness, hot mounting epoxy with good edge retention and low shrinkage. EpoMet F is similar to EpoMet G, with very low shrinkage and a finer grain size.

- · **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 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



Eye Dam. 1 H318 Causes serious eye damage.



Skin Irrit. 2 H315 Causes skin irritation.

Skin Sens. 1 H317 May cause an allergic skin reaction.

- · 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





GHS05 GHS07

- · Signal word Danger
- · 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]

2,4,6-tris(dimethylaminomethyl)phenol

Hazard statements

H315 Causes skin irritation.

H318 Causes serious eye damage.

H317 May cause an allergic skin reaction.

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· 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.

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

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

P310 Immediately call a POISON CENTER/doctor.

P321 Specific treatment (see on this label).

P362+P364 Take off contaminated clothing and wash it before reuse.

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

international regulations.

#### · 2.3 Other hazards

Accumulation of fine dust may entail the risk of a dust explosion in the presence of air.

- 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: 60676-86-0 EINECS: 262-373-	Silica, fused substance with a Community workplace exposure limit	59.0%	
CAS: 26265-08-7	CAS: 26265-08-7 Phenol, 4,4'-(1-methylethylidene)bis[2,6-dibromo-, polymer with (chloromethyl)oxirane and 4,4'-(1-methylethylidene)bis[phenol]  Eye Dam. 1, H318;  Skin Sens. 1, H317		
CAS: 90-72-2 EINECS: 202-013-	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	1.45%	
CAS: 13463-67-7 EINECS: 236-675-	titanium dioxide  Start Carc. 2, H351	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.

Change soaked clothing.

### · After inhalation:

Supply fresh air.

No adverse effects are anticipated from inhalation.

Ensure supply of fresh air.

In the event of symptoms seek for medical treatment.

#### After skin contact:

Wash with water and soap and rinse thoroughly.

In case of contact with skin wash off immediately with soap and water.

Consult a doctor if skin irritation persists.

# After eye contact:

Rinse opened eye for several minutes under running water. Then consult a doctor.

Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.

Continue rinsing. Consult a doctor immediately.

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· After swallowing:

Consult a doctor immediately.

Induce the patient to vomit of his own accord only if fully conscious.

Rinse out mouth and give plenty of water to drink.

4.2 Most important symptoms and effects, both acute and delayed

Allergic reactions.

Irritant effects.

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

Treat symptomatically.

# **SECTION 5: Firefighting measures**

- 5.1 Extinguishing media
- · Suitable extinguishing agents:

Use fire extinguishing methods suitable to surrounding conditions.

Carbon dioxide.

Water spray jet.

Dry powder.

Foam.

- · For safety reasons unsuitable extinguishing agents: Full water jet.
- 5.2 Special hazards arising from the substance or mixture

Unknown risk of formation of toxic pyrolysis products.

· 5.3 Advice for firefighters

Fire residues and contaminated firefighting water must be disposed of in accordance with the local regulations.

· Protective equipment: Use self-contained breathing apparatus.

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

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

Wear protective gloves and glasses.

Ensure adequate ventillation.

Keep people away and stay on the upwind side.

Avoid dust formation.

Use breathing apparatus if exposed to dust.

Use personal protective clothing.

· 6.2 Environmental precautions:

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

Do not discharge into the drains/surface waters/groundwater.

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

Use neutralising agent.

Dispose contaminated material as waste according to item 13.

Ensure adequate ventilation.

Pick up mechanically.

Avoid raising dust.

Dispose of absorbed material in accordance within the regulations.

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

Thorough dedusting.

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Ensure good ventilation/exhaustion at the workplace.

Dust deposits that cannot be avoided must be taken up regularly.

Provide vacuuming if dust raised.

Avoid the formation and deposition of dust.

Take precautionary measures against static discharges.

Dust can form an explosive mixture with air.

Do not eat, drink, smoke or take drugs at work.

After worktime and before work breaks the affected skin areas must be thoroughly cleaned.

Take off contaminated clothing and wash before reuse.

· Information about fire - and explosion protection: No special measures required.

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

Keep only in original container.

Prevent penetration into the ground.

· Storage:

### · Requirements to be met by storerooms and receptacles:

Keep container tightly closed.

Keep container in a well-ventilated place.

Store in a dry place.

#### · Information about storage in one common storage facility:

Do not store together with oxidising agents.

Do not store together with food and animal food/diet.

- · 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:

Ensure adequate ventilation on workstation.

To pay attention to dust limit value (ACGHI-2011: 10 mg/m³ particle inhalable; 3 mg/m³ particle respirable).

#### Ingredients with limit values that require monitoring at the workplace:

#### 60676-86-0 Silica, fused

WEL Long-term value: 0.08 mg/m³ fused respirable dust

## 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 skin.

Avoid contact with the eyes and skin.

Avoid contact with eyes and skin.

Do not inhale dust.

Personal protective equipment should be selected specifically for the working place, depending on concentration and quantity of the hazardous substances handled. The resistance of these equipments to chemicals should be ascertained with the respective supplier.

#### 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.

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Breathing apparatus in the event of high concentrations. Short term: filter apparatus, filter P3.

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.

Butyl rubber, >120 min (EN 374).

#### 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

Safety glasses.

· Body protection: Light protective clothing of plastic material.

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

. 9	.1 Information on basic physical and chemical properties
· G	eneral Information

Appearance:

Form: Powder Colour: Black
Odour: Mild

Odour threshold: Not determined.

· **pH-value:** Not applicable.

· Change in condition

Melting point/freezing point: Undetermined. Initial boiling point and boiling range: >199 °C

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: Not determined. Upper: Not determined.

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· Vapour pressure:	Not applicable.
· Density at 20 °C:	0.9 g/cm <sup>3</sup>
Relative density	>1
· Vapour density	Not applicable.
Evaporation rate	<1
· Solubility in / Miscibility with	
water:	Insoluble.
· Partition coefficient: n-octanol/water:	Not determined.
· Viscosity:	
Dynamic:	Not applicable.
Kinematic:	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 dangerous reactions known if used as directed.
- · 10.2 Chemical stability The product is stable under standard conditions.
- Thermal decomposition / conditions to be avoided:

No decomposition if used according to specifications.

· 10.3 Possibility of hazardous reactions

Accumulation of fine dust may entail the risk of a dust explosion in the presence of air. Reactions with acids, alkalies and oxidising agents.

- **10.4 Conditions to avoid** No further relevant information available.
- · 10.5 Incompatible materials: 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:

#### 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 damage.

Not determined.

Respiratory or skin sensitisation

May cause an allergic skin reaction.

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

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· 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.

Must not reach sewage water or drainage ditch undiluted or unneutralised.

- 12.5 Results of PBT and vPvB assessment
- · PBT: Not applicable.
- · **vPvB:** Not applicable.
- 12.6 Other adverse effects

The product contains organically bound halogen in accordance with the formulation. No classification on the basis of the calculation procedure of the preparation directive.

# **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.

Waste material must be disposed of in accordance with the Directive on waste 2008/98/EC as well as other national and local regulations. It is not possible to determine a waste code for this product in accordance with the European Waste Catalogue (EWC) since it is only possible to classify it according to how it is used by the customer. The waste code is to be determined within the EU in liaison with the waste-disposal operator.

- · Waste disposal key: Product Waste no. (recommended) 070214\*
- Recommendation:

Uncontaminated packaging may be taken for recycling.

Waste no. (recommended) 150110\*, 150102.

NO DANGEROUS GOODS Void
Void
-
Void

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· 14.5 Environmental hazards: · Marine pollutant:	No	
· 14.6 Special precautions for user	Not applicable.	
• 14.7 Transport in bulk according to Annex II of Marpol and the IBC Code 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.
- 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

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.

H351 Suspected of causing cancer.

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

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

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. 2: Carcinogenicity – Category 2

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

\* Data compared to the previous version altered.