

Safety data sheet

according to 1907/2006/EC, Article 31

Date Printed 27.02.2019

Version number 1

Revision Date 26.03.2015

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

- **1.1 Product identifier**
- **Trade name: SampleKwick Hardener**
- **Article number: AGB8786H**
- **1.2 Relevant identified uses of the substance or mixture and uses advised against**
Mounting material for metallographic specimens
- **Application of the substance / the preparation:** No further relevant information available.
- **Uses advised against** None known.
- **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**



GHS02 flame

Flam. Liq. 3 H226 Flammable liquid and vapour.



GHS09 environment

Aquatic Acute 1 H400 Very toxic to aquatic life.



GHS07

Acute Tox. 4	H302 Harmful if swallowed.
Skin Irrit. 2	H315 Causes skin irritation.
Eye Irrit. 2	H319 Causes serious eye irritation.
Skin Sens. 1	H317 May cause an allergic skin reaction.
STOT SE 3	H335 May cause respiratory irritation.

Aquatic Chronic 3 H412 Harmful to aquatic life with long lasting effects.

- **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**



GHS02 GHS07 GHS09

- **Signal word** Warning

(Contd. on page 2)

Safety data sheet

according to 1907/2006/EC, Article 31

Date Printed 27.02.2019

Version number 1

Revision Date 26.03.2015

Trade name: SampleKwick Hardener

(Contd. of page 1)

Hazard-determining components of labelling:

isobutyl methacrylate
 propylidynetrimethyl trimethacrylate
 N,N-dimethyl-p-toluidine

Hazard statements

H226 Flammable liquid and vapour.
 H302 Harmful if swallowed.
 H315 Causes skin irritation.
 H319 Causes serious eye irritation.
 H317 May cause an allergic skin reaction.
 H335 May cause respiratory irritation.
 H400 Very toxic to aquatic life.
 H412 Harmful 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 label before use.
 P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
 P241 Use explosion-proof [electrical/ventilating/lighting] equipment.
 P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].
 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.

Information concerning particular hazards for human and environment:

Does not contain any PBT or vPvB substances.
2.3 Other hazards Further hazards were not determined with the current level of knowledge.

Results of PBT and vPvB assessment

PBT: Not applicable.
vPvB: Not applicable.

SECTION 3: Composition/information on ingredients

Description: Mixture of substances listed below with nonhazardous additions.

Dangerous components:

CAS: 97-86-9 EINECS: 202-613-0	isobutyl methacrylate ⚠ Flam. Liq. 3, H226; ⚠ Aquatic Acute 1, H400; ⚠ Skin Irrit. 2, H315; Eye Irrit. 2, H319; Skin Sens. 1, H317; STOT SE 3, H335	83.0%
CAS: 3290-92-4 EINECS: 221-950-4	propylidynetrimethyl trimethacrylate ⚠ Aquatic Chronic 2, H411; ⚠ Acute Tox. 4, H302; Eye Irrit. 2, H319; Skin Sens. 1, H317	14.0%
CAS: 99-97-8 EINECS: 202-805-4	N,N-dimethyl-p-toluidine ⚠ Acute Tox. 3, H301; ⚠ Acute Tox. 3, H311; ⚠ Acute Tox. 3, H331; ⚠ STOT RE 2, H373; ⚠ Aquatic Chronic 3, H412	3.0%

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.

(Contd. on page 3)

Safety data sheet

according to 1907/2006/EC, Article 31

Date Printed 27.02.2019

Version number 1

Revision Date 26.03.2015

Trade name: SampleKwick Hardener

(Contd. of page 2)

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

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 under running water. If symptoms persist, consult a doctor.

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

Continue rinsing.

If eye irritation persists: Get medical advice/attention.

· **After swallowing:**

Call for a doctor immediately.

Consult a doctor immediately.

Do not induce vomiting.

Rinse out mouth and give plenty of water to drink.

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

Allergic reactions. Headache.

· **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:** Carbon dioxide. Water spray jet. Dry powder. Foam.

· **For safety reasons unsuitable extinguishing agents:**

Water with full jet

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**

· **Protective equipment:** Use self-contained breathing apparatus.

· **Additional information**

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

SECTION 6: Accidental release measures

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

Wear protective gloves and glasses.

Keep away from all sources of ignition.

Ensure adequate ventilation.

High risk of slipping due to leakage/spillage of product.

Use personal protective equipment.

· **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.

Prevent spread over a wide area (e.g. by containment or oil barriers). Do not discharge into the drains/surface waters/groundwater.

(Contd. on page 4)

Safety data sheet

according to 1907/2006/EC, Article 31

Date Printed 27.02.2019

Version number 1

Revision Date 26.03.2015

Trade name: SampleKwick Hardener
(Contd. of page 3)

- **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.
 Take up with absorbent material (e.g. general purpose binder). Dispose of absorbed material in accordance with 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**
 Ensure good ventilation/exhaustion at the workplace.
 Prevent formation of aerosols.
 Use only in well ventilated areas.
 Keep away from all sources of ignition - Refrain from smoking.
 Vapours can form an explosive mixture with air.
 Take precautionary measures against static discharges.
 Use explosion proofed equipment/fittings and non-sparking tools.
 Do not drink, smoke or take drugs at work.
 Use barrier skin cream.
 Take off contaminated clothing and wash before reuse.
 After worktime and before breaks the affected skin areas must be thoroughly cleaned.
- **Information about fire - and explosion protection:**
 The dried resin is combustible, similar to wood. Burning dry resin emits dense, black smoke. As latex, material is not combustible.
 Protect against electrostatic charges.
- **7.2 Conditions for safe storage, including any incompatibilities**
 Keep only in original container.
 Prevent penetration into the ground.
 Do not store together with oxidising agents.
 Do not store together with food and animal food/diet.
 Keep container tightly closed.
 Protect from atmospheric moisture and water.
 Protect from heat/overheating.
 Protect from light.
- **Storage:**
- **Requirements to be met by storerooms and receptacles:**
 No further relevant information available.
- **Information about storage in one common storage facility:**
 No further relevant information available.
- **Further information about storage conditions:**
 Keep container tightly sealed.
 No further relevant information available.
- **7.3 Specific end use(s)** No further relevant information available.

SECTION 8: Exposure controls/personal protection

- **Additional information about design of technical facilities:**
 Ensure adequate ventilation at workstation.
- **8.1 Control parameters**
- **Ingredients with limit values that require monitoring at the workplace:**
 The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

(Contd. on page 5)

Safety data sheet

according to 1907/2006/EC, Article 31

Date Printed 27.02.2019

Version number 1

Revision Date 26.03.2015

Trade name: SampleKwick Hardener

(Contd. of page 4)

- **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.
 Avoid contact with eyes and skin.
 Do not breathe vapour/spray.
 Personal protective equipment should be selected specifically for the working place, depending on concentration and quantity of handled hazardous substances. The resistance of equipment to chemicals should be ascertained with the respective supplier.

Thermal hazards: none.

- **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.
 Breathing apparatus in the event of high concentrations. Short term: filter apparatus, combination filter A-P2.
- **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, >480 min (EN 374). The details concerned are recommendations. Please contact the glove supplier for further information.
- **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**
- **General Information**
- **Appearance:**
 Form: Liquid

(Contd. on page 6)

Safety data sheet

according to 1907/2006/EC, Article 31

Date Printed 27.02.2019

Version number 1

Revision Date 26.03.2015

Trade name: **SampleKwick Hardener**

(Contd. of page 5)

· Colour:	Not determined.
· Odour:	Characteristic
· Odour threshold:	Not determined.
· pH-value:	Not determined.
· Change in condition	
Melting point/freezing point:	Undetermined.
Initial boiling point and boiling range:	155 °C
· Flash point:	49 °C
· Flammability (solid, gas):	Not applicable.
· Decomposition temperature:	Not determined.
· Auto-ignition temperature:	Not applicable.
· Explosive properties:	No further relevant information available.
· Explosion limits:	
Lower:	Not determined.
Upper:	Not determined.
· Oxidising properties	no
· Vapour pressure at 20 °C:	0.2 hPa 0.21 (20°C) kPa
· Density at 20 °C:	0.89 g/cm ³
· Relative density	>1
· Vapour density	>1 air
· Evaporation rate	<1
· Solubility in / Miscibility with water:	<1 (virtually insoluble) g/l
· Partition coefficient: n-octanol/water:	Not determined.
· Viscosity:	
Dynamic:	Not determined.
Kinematic at 20 °C:	1.01 mm ² /s
· Solvent content:	
VOC (EC)	0.00 %
Solids content:	0.0 %
· 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** Stable under normal ambient conditions (ambient temperature).
- **Thermal decomposition / conditions to be avoided:**
No decomposition if used according to specifications.
- **10.3 Possibility of hazardous reactions**
Evolution of flammable mixtures possible in air when heated above flash point and/or during spraying or misting.
Reactions with oxidising agents.
Reactions with strong acids and alkalis.
- **10.4 Conditions to avoid** Strong heating.
- **10.5 Incompatible materials:** See Section 10.3

(Contd. on page 7)

Safety data sheet

according to 1907/2006/EC, Article 31

Date Printed 27.02.2019

Version number 1

Revision Date 26.03.2015

Trade name: SampleKwick Hardener

(Contd. of page 6)

- **10.6 Hazardous decomposition products:** No dangerous decomposition products known.

SECTION 11: Toxicological information

- **11.1 Information on toxicological effects**

Acute toxicity:

ATE-mix, dermal, >2000 mg/kg

ATE-mix, oral, >2000 mg/kg

- **Acute toxicity**

Harmful if swallowed.

- **LD/LC50 values relevant for classification:**

97-86-9 isobutyl methacrylate		
Oral	LD50	11,990 mg/kg (mouse)

- **Skin corrosion/irritation**

Causes skin irritation.

Not determined.

- **Serious eye damage/irritation**

Causes serious eye irritation.

Not determined.

- **Respiratory or skin sensitisation**

May cause an allergic skin reaction.

Not determined.

- **Additional toxicological information:**

Toxicological data of complete product is not available.

The product was classified on the basis of the calculation procedure of the preparation directive.

- **CMR effects (carcinogenicity, 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**

CAS 3290-92-4, Propylidynetrimethyl trimethacrylate:

LC50, (96h), Rainbow trout : 2 mg/l.

CAS 97-86-9, Isobutyl methacrylate:

EC50, (96h), Selenastrum capricornutum: 0,29 mg/l (IUCLID)

EC50, (48h), Daphnia magna: 23 mg/l (IUCLID)

LC50, (48h), Leuciscus idus: 92 mg/l (IUCLID)

- **Aquatic toxicity:** No further relevant information available.

- **12.2 Persistence and degradability**

Behaviour in environment compartments: Not determined.

Behaviour in sewage plant: Not determined.

Biological degradability: The product is readily biodegradable. 74%, (28d).

- **12.3 Bioaccumulative potential** No further relevant information available.

- **12.4 Mobility in soil** Yes

- **Ecotoxicological effects:**

- **Remark:**

Very toxic for fish

Harmful to fish

(Contd. on page 8)

Safety data sheet

according to 1907/2006/EC, Article 31

Date Printed 27.02.2019

Version number 1

Revision Date 26.03.2015

Trade name: **SampleKwick Hardener**



(Contd. of page 7)

- **Additional ecological information:**
- **General notes:**
 Water hazard class 2 (German Regulation) (Self-assessment): hazardous for water
 Do not allow product to reach ground water, water course or sewage system.
 Danger to drinking water if even small quantities leak into the ground.
 Very toxic for aquatic organisms
 Harmful to aquatic organisms
- **12.5 Results of PBT and vPvB assessment**
 Based on all available information not to be classified as PBT or vPvB respectively.
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **12.6 Other adverse effects**
 Ecological data of complete product is not available.
 The product was classified on the basis of the calculation procedure of the preparation directive.
 The toxicity data was supplied by raw materials manufacturers.

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 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 European Waste Catalogue (EWC) since it is only possible to classify it according to how it is used by a customer. The waste code is to be determined within the EU in liaison with waste disposal operator.
- **Waste disposal key:**
 Product: 080409*
 Contaminated packaging: 150110*, 150102, 150104
- **Recommendation:**
 Coordinate disposal with local authorities if necessary.
 Disposal in an incineration plant according to official regulations.
 Packaging that cannot be cleaned should be disposed of as product. Uncontaminated packaging may be taken for recycling.

SECTION 14: Transport information

- | | |
|---|--|
| <ul style="list-style-type: none"> · 14.1 UN-Number · ADR, IMDG, IATA | <p style="text-align: center;">UN1866</p> |
| <ul style="list-style-type: none"> · 14.2 UN proper shipping name · ADR · IMDG · IATA | <p style="text-align: center;">1866 RESIN SOLUTION, ENVIRONMENTALLY HAZARDOUS
 RESIN SOLUTION (ISOBUTYL METHACRYLATE, STABILIZED), MARINE POLLUTANT
 RESIN SOLUTION</p> |
| <ul style="list-style-type: none"> · 14.3 Transport hazard class(es) · ADR, IMDG | <div style="display: flex; align-items: center; justify-content: center; gap: 20px;">   </div> <p style="text-align: center;">3 Flammable liquids.</p> |
| <ul style="list-style-type: none"> · Class | <p style="text-align: center;">3 Flammable liquids.</p> |

(Contd. on page 9)

Safety data sheet

according to 1907/2006/EC, Article 31


Date Printed 27.02.2019

Version number 1

Revision Date 26.03.2015

Trade name: SampleKwick Hardener

(Contd. of page 8)

· Label	3
· IATA	
	
· Class	3 Flammable liquids.
· Label	3
· 14.4 Packing group	
· ADR, IMDG, IATA	III
· 14.5 Environmental hazards:	Product contains environmentally hazardous substances: isobutyl methacrylate
· Marine pollutant:	Yes
· Special marking (ADR):	Symbol (fish and tree)
· 14.6 Special precautions for user	Warning: Flammable liquids.
· Danger code (Kemler):	30
· EMS Number:	F-E, <u>S-E</u>
· Stowage Category	A
· 14.7 Transport in bulk according to Annex II of Marpol and the IBC Code	Not applicable.
· Transport/Additional information:	
· ADR	
· Limited quantities (LQ)	5L
· Excepted quantities (EQ)	Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml
· Transport category	3
· Tunnel restriction code	D/E
· IMDG	
· Limited quantities (LQ)	5L
· Excepted quantities (EQ)	Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml
· UN "Model Regulation":	UN 1866 RESIN SOLUTION, 3, III, ENVIRONMENTALLY HAZARDOUS

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
P5c FLAMMABLE LIQUIDS
- **Qualifying quantity (tonnes) for the application of lower-tier requirements** 100 t
- **Qualifying quantity (tonnes) for the application of upper-tier requirements** 200 t
- **REGULATION (EC) No 1907/2006 ANNEX XVII** Conditions of restriction: 3

(Contd. on page 10)

Safety data sheet

according to 1907/2006/EC, Article 31

Date Printed 27.02.2019

Version number 1

Revision Date 26.03.2015

Trade name: SampleKwick Hardener
(Contd. of page 9)

· **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**

H226 Flammable liquid and vapour.
 H301 Toxic if swallowed.
 H302 Harmful if swallowed.
 H311 Toxic in contact with skin.
 H315 Causes skin irritation.
 H317 May cause an allergic skin reaction.
 H319 Causes serious eye irritation.
 H331 Toxic if inhaled.
 H335 May cause respiratory irritation.
 H373 May cause damage to organs through prolonged or repeated exposure.
 H400 Very toxic to aquatic life.
 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 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
 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)
 VOC: Volatile Organic Compounds (USA, EU)
 LC50: Lethal concentration, 50 percent
 LD50: Lethal dose, 50 percent
 PBT: Persistent, Bioaccumulative and Toxic
 vPvB: very Persistent and very Bioaccumulative
 Flam. Liq. 3: Flammable liquids – Category 3
 Acute Tox. 3: Acute toxicity – Category 3
 Acute Tox. 4: Acute toxicity – Category 4
 Skin Irrit. 2: Skin corrosion/irritation – Category 2
 Eye Irrit. 2: Serious eye damage/eye irritation – Category 2
 Skin Sens. 1: Skin sensitisation – Category 1
 STOT SE 3: Specific target organ toxicity (single exposure) – Category 3
 STOT RE 2: Specific target organ toxicity (repeated exposure) – Category 2
 Aquatic Acute 1: Hazardous to the aquatic environment - acute 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