

## SAFETY DATA SHEET

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

#### 1.1 Product identifier

- Product Name: Plastic Steel Liquid B Activator Component
- Product Part Number: MUL10211

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

- Use of the substance/mixture: Polymer repair system

#### 1.3 Details of the supplier of the safety data sheet

- Name of Supplier: Resimac Limited
- Address of Supplier: Unit B Park Barn Estate  
Station Road  
Topcliffe, Thirsk  
YO7 3SE
- Telephone: +44 (0) 1845 577498
- Responsible Person: Ryan Lockie
- Email: Info@resimac.co.uk

#### 1.4 Emergency telephone number

- Emergency Telephone: +44 (0) 1845 577498 OPEN HOURS 9am-5pm

### SECTION 2: Hazards identification

#### 2.1 Classification of the substance or mixture

- CLP: Skin Sens. 1, Acute Tox. 4, Skin Corr. 1B, Repr. Cat. 1B, Aquatic Chronic 2

#### 2.2 Label elements



GHS05



GHS08



GHS09

- Signal Word: Danger

#### Hazard statements

H302 - Harmful if swallowed.  
H360F - May damage fertility.  
H314 - Causes severe skin burns and eye damage.  
H317 - May cause an allergic skin reaction.  
H411 - Toxic to aquatic life with long lasting effects.

#### Precautionary statements

P301+P330+P331 - IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.  
P280 - Wear protective gloves/protective clothing/eye protection/face protection.  
P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove

**SECTION 2: Hazards identification (....)**

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

P273 - Avoid release to the environment.

P302+P352 - IF ON SKIN: Wash with plenty of soap and water.

P272 - Contaminated work clothing should not be allowed out of the workplace.

**2.3 Other hazards**

- Contains: Benzyl alcohol  
3-aminomethyl-3,5,5-trimethylcyclohexylamine  
bisphenol A; 4,4'-isopropylidenediphenol  
m - PHENYLENEBIS (METHYLAMINE)  
2,2'-iminodiethylamine; diethylenetriamine

**SECTION 3: Composition/information on ingredients**
**3.2 Mixtures**

Chemical Name	CAS Number	EC Number	Concentration	Acute toxicity estimate	Specific Concentration Limits
benzyl alcohol	100-51-6	202-859-9	20-30%		
3-aminomethyl-3,5,5-trimethylcyclohexylamine	2855-13-2	220-666-8	20-30%		
2,2'-iminodiethylamine; diethylenetriamine	111-40-0	203-865-4	20-30%		
bisphenol A; 4,4'-isopropylidenediphenol	80-05-7	201-245-8	10-20%		
4,4'-ISOPROPYLIDENEDIPHENOL, OLIGOMERIC REACTION PRODUCTS WITH 1-CHLORO-2,3-EPOXYPROPANE, REACTION PRODUCTS WITH 3-AMINOPROPYLDIETHYLAMINE AND 2-PIPERAZIN-1-YLETHYLAMINE	68698-70-4	500-230-6	1-10%		
m -PHENYLENEBIS (METHYLAMINE)	1477-55-0	216-032-5	1-10%		
Phenol, styrenated	61788-44-1	262-975-0	1-5%		
2,4,6-tris(dimethylaminomethyl)phenol	90-72-2	202-013-9	1-5%		

Chemical Name	Categories	Symbols	H Statements
benzyl alcohol	Acute Tox. 4	GHS07	H332;H302
3-aminomethyl-3,5,5-trimethylcyclohexylamine	Acute Tox. 4 Skin Corr. 1B Skin Sens. 1 Aquatic Chronic 3	GHS05 GHS07	H312 H302 H314 H317 H412
2,2'-iminodiethylamine; diethylenetriamine	Acute Tox. 4 Skin Corr. 1B Skin Sens. 1	GHS05 GHS07	H312 H302 H314 H317
bisphenol A; 4,4'-isopropylidenediphenol	Eye Dam. 1 Skin Sens. 1 Repr. Cat. 1B STOT SE 3	GHS08 GHS05 GHS07	H360F H335 H318 H317

**SECTION 3: Composition/information on ingredients (....)**

4,4'-ISOPROPYLIDENEDIPHENOL, OLIGOMERIC REACTION PRODUCTS WITH 1-CHLORO- 2,3-EPOXYPROPANE, REACTION PRODUCTS WITH 3-AMINOPROPYLDIETHYLAMINE AND 2-PIPERAZIN- 1-YLETHYLAMINE	Acute Tox. 4 Skin Irrit. 2 Eye Irrit. 2 Skin Sens. 1 Aquatic Acute 1 Aquatic Chronic 1	GHS07, GHS09	H302, H315, H317, H319, H400, H410
m -PHENYLENEBIS (METHYLAMINE)	Acute Tox. 4 Skin Corr. 1B Eye Dam. 1 Skin Sens. 1B Aquatic Chronic 3	GHS05, GHS07	H302, H314, H317, H318, H332, H412
Phenol, styrenated	Skin Irrit. 2 Skin Sens. 1 Aquatic Chronic 2	GHS07, GHS09	H315, H317, H411
2,4,6-tris(dimethylaminomethyl)phenol	Acute Tox. 4 Skin Irrit. 2 Eye Irrit. 2	GHS07	H302 H315 H319

**SECTION 4: First aid measures****4.1 Description of first aid measures**

- Wash contaminated clothing before reuse.

**Contact with eyes**

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

IF exposed or concerned: Get medical advice/attention.

**Contact with skin**

IF ON SKIN: Wash with plenty of soap and water.

IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].

If skin irritation or rash occurs: Get medical advice/attention.

IF exposed or concerned: Get medical advice/attention.

**Ingestion**

IF SWALLOWED: Call a POISON CENTRE/doctor/ if you feel unwell.

IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

If vomiting occurs turn patient on side

When in doubt or symptoms persist, seek medical attention

IF exposed or concerned: Get medical advice/attention.

**Inhalation**

IF INHALED: Remove person to fresh air and keep comfortable for breathing.

If breathing is difficult, oxygen should be given by a trained person

Seek medical advice if necessary

IF exposed or concerned: Get medical advice/attention.

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

- May cause blistering of the skin
- May cause dizziness
- May cause nausea/vomiting
- May cause redness and irritation
- May cause wheeziness

## **SECTION 4: First aid measures (....)**

### **4.3 Indication of any immediate medical attention and special treatment needed**

- Call a POISON CENTER/doctor/physician if symptoms continue.
- 

## **SECTION 5: Firefighting measures**

### **5.1 Extinguishing media**

- Not flammable. In case of fire use extinguishing media appropriate to surrounding conditions
- Do not use water jets

### **5.2 Special hazards arising from the substance or mixture**

- Smoke from fires is toxic. Take precautions to protect personnel from exposure
- Carbon oxides may be formed

### **5.3 Advice for firefighters**

- Wear protective gloves/protective clothing/eye protection/face protection.
  - Toxic fumes may be formed
  - Wear Breathing Apparatus
- 

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

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

- Do not get in eyes, on skin, or on clothing.
- Evacuate the area and keep personnel upwind
- In case of leakage, eliminate all ignition sources.
- Wear protective clothing as per section 8

### **6.2 Environmental precautions**

- Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment
- Avoid release to the environment. Refer to special instructions/Safety data sheets
- Do not allow to enter public sewers and watercourses
- If contamination of drainage systems or water courses is unavoidable, immediately inform appropriate authorities

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

- Absorb spillage in suitable inert material
- Collect as much as possible in clean container for reuse or disposal
- Seek expert advice for removal and disposal of all contaminated materials and wastes

### **6.4 Reference to other sections**

- See Section 8
  - See Section 13
- 

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

### **7.1 Precautions for safe handling**

- Forms hazardous decomposition products
- Avoid contact with skin and eyes
- Dispose of contents/container to an authorised waste collection point
- Ensure adequate ventilation
- Wash contaminated clothing before reuse.
- Wear protective gloves/protective clothing/eye protection/face protection.

## SECTION 7: Handling and storage (....)

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

- Store in a dry place. Store in a closed container.
- Keep container tightly closed, in a cool, well ventilated place

### 7.3 Specific end use(s)

- No information available

## SECTION 8: Exposure controls/personal protection

### 8.1 Control parameters

#### benzyl alcohol

DNEL (Industry; inhalational, short term systemic effects): 110 mg/m<sup>3</sup>  
 DNEL (Industry; inhalational, long term systemic effects): 22 mg/m<sup>3</sup>  
 DNEL (Industry; dermal, short term systemic effects): 40 mg/kg/day  
 DNEL (Industry; dermal, long term systemic effects): 8 mg/kg/day  
 DNEL (Consumer; inhalational, long term systemic effects): 5.4 mg/m<sup>3</sup>  
 DNEL (Consumer; inhalational, short term systemic effects): 27 mg/m<sup>3</sup>  
 DNEL (Consumer; dermal, long term systemic effects): 4 mg/kg/day  
 DNEL (Consumer; dermal, short term systemic effects): 20 mg/kg/day  
 DNEL (Consumer; oral, long term systemic effects): 4 mg/kg/day  
 DNEL (Consumer; oral, short term systemic effects): 20 mg/kg/day

#### m - PHENYLENEBIS (METHYLAMINE)

DNEL (Industry; dermal, long term systemic effects): 0.33 mg/kg/day  
 DNEL (Industry; inhalational, long term local effects): 0.2 mg/m<sup>3</sup>  
 DNEL (Industry; inhalational, long term systemic effects): 1.2 mg/m<sup>3</sup>

#### 2,2'-iminodiethylamine; diethylenetriamine

DNEL (Industry; dermal, long term systemic effects): 11.4 mg/kg/day  
 DNEL (Industry; inhalational, long term systemic effects): 15.4 mg/m<sup>3</sup>  
 DNEL (Industry; dermal, long term local effects): 1.1 mg/m<sup>3</sup>  
 DNEL (Industry; inhalational, long term local effects): 0.87 mg/m<sup>3</sup>  
 DNEL (Consumer; dermal, short term systemic effects): 4.88 mg/kg/day  
 DNEL (Consumer; inhalational, short term systemic effects): 27.5 mg/m<sup>3</sup>  
 DNEL (Consumer; dermal, long term systemic effects): 4.88 mg/kg/day  
 DNEL (Consumer; inhalational, long term systemic effects): 4.6 mg/m<sup>3</sup>

### 8.2 Exposure controls



Gloves



Goggles

- Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
- Use personal protective equipment as required.
- In poorly ventilated areas or confined spaces, use an airline respirator or self-contained breathing apparatus
- Wear suitable gloves: Chemical resistant, impervious gloves such as Nitrile, Neoprene and PVC complying with European Standard EN374
- Wear protective gloves/protective clothing/eye protection/face protection.

---

## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

- Physical state: Liquid
- Colour: Amber
- Odour: Ammonia odour
- Melting point/Range: Not applicable
- Boiling Point/Range: >200°C
- Flammability: Not flammable
- pH: Not available
- Solubility in water: Immiscible with water
- Density: 1.0
- Flashpoint: >93°C

### 9.2 Other information

---

## SECTION 10: Stability and reactivity

### 10.1 Reactivity

- Considered stable under normal conditions

### 10.2 Chemical stability

- Considered stable under normal conditions

### 10.3 Possibility of hazardous reactions

- No hazardous reactions known if used for its intended purpose

### 10.4 Conditions to avoid

- Keep away from heat

### 10.5 Incompatible materials

- Avoid contact with acids and alkalis
- Keep away from strong oxidizing substances

### 10.6 Hazardous decomposition products

- Decomposition products may include toxic fumes
- 

## SECTION 11: Toxicological information

### 11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

#### Acute toxicity

#### Substances

Chemical Name	LD <sub>50</sub> (oral, rat)	LD <sub>50</sub> (skin, rat)	LD <sub>50</sub> (oral, mouse)	LD <sub>50</sub> (dermal, rabbit)	LC <sub>50</sub> (inhalation, rat)
benzyl alcohol	1,620 mg/kg	2000 mg/kg	1,040 mg/kg		
3-aminomethyl-3,5,5-trimethylcyclohexylamine	1,030 mg/kg	>2,000 mg/kg		1,840 mg/kg	

**SECTION 11: Toxicological information (....)**

m -PHENYLENEBIS (METHYLAMINE)	980 mg/kg		1,180 mg/kg	3100 mg/kg	1.34 dust/mist mg/l
Phenol, styrenated	>2,000 mg/kg	>2,000 mg/kg			
2,4,6-tris(dimethylaminomethyl)phenol	2,169 mg/kg				
2,2'-iminodiethylamine; diethylenetriamine	1,620 mg/kg			1,045 mg/kg	0.07 dust/mist mg/l
bisphenol A; 4,4'-isopropylidenediphenol	3,250 mg/kg			3,000 mg/kg	>5 mg/l/4h

**Skin corrosion/irritation**

Causes redness and irritation

Causes allergic reaction in susceptible people

**Serious eye damage/irritation**

Can cause damage to the eyes

May cause burning sensation

Prolonged skin or eye contact may cause chemical burns

**Respiratory or skin sensitisation**

May cause shortness of breath

**Germ cell mutagenicity**

No experimental data available

**Carcinogenicity**

No experimental data available

**Reproductive toxicity**

Not applicable

**STOT (specific target organ toxicity) - single exposure**

No information available

**STOT (specific target organ toxicity) - repeated exposure**

No information available but must be considered harmful

**Aspiration hazard**

No experimental data available

**11.2 Information on other hazards**

- No information available

**SECTION 12: Ecological information****12.1 Toxicity****Substances**

Chemical Name	IC <sub>50</sub> (algae)	EC <sub>50</sub> (daphnia)	LC <sub>50</sub> (fish)
benzyl alcohol	770 mg/l (72 hr)	230 mg/l (48 hr)	460 mg/l (96 hr)
3-aminomethyl- 3,5,5-trimethylcyclohexylamine		23 mg/l (48 hr)	110 mg/l (96 hr)

## SECTION 12: Ecological information (....)

m -PHENYLENEBIS (METHYLAMINE)		15.2 mg/l (48 hr)	75 mg/l (96 hr)
Phenol, styrenated		4.6 mg/l (48 hr)	
2,2'-iminodiethylamine; diethylenetriamine	1164 mg/l (72 hr)	16 mg/l (48 hr)	430 mg/l (96 hr)
bisphenol A; 4,4'-isopropylidenediphenol		10.2 mg/l (48 hr)	

### 12.2 Persistence and degradability

- Biodegradable

### 12.3 Bioaccumulative potential

- Bioaccumulation is insignificant

### 12.4 Mobility in soil

- This substance will leach into the soil

### 12.5 Results of PBT and vPvB assessment

- Not a PBT according to REACH Annex XIII

### 12.6 Endocrine disrupting properties

- No information available

### 12.7 Other adverse effects

- No information available

## SECTION 13: Disposal considerations

### 13.1 Waste treatment methods

- Dispose of container to a hazardous or special waste collection point

## SECTION 14: Transport information



Corrosive



ENVIRONMENTALLY HAZARDOUS

### 14.1 UN number or ID number

- UN No.: 2735

### 14.2 UN proper shipping name

- Proper Shipping Name: AMINES, LIQUID, CORROSIVE, N.O.S.
- Proper Shipping Name: Benzyl alcohol

### 14.3 Transport hazard class(es)

- Hazard Class: 8

### 14.4 Packing group

- Packing Group: III

### 14.5 Environmental hazards



**SECTION 14: Transport information (....)**

- Marine Pollutant

**14.6 Special precautions for user**

- Contains: 3-aminomethyl-3,5,5-trimethylcyclohexylamine  
2,2'-iminodiethylamine; diethylenetriamine
- Tunnel Code: E

**14.7 Maritime transport in bulk according to IMO instruments****SECTION 15: Regulatory information****15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture****Substance of very high concern (SVHC)**

Chemical Name	CAS Number	Listed In	Notes
bisphenol A; 4,4'-isopropylidenediphenol	80-05-7	2017	Toxic for reproduction Endocrine disrupting properties (environment) Endocrine disrupting properties (human health)

- Water Hazard Class (Company): 2

**Substances**

Chemical Name	Water Hazard Class (Official)	Water Hazard Class (Company)
benzyl alcohol	1	
3-aminomethyl-3,5,5-trimethylcyclohexylamine	1	
4,4'-ISOPROPYLIDENEDIPHENOL, OLIGOMERIC REACTION PRODUCTS WITH 1-CHLORO-2,3-EPOXYPROPANE, REACTION PRODUCTS WITH 3-AMINOPROPYLDIETHYLAMINE AND 2-PIPERAZIN-1-YLETHYLAMINE	Not hazardous	
m-PHENYLENEBIS (METHYLAMINE)	Not hazardous	
Phenol, styrenated	Not hazardous	
2,4,6-tris(dimethylaminomethyl)phenol		Not Classified
2,2'-iminodiethylamine; diethylenetriamine	2	
bisphenol A; 4,4'-isopropylidenediphenol	2	

**15.2 Chemical safety assessment****SECTION 16: Other information**

Text not given with phrase codes where they are used elsewhere in this safety data sheet:-  
**H302: Harmful if swallowed. H312: Harmful in contact with skin. H314: Causes severe skin burns and eye damage. H315: Causes skin irritation. H317: May cause an allergic skin reaction. H318: Causes serious eye damage. H319: Causes serious eye irritation. H332: Harmful if inhaled. H335: May cause respiratory irritation. H360F: May damage fertility. H400:**

## **SECTION 16: Other information (....)**

**Very toxic to aquatic life. H410: Very toxic to aquatic life with long lasting effects. H411: Toxic to aquatic life with long lasting effects. H412: Harmful to aquatic life with long lasting effects.**

### **Legal Disclaimer**

- The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. This company shall not be held liable for any damage resulting from handling or from contact with the above product

--- end of safety datasheet ---

---