

## 1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION

### Product Information

Trade name : ARMOURGUARD S , RESIN COMPONENT  
Company : Reactive Resins  
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Walker Lines Industrial Estate  
BODMIN  
Cornwall PL31 1HA  
United Kingdom  
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## 2. COMPOSITION/INFORMATION ON INGREDIENTS

### Chemical nature

Solvent containing epoxy resin preparation

### Hazardous components

Chemical Name	CAS-No.	Symbol(s)	R-phase(s)	Concentration (%)
Bisphenol A epoxy resin Number average MW > 700	25068-38-6	Xi, N	R36/38-43-51/53	>10.00 - <30.00
Bisphenol F – epoxy resins, number average MW > 700	28064-14-4-	Xi, N	R36/38-43-51/53	>5.00 - <20.00
Hexanedioldiglycidylether	16096-31-4	Xi	R 36/38-43-52/53	>2.00 - <10.00
Methyl Isobutyl Ketone	108-10-1	Xn	R11, R20, R36/R37, R66	>1.50 - <10.00
Methoxy-2-Propanol	107-98-2		R10	>1.50 - <10.00
Xylene	1330-20-7	Xn	R10, R20/R21, R38	>1.50 - <10.00

## 3. HAZARDS IDENTIFICATION

Flammable.  
Harmful by inhalation and in contact with skin.  
Irritating to skin.

## 4. FIRST AID MEASURES

Inhalation : Move to fresh air.  
If symptoms persist, call a physician.

Eye contact : Rinse immediately with plenty of water for at least 15 minutes.  
If eye irritation persists, consult a specialist.

Skin contact : Clean with detergents. Avoid solvents.

Ingestion : Immediately give plenty of water (is possible charcoal slurry).  
If a person vomits when lying on his back, place him in the recovery position.  
Oxygen or artificial respiration if needed.  
Do not induce vomiting.

## SAFETY DATA SHEET according to EEC directive 93/112/EC

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#### 5. FIRE-FIGHTING MEASURES

Suitable extinguishing media	:	Carbon dioxide (CO <sub>2</sub> ). Foam. Dry powder. Sand
Extinguishing media which must not be used for safety reasons	:	High volume water jet.
Special protective equipment for fire-fighters	:	Wear self-contained breathing apparatus and protective suit
Further information	:	Burning produces obnoxious and toxic fumes. Carbon oxides.

#### 6. ACCIDENTAL RELEASE MEASURES

Personal precautions	:	Keep away from sources of ignition – No smoking. Avoid contact with skin, eyes and clothing. Do not breathe vapours/dust.
Environmental precautions	:	Prevent product from entering drains. Do not contaminate surface water. Avoid subsoil penetration.
Methods for cleaning up	:	Soak up with inert absorbent material and dispose of as hazardous waste.

#### 7. HANDLING AND STORAGE

##### Handling

Advice on safe handling	:	Provide sufficient air exchange and/or exhaust in work rooms. Remove all sources of ignition. Ensure adequate ventilation. Handle and open container with care.
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##### Storage

Further information on storage conditions	:	Keep away from food, drink and animal feeding stuffs. Keep container tightly closed. Store at room temperature in the original container.
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Storage hazard class	:	Storage class 3, Flammable Liquids
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## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Components with workplace control parameters

Components	CAS-No.	STEL ppm	OEL
Methyl isobutyl ketone	108-10-1	100	50
Xylene	1330-20-7	100	50
Methyl Proxitol	107-98-2	150	100

### Engineering measures

Avoid formation of aerosol.

Provide appropriate exhaust ventilation at machinery and at places where dust can be generated.

### Personal protective equipment

Eye protection	:	Tightly fitting safety goggles. Face-shield.
Hand protection	:	Rubber or plastic gloves.
Skin and body protection	:	Protective suit. Safety shoes.
Protective measures	:	Keep away from sources of ignition – No smoking. Avoid contact with skin, eyes and clothing.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

Form	:	liquid
Colour	:	pigmented
Odour	:	solvent
Boiling point	:	approx. 140°C
Thermal decomposition	:	> 200°C
Flash point	:	26°C Method : DIN51755 (Abel-Pensky Closed Cup)
Vapour pressure	:	800 Pa at 20°C
Density	:	approx. 1.1 g/cm <sup>3</sup> at 25°C
Water solubility	:	at 20°C
Miscibility with water	:	Note : practically insoluble immiscible

## 10. STABILITY AND REACTIVITY

Conditions to avoid	:	Note: Take necessary action to avoid static electricity discharge.
Materials to avoid	:	Strong acids and strong bases. Strong oxidizing agents.
Hazardous decomposition products	:	Carbon oxides. Burning produces obnoxious and toxic fumes.

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## 11. TOXICOLOGICAL INFORMATION

Acute oral toxicity	:	LD50 rat Dose: >5,000 mg/kg
Eye irritation	:	irritating rabbit Method : estimated
Skin irritation	:	irritating rabbit Method : estimated
Sensitization	:	dermal Causes sensitization guinea pig Method:Maximisation Test (GPMT) dermal

## 12. ECOLOGICAL INFORMATION

### Ecotoxicity effects

### Further information on ecology

Additional ecological information :	Avoid subsoil penetration. Prevent product from entering drains. Do not contaminate surface water.
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## 13. DISPOSAL CONSIDERATIONS

Container	:	Empty containers can be landfilled after cleaning, when in compliance with the Environmental Protection (Duty of Care) Regulations 1991.
Product	:	Waste Key Number: 070208

## 14. TRANSPORT INFORMATION

### Land Transport

#### ADR:

UN-No.	:	1866
Class	:	3
Item	:	F1
Risk No.	:	30
ADR/RID-Labels	:	3
Proper Shipping Name	:	RESIN SOLUTION, FLAMMABLE

#### RID:

UN-No.	:	1866
Class	:	3
Item	:	F1
Risk No.	:	30
ADR/RID-Labels	:	3
Proper Shipping Name	:	RESIN SOLUTION, FLAMMABLE

## SAFETY DATA SHEET according to EEC directive 93/112/EC

### ARMOURGUARD S , RESIN COMPONENT

#### Sea Transport

*IMDG:*

UN-No.	:	1866
Class	:	3
Packaging Group	:	III
ADR/RID-Labels	:	3
MFAG	:	
EmS	:	F-E-S-E
Proper Shipping Name	:	RESIN SOLUTION, FLAMMABLE

#### Air Transport

*IATA-DGR:*

UN-No.	:	UN 1866
Class	:	3
Packaging Group	:	III
Packing Instruction (cargo aircraft)	:	310
ADR/RID-Labels	:	3
Proper Shipping Name	:	RESIN SOLUTION, FLAMMABLE

## 15. REGULATORY INFORMATION

#### Labelling according to EEC Directive

Labelling required

Symbol(s)	:	Xn	Harmful
R-phrases(s)	:	R10	Flammable
		R20/21	Harmful by inhalation and in contact with skin
		R43	May cause sensitization by skin contact
		R36/38	Irritating to eyes and skin
S-phrases(s)	:	S28	After contact with skin, wash immediately with plenty of soap and water
		S37/39	Wear suitable gloves and eye/face protection

Hazardous components which must be listed on the label

bisphenol A- epoxy resins, number average MW >700 – <1100  
bisphenol F- epoxy resins, number average MW >700 – <1100  
methyl isobutyl ketone  
xylene

## 16. OTHER INFORMATION

The provision of Safety Data Sheets comes under regulation 6 of CHIP (CHIP is the recognised abbreviation for the Chemicals Hazard Information and Packaging regulations). This is an addition to the Health & Safety at Work Act 1974.

Users of products supplied by Reactive Resins should take appropriate measures to ensure working practices are in accordance with the Control of Substances Hazardous to Health Regulations (COSHH)

All information is based on results gained from experience and tests and is believed to be accurate but is given without acceptance of liability for loss or damage attributable to reliance thereon as conditions of use lie outside our control. Users should always carry out sufficient tests to establish the suitability of any products for their intended applications. No statements shall be incorporated in any contract unless expressly agreed in writing nor construed as recommending the use of any product in conflict of any patent. All goods are supplied subject to Reactive Resins General Conditions of Sale.