

<b>Trade Name:</b>	<b>RAWL R-KF2 Polyester Resin</b>
<b>Producer: Supplier:</b>	<b>Artex Rawlplug Limited Skibo Drive Thornliebank Industrial Estate Glasgow G46 8JR. GB Telephone: 0141 638 7961 Fax: 0141 638 7397</b>
<b>Printing Date</b>	<b>04.02.2004</b>

**1. Composition/information on ingredients**

Chemical characteristics

Component A: Polyester-resin in styrene, filled

Component B: Dibenzoylperoxide, phlegmatisized, filled

Hazardous ingredients

CAS-Nr.	Hazardous ingredient	Conc.(weight.-%)	Symbol	R-phases
Component A:				10-20-36/38
100-42-5	Styrene	12,5-30%	Xn	10-20-36/38
Component B:				
94-36-0	Dibenzoylperoxide	10-40%	O, Xi	7-36/38-43
107-21-1	1,2 Ethandiole	3-10%	Xn 22	

**2. Hazards identification**

Hazards and symptoms:

Component A: R 10 - Flammable

R 20 - Harmful by inhalation

R 36/38 - Irritating to eyes and skin

Component B: R 36 - Irritating to eyes

R 43 - Sensitivity by skin contact is possible

**3. First aid measures**

General instructions:	Take off and remove contaminated clothing immediately.
If inhaled:	Bring person concerned to fresh air and keep him calm. Seek medical attention.
On skin contact:	Wash thoroughly with soap and water.
On contact with eyes:	Wash affected eyes for at least 15 minutes under running water with eyelids held open, consult an eye specialist.
On ingestion:	Immediately rinse mouth and then drink plenty of water, Seek medical attention.
Instructions for the doctor:	No data available.

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#### 4. Fire-fighting measures

Suitable extinguishing media:	Foam, water, dry extinguishing media, CO <sub>2</sub>
Extinguishing media that must not be used for safety reasons:	No data available.
Special hazards from the substance itself, its combustion products or resulting gases: In case of fire can be released:	Carbon monoxide, carbon dioxide, water and cracked hydrocarbons.
Special protective equipment:	Breathing apparatus.
Further information:	No data available.

#### 5. Accidental release measures

Personal precautions:	Use personal protective clothing. Ensure adequate ventilation.
Environmental precautions:	Do not discharge into the drains, surface water, ground water.
Methods for cleaning up:	Take up mechanically. Contain with absorbent material (e.g. sand, silica gel, acid binder, general purpose binder, sawdust).
Further information:	No data available.

#### 6. Handling and storage

<u>Handling:</u>	
Instructions for safety handling:	Consider manufacturing date on cartridge.
Instructions for fire and explosion protection:	Keep away from sources of ignition. Do not smoke.
<u>Storage:</u>	
Requirements for storage	
Rooms and vessels:	Product in original packing in a cool, dry and dark place with ventilation. Protect against sun and heat influence.
Vessel content:	380 ml
Vessel material:	Plastic cartridge.
Storing temperature:	5°C < T < 25°C.
Storage class:	No data available.
Further instructions:	Keep out of the reach of children.

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## 7. Exposure controls/personal protection

### Personal protective equipment:

General protection and hygienic measures:	Closed working clothes, preventive skin protection with skin protection cream. Avoid contact with skin, eyes and clothes.
Hand protection:	Protective gloves.
Body protection:	Closed working clothes.

## 8. Physical and chemical properties

Form:	Paste
Colour:	A-Component: white – B-Component: black
Odour:	characteristic (Styrene)
Boiling point:	146°C (Styrene)
Flash:	34°C (Styrene)
Explosion limits:	lower: 1,1 Vol.% (Styrene) Upper: 8,0 Vol.% (Styrene)
Ignition temperatures:	490 °C (Styrene)
Steam pressure:	10 mbar at 20 °C, 50 mbar at 50 °C (Styrene)
Solubility:	Solubility in water: resin (20 °C) 300 mg/l (appr.) A: 1,0-1,6 – B: 1-1,2 (20 °C)
Content of solvent:	< 30 Gew. %

## 9. Stability and reactivity

Hazardous reactions:	Heat develops during polymerisation.
Hazardous decomposition products:	Carbon monoxide, carbon dioxide, water and cracked hydrocarbons.
Thermal decomposition:	Component B: above 60 °C

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## 10. Toxicological information

### Acute toxicity:

Acute oral toxicity:	LD50/rat: 4000 mg/kg (1,2 Ethandiole) LD50/rat: 5000 mg/kg (Styrene) LD50 Dibenzoylperoxide/rat > 5000 mg/kg
Acute inhal. toxicity:	LC50/rat: 11,9 mg/l 4h (Styrene) LC50 Dibenzoylperoxide/rat > 2000 mg/kg LD50/hare: 2000 mg/kg (1,2 Ethandiole)
Dermal toxicity:	Irritant
Irritant effect on skin:	Irritant
Irritant effect on eye :	Irritant
Sensitivity:	Possible by skin contact (Dibenzoylperoxide)
Sub-acute to chronic toxicity:	No data available
Further remarks on toxicological examination:	No data available
Experience made in practice:	unknown

## 11. Ecological information

### Elimination information:

Styrene:	
Test method:	OECD 301C/ISO 9408/EEC 84/449/V, C.7
Method of analysis:	BOD of the ThOD
Degree of elimination:	> 60%
Evaluation:	readily biodegradable

### Ecotoxic effect:

Styrene:  
Stopping of breathing of communal living sludge: EC20 100 mg/l (ISO 8192/OECD 209/EEC 88/302C).

### Further ecological information:

Insoluble. Do not discharge product into water courses without pre-treatment (biological purification plant).

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## 12. Disposal considerations

### Disposal of product:

Advice: Non cured: must be disposed of by special means, e.g. suitable incineration, in accordance with local regulations.  
Cured: can be dumped with domestic refuse or incinerated in suitable plant in accordance with local regulations.

Waste code: Component A: 08 04 06/20 01 12  
Component B: 07 02 99  
08 04 04 (cured)

### Disposal of contaminated packaging:

Advices: Contaminated packaging should be emptied as far as possible  
Packaging that cannot be emptied should be disposed of in the same manner as the contents.

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## 13. Transport information

### Land transport ADR/RID and GGVS/GGVE:

Regulations do not apply to this product (small amount).  
UN-No. 3269 Polyester resin kit, small amount.

### Inland waterway transport ADN/ADNR:

Regulations do not apply to this product (small amount).  
UN-No. 3269 Polyester resin kit (small amount).

### Sea transport IMDG/GGVSee:

Class: 3.3  
Code: 3377-1  
PG: III

EMS: 3-07  
MFAG: 310  
Marine pollutant: yes  
Proper technical name: Polyester resin kit (styrene monomer, inhibited)  
Marine pollutant.

### Air transport ICAO/IATA:

Class: 3  
PG: III  
Proper technical name: Polyester resin kit

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#### 14. Prescriptions

##### Labelling according to EEC directives:

Labelling: The product is classified and labelled in accordance to EEC-regulations  
Hazards: Component A: Xn – harmful  
Component B: Xi – irritating, O – oxidizing

##### R-Phrases:

Component A: R 10 – Flammable.  
R 20 – Harmful by inhalation.  
R 36/38 – Irritating to eyes and skin.

Component B: R 36 – Irritating to eyes.  
R 43 – Sensitivity by skin contact is possible.

##### S-Phrases:

Component A: S 37/39 - Wear suitable safety gloves and eye protection.

Component B: S 3 - Keep in a cool place.  
S 37/39 - Wear suitable safety gloves and eye protection.

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#### 15. Further information

The above information is furnished without warranty of any kind. Users should consider this data only as a supplement of other information gathered by them and make independent determinations of suitable and completeness of information from all sources to ensure proper use and disposal of these materials and the safety of employees and customers.