

Trade name:	Rawl RP30
Manufacturer/supplier:	Rawlplug Limited
Version dated:	30.07.2004
Revised:	30.09.2005

Safety data sheet in accordance with EU directive 91/155/EEC

1. Identification of the substance / preparation and company

Identification of the substance or preparation:

RAWLPLUG RP30 Injection Polyester

Usage of the substance or preparation: Component A (resin)

Manufacturer / supplier details

Rawlplug Limited

Skibo Drive, Thornliebank Industrial Estate

Glasgow G46 8JR. United Kingdom

Emergency phone no. / consultation point

Consultation point for symptoms of poisoning:

Phone: +44 (0) 141-638-7961

Emergency phone no. of manufacturer / supplier:

Phone: +44 (0) 141-638-7961

2. Composition / information on ingredients

Chemical

Description	% range	Symbol	R-phrases	EINECS, ELINCS
Styrene	12.5 – 25	Xn/Xi	10-20-36/38	202-851-5
Quartz	40 – 50			238-878-4
Calcium carbonate	10 – 20			207-439-9
Silicon dioxide	1 – 5			231-545-4

For text for the R-phrases see section 16.

3. Hazards identification

For humans

See also sections 11 and 15.

Preparation is classed as dangerous in accordance with Directive 1999/45/EC.

Product is flammable.

Irritation to the eyes.

Irritation to the skin.

Inhalation:

Product is detrimental to health.

For the environment

See section 12.

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4. First aid measures

After inhalation: Remove person from danger area. Ensure supply of fresh air to the person; call a doctor immediately.

After eye contact: Rinse thoroughly with water for several minutes; call a doctor immediately; keep the data sheet to hand.

After skin contact: Wash thoroughly with plenty of water and soap. Remove contaminated, soaked clothing at once. If the skin shows signs of irritation (redness etc.) seek medical attention.

After ingestion: Rinse mouth thoroughly with water. Ensure that plenty of water is consumed; call a doctor immediately.

Special agents required for first aid Not tested

5. Fire fighting measures

Suitable extinguishing substances

CO₂, dry powder, foam, water spray jet.

Cool containers that are at risk with water.

For safety reasons – unsuitable extinguishing substances

n.a.

Special danger from the substance or the preparation itself, its products of combustion or resulting gases

In case of fire the following can arise:

Smoke, carbon monoxide, hydrocarbons, cracked products, explosive vapour / air mixtures.

Special protective equipment for fire fighting

Self-contained breathing equipment. Depending on the size of the fire, total protection, if necessary.

Other instructions

Dispose of contaminated fire fighting water in accordance with local authority regulations.

6. Accidental release measures

See section 13, and for personal protective equipment see section 8.

Remove all ignition sources, do not smoke.

Ensure there is plenty of ventilation.

Avoid eye and skin contacts as well as inhaling.

Environmental protection measures

If larger amounts should escape, try to confine them.

Do not allow them to flow into the sewerage system.

Avoid any run-off into surface or ground water as well as into the earth.

Cleaning procedures

Absorb mechanically and dispose of in accordance with section 13.

Or:

Absorb into a fluid-binding material (e.g. universal binding agent, sand, diatomaceous earth) and dispose of in accordance with section 13.

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7. Handling and storage

Safe handling:

See section 6 (Personal safety precautions)

Ensure there is plenty of ventilation.

Keep away from ignition sources – do not smoke.

Drinking, eating, smoking and the keeping of foodstuffs are all prohibited in the work area.

Wash hands prior to taking breaks and at the end of work.

Carefully observe notes on the label and usage instructions.

Always work according to the operating instructions.

Storage

Storage room and container requirements

Observe special storage requirements (in Germany according to operational safety regulations, for example).

Do not store the product in passages and on stairways.

Always store the product in its original packaging and properly closed off.

Special storage requirements

See section 10 (Substances to avoid).

Store closed and away from sources of moisture.

Store only at temperatures ranging from 5°C to 25°C.

Protect against direct sunlight and sources of heat.

8. Exposure controls and personal protection

Ensure there is enough ventilation. This is possible through local extraction or general exhaust air. If this should prove inadequate to keep the concentration below the MAK figures, then suitable breathing apparatus must be used. Applies only if exposure limitation figures are stated here.

D Chem. Bezeichnung Styrol D Chem. description styrene AG: 20 ppm (86 mg/m ³) Spb.-Üf.: 4 - - - BG: 600 mg/g creatinine (mendelic acid plus phenylglyoxyl acid, urine c,b) Other information: DFG, Y
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CH Chem. description styrene MAK / VME: 20 ppm (85mg/m ³) KG / VLE: 40 ppm (170 mg/m ³) (4x15 min) - - - BAT / VBT: 400 mg/g (297 mol/mmol) creatinine (mandelic acid, U) / 500 mg/g creatinine (mendelic acid plus phenylglyoxyl acid, U) Other: C

D Chem. Bezeichnung Quarz D Chem. description quartz AG: 0,15 mg/m ³ A Spb.-Üf.: - - - - - BG: - - - Other information: DFG, Y CH Chem. description quartz MAK / VME: 0.15 mg/ m ³ a KG / VLE: - - - - - BAT / VBT: - - - Other: C
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CH Chem. description calcium carbonate
MAK / VME: 3 mg/ m₃ a KG / VLE: - - - - -
BAT / VBT: - - - Other: C

D Chem. Bezeichnung Siliciumdioxid D Chem. description silicon dioxide
AG: AG: 4 mg/m₃ E (Kieselsäuren, amorphe)⁴
mg/m₃ E (silicic acids, amorphes)
Spb.-Üf.: - - - - -
BG: - - - Sonstige Angaben: Other
information: DFG, Y
(Kieselsäuren, amorphe) DFG, Y
(silicic acids, amorphes)

CH Chem. description silicon dioxide
MAK / VME: 4 mg/m₃ e (silicic acids,
amorphes)
KG / VLE: - - - - -
BAT / VBT: - - - Other: C (silicic acids,
amorphes)

D AG = Workplace limiting value. E = Inhalation fraction, A = Alveolar fraction / Spb.-ÜF = Peak limitation – category (= =) and exceeding factor (1 to 4) for short period value / BG = Biological limiting value. Sample-taking time: a) no restriction, b) end of exposure, or end of shift, c) for long-term exposure: after several previous shifts, d) prior to the next shift, e) at end of exposure. hours. / ARW = Workplace standard value, H = Skin resorption. Y = There is no need to fear any risk of fertility damage if AG and BG are complied with, DFG = German Research Association (MAK commission).

CH MAK / VME = Maximum workplace concentration value / Valeur moyenne d'exposition / KG/VLE = Short period limiting value / Valeur limite d'exposition / BAT / VBT = Biological working material tolerance value / Valeurs biologiques tolérables / investigation material: B = Full blood, E = Erythrocytes, U = Urine, A = Alveolar air, P/Se = Plasma/ serum. Sample-taking time a = no restriction, b = end of exposure, or end of shift, c = for long-term exposure: after several previous shifts, d = prior to the next shift. / H = Skin resorption possible / S = Sensitizer.
Subtrat d'examen: B = Sang complet, E = Erythrocytes, U = Urine, A = Airt alvéolaire, P/Se = Plasma/ Sérum. Moment du prélèvement: a = indifférent, b = fin de l'exposition, de la période de travail, c = exposition de longue durée : après plusieurs périodes de travail, Subtrat d'examen: B = Sang complet, E = Erythrocytes, U = Urine, A = Airt alvéolaire,

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P/Se = Plasma/ Sérums. Moment du prélèvement: a = indifférent, b = fin de l'exposition, de la période de travail, c = exposition de longue durée : après plusieurs périodes de travail, d = avant la reprise du travail. / H = résorption via la peau pos. S = Sensibilisateur. K = Carcinogenic effect. / effet cancérigène./ P = provisional / provis. / A,B,C,D = Group./ cat. Repr. Tox.

Respiratory protection

If the workplace limiting value is exceeded (AG, Germany) or MAK (CH, A) Filter A P 3 (EN 141). Not normally required for MAK (CH, A).

Hand protection

Hand protection cream is recommended.

In the event of longer contact: Protective gloves made of butyl (EN 374).

Permeation time (breakthrough time) in minutes: >480

In the event of brief contact: Protective gloves made of nitrile (EN 374).

Permeation time (breakthrough time) in minutes: >30

Eye protection

Safety glasses close fitting with side flaps (EN 166).

Body protection

Protective clothing (e.g. safety shoes EN 344, long-sleeved working clothes).

Additional information regarding hand protection – no tests were conducted. The selection was made taking into account our best knowledge about the preparations and information about the ingredients. The selection of material was made with reference to information supplied by glove manufacturers.

The final selection of glove material must be made taking into account the breakthrough time, permeation rate and degradation. The selection of a suitable glove depends not only on the material but also on other quality characteristics that vary from one manufacturer to another. For preparations the durability of glove materials is unpredictable and must therefore be tested prior to being used. The exact breakthrough time of glove material should be obtained from the protective glove manufacturer and must be strictly adhered to.

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9. Physical and chemical properties

State of matter:	Highly viscous
Colour:	White
Odour	Characteristic
ph-value diluted:	7
Boiling point / boiling range (in °C):	146 *
Melting point / melting range (in °C):	Not determined
Flash point (in °C):	34 *
Ignition temperature:	490°C *
Lower explosion limit:	1.1 Vol % *
Upper explosion limit:	8.0 Vol % *
Vapour pressure:	10 mbar (20°C), 50 mbar (50°C)*
Density (g/ml):	1.9
Water solubility:	Not soluble
Viscosity	Thixotrope

* Styrene

10. Stability and reactivity

Conditions to be avoided

See section 7.

Not to be expected if properly stored and handled (stable).

Heating up, naked flames, ignition sources.

Protect against moisture.

Materials to be avoided

See section 7.

Avoid contact with oxidising agents.

Exothermic reactions possible with: Peroxides

Dangerous decomposition products

See section 5 (special danger from the substance or the preparation itself, its products of combustion or resulting gases).

11. Toxicological information

Acute toxicity with immediate effect

Ingestion, LD50 rat oral (mg/kg):	5000*
Inhalation, LC50 rat inhalation (mg/l/4h):	Not determined, see section 15.
Skin contact, LD50 rat dermal (mg/kg):	Not determined, see section 15.
Eye contact	Irritating

Delayed as well as chronic reactions

Sensitizing effect:	Not determined
Carcinogenic effect:	Not determined
Mutagenic effect:	Not determined
Reproduction hazard effect:	Not determined
Anaesthetising effect:	Not determined

General remarks

Classification according to calculation procedure

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Cont.

The following can arise:

Repeated contact can lead to chapped or cracked skin.

In high doses:

Irritation of nose and throat mucous membranes, headaches, dizziness.

Unconsciousness.

* Styrene

12. Ecological information

Water hazard class (Germany):	2
Self-assessment:	Yes (Regulation for water hazardous substances)
Persistence and degradability:	80%/20d *
Behaviour in sewage treatment plants:	With proper usage no problems to be expected. According to formulation no AOX contained.
Aquatic toxicity:	Not determined
Daphnian toxicity:	EC50 Daphnia magna 4.7 mg/l/48h *
Fish toxicity:	LC50 Lepomis macrochirus 25 mg/l/96h *
Algae toxicity:	IC 50 Selenastrum capricornutum 0.72 mg/l/96h *
Ecological toxicity:	Not determined

* Styrene

13. Disposal considerations

For the substance / preparation / residual amounts

Waste material key no: EU:

The waste material keys quoted are recommendations based on the anticipated usage of this product. Due to the special usage and disposal circumstances for the user in certain cases other waste keys may be allocated.

08 04 09 Adhesive and jointing compound waste products that contain solvents or other hazardous substances.

Recommendation:

Observe local authority regulations, for example disposal on an approved landfill site or in a suitable incineration plant.

For contaminated packaging material

See section 13: For the substance / preparation / residual amounts.

Observe local authority regulations.

Completely empty the container.

Packaging that is not contaminated can be re-used.

Packaging that cannot be cleaned must be disposed of in the same manner as the substance.

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14. Transport information

General details

UN Number: 3269

A + B

Road / rail transport (GGVSE/ADR/RID)

Class / packaging group: 3/III

UN 3269 POLYESTER RESIN MULTI-COMPONENT SYSTEMS

Classification code: F1

LQ: 7

Maritime transport

IMDG class: 3/III (Class / packaging group)

EmS: F-E, S-D

Marine pollutant: n.a.

POLYESTER RESIN KIT

Air transport

IATA: 3/-/III (Class / extra hazard / packaging group)

Polyester resin kit

Additional remarks:

Hazard number and packaging code on request.

15. Regulatory information

Labelling according to hazardous materials including EU directives

(67/548/EEC and 1999/45/EC)

Hazard symbol: Xi/O

Hazard designation: Detrimental to health

R-phrases: 10 Flammable.

20 Detrimental to health if inhaled.

36/ 38 Irritates the eyes and skin.

S-phrases: (2) Must not get into the hands of children.

35 Waste and container must be disposed of in a secure manner.

37/39 Wear suitable protective gloves and safety glasses / face protection when working with the product.

(46) If ingested seek immediate medical attention and show packaging or labelling.

Additive: Styrene

Observe restrictions: Observe Children and Young Persons Act (German regulation)

Observe restriction directives 76/769/EEC, 1999/51/EC, 1999/77/EC

VOC 1999/13/EC 16% w/w

VOC-CH 0.066 kg/235 ml, 0.084 kg/300 ml, 0.097 kg/345 ml

MAK/BAT: See section 8.

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16. Other information

This information refers to the product as delivered.

Storage class according to VCI: 3 A

Revised points: 15

The following phrases represent the stated R-phrases for the ingredients (named in section 2).

10 Flammable.

20 Detrimental to health if inhaled.

36/ 38 Irritating to eyes and skin.

Legend:

n.a. = not applicable / n.v. = not available / n.g. = not tested

AG = Workplace limiting value / BG = Biological limiting value

VbF = Regulation regarding flammable fluids (Austrian regulation)

WGK = Water hazard class (German regulation)

WGK3 = Severely hazardous for water

WGK2 = Hazardous for water

WGK1 = Mildly hazardous for water

VOC = Volatile organic compounds

AOX = Adsorbable organic halogen compounds

The information presented here is intended to describe the product with regard to the requisite safety precautions. It is not there to make assurances about certain product properties and is based on present knowledge.

All liability is excluded.

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Safety data sheet in accordance with EU directive 91/155/EEC

1. Identification of the substance / preparation and company

Identification of the substance or preparation:

RAWLPLUG RP30 Injection Cartridge Polyester

Usage of the substance or preparation: Component B (hardener)

Manufacturer / supplier details

Rawlplug Limited

Skibo Drive, Thornliebank Industrial Estate

Glasgow G46 8JR. United Kingdom

Emergency phone no. / consultation point

Consultation point for symptoms of poisoning:

Phone: +44 (0) 141-638-7961

Emergency phone no. of manufacturer / supplier:

Phone: +44 (0) 141-638-7961

2. Composition / information on ingredients

Chemical

Description	% range	Symbol	R-phrases	EINECS, ELINCS
Dibenzoyl-peroxide	20 – 25	E/Xi	2-36-43	202-327-6
Quartz	25 – 50			238-878-4
Glycerine	15 – 20			200-289-5
Ethandiol	5 – 10	Xn	22	203-473-3

For text for the R-phrases see section 16.

3. Hazards identification

For humans

See also sections 11 and 15.

Preparation is classed as dangerous in accordance with Directive 1999/45/EC.

Can cause a fire.

Irritation to the eyes.

Sensitisation through contact with the skin possible.

For the environment

See section 12.

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4. First aid measures

After inhalation: Remove person from danger area. Ensure supply of fresh air to the person and, depending on symptoms, consult a doctor.

After eye contact: Rinse thoroughly with water for several minutes; call a doctor immediately; keep the data sheet to hand.

After skin contact: Wash thoroughly with plenty of water and soap. Remove contaminated, soaked clothing at once. If the skin shows signs of irritation (redness etc.) seek medical attention.

After ingestion: Rinse mouth thoroughly with water. Do not encourage vomiting, ensure that plenty of water is consumed; call a doctor immediately. Keep the data sheet to hand.

Special agents required for first aid
not determined

5. Fire fighting measures

Suitable extinguishing substances

CO₂, dry powder, foam, water spray jet.

In case of large sources of fire:

Water spray jet / alcohol-resistant foam.

Cool containers that are at risk with water.

For safety reasons – unsuitable extinguishing substances

Full water jet

Special danger from the substance or the preparation itself, its products of combustion or resulting gases

In case of fire the following can arise:

Carbon monoxide, cracked products, hydrocarbons, carbonic acids, toxic pyrolysis products.

Special protective equipment for fire fighting

Self-contained breathing equipment. Depending on the size of the fire, total protection, if necessary.

Other instructions

Dispose of contaminated fire fighting water in accordance with local authority regulations.

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6. Accidental release measures

See section 13, and for personal protective equipment see section 8.

Personal safety precautions

Remove all ignition sources, do not smoke.

Ensure there is plenty of ventilation.

Avoid eye and skin contacts as well as inhaling.

Environmental protection measures

If larger amounts should escape, try to confine them.

Do not allow them to flow into the sewage system.

If there is an accidental seepage into the sewage system, then inform the authorities.

Avoid any run-off into surface or ground water as well as into the earth.

Cleaning procedures

Absorb mechanically and dispose of in accordance with section 13.

Do not use any flammable substances.

Do not close the drum.

7. Handling and storage

Safe handling:

See section 6 (Personal safety precautions)

Ensure there is plenty of ventilation.

Keep away from ignition sources – do not smoke.

If necessary, introduce measures to prevent electrostatic charging.

Never return residual amounts into the storage containers.

Carefully avoid contaminating the product with foreign substances.

Avoid eye and skin contacts as well as inhaling.

Wash hands prior to taking breaks and at the end of work.

Drinking, eating, smoking and the keeping of foodstuffs are all prohibited in the work area.

Carefully observe notes on the label and usage instructions.

Always work according to the operating instructions.

Storage

Storage room and container requirements

Do not store the product in passages and on stairways.

Always store the product in its original packaging and properly closed off.

Never store it together with easily flammable, flammable or spontaneous ignition substances.

Observe separation guidelines.

Observe special regulations for organic peroxides.

Store in upright position.

Suitable containers: Stainless steel, PE

Special storage requirements

See section 10 (Substances to avoid)

Store only at temperatures ranging from 5°C to 25°C.

Protect against direct sunlight and sources of heat.

Store closed and away from sources of moisture.

Avoid drying out.

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8. Exposure controls and personal protection

Ensure there is enough ventilation. This is possible through local extraction or general exhaust air. If this should prove inadequate to keep the concentration below the MAK figures, then suitable breathing apparatus must be used. Applies only if exposure limitation figures are stated here.

D Chem. Bezeichnung Dibenzoylperoxid D Chem. description Dibenzoylperoxide

AG: 5 mg/m³ E Spb.-Üf.: =1= - - -

BG: - - - Sonstige Angaben: Other

information: DFG

CH Chem. description Dibenzoylperoxide

MAK / VME: 5 mg/ m³ e KG / VLE: 5 mg/m³ e (15 min) - - -

BAT / VBT: - - - Other: - - -

D Chem. Bezeichnung Quarz D Chem. description quartz

AG: AG: 0,15 mg/m³ A 0.15 mg/m³ A Spb.-Üf.: - - - - -

BG: - - - Other information: DFG, Y

CH Chem. description quartz

MAK / VME: 0.15 mg/m³ a KG / VLE: - - - - -

BAT / VBT: - - - Other: C

D Chem. Bezeichnung Ethandiol D Chem. description ethandiol

AG: 10 ppm (26mg/m³) (AG), 20 ppm (52mg/m³)

(EG)

Spb.-Üf.: =1=(AG), 40ppm(104mg/m³) (EG) - - -

BG: - - - Other information: DFG, H, Y

CH Chem. description ethandiol

MAK / VME: 10 ppm (26 mg/m³) KG / VLE: 20 ppm(52mg/m³) (4x15 min) - - -

BAT / VBT: - - - Other: H, C

D AG = Workplace limiting value. E = Inhalation fraction, A = Alveolar fraction / Spb.-Üf = Peak limitation – category (= =) and exceeding factor (1 to 4) for short period value / BG = Biological limiting value. Sample-taking time: a) no restriction, b) end of exposure, or end of shift, c) for long-term exposure: after several previous shifts, d) prior to the next shift, e) at end of exposure. hours. / ARW = Workplace standard value, H = Skin resorption. Y = There is no need to fear any risk of fertility damage if AG and BG are complied with, DFG = German Research Association (MAK commission).

CH MAK / VME = Maximum workplace concentration value / Valeur moyenne d'exposition / KG/VLE = Short period limiting value / Valeur limite d'exposition / BAT /VBT = Biological working material tolerance value / Valeurs biologiques tolérables /

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investigation material: B = Full blood, E = Erythrocytes, U = Urine, A = Alveolar air, P/Se = Plasma/ serum. Sample-taking time a = no restriction, b = end of exposure, or end of shift, c = for long-term exposure: after several previous shifts, d = prior to the next shift. / H = Skin resorption possible / S = Sensitizer.

Subtrat d 'examen: B = Sang complet, E = Erythrocytes, U = Urine, A = Airt alvéolaire, P/Se = Plasma/ Sérum. Moment du prélèvement: a = indifférent, b = fin de l 'exposition, de la période de travail, c = exposition de longue durée : après plusieurs périodes de travail, d = avant la reprise du travail. / H = éSORption via la peau pos.

S = Sensibilisateur. K = Carcinogenic effect. / effet cancérigène./ P = provisional / provis. / A,B,C,D = Group./ cat. Repr. Tox.

Respiratory protection

If the workplace limiting value is exceeded (AG, Germany) or MAK (CH, A)

Filter A P 3 (EN 141) for MAK (CH, A) not normally required.

Hand protection

In the event of longer contact: Protective gloves made of natural latex (EN 374).

Permeation time (breakthrough time) in minutes: >480

Additional information regarding hand protection – no tests were conducted. The selection was made taking into account our best knowledge about the preparations and information about the ingredients. The selection of material was made with reference to information supplied by glove manufacturers.

The final selection of glove material must be made taking into account the breakthrough time, permeation rate and degradation. The selection of a suitable glove depends not only on the material but also on other quality characteristics that vary from one manufacturer to another. For preparations the durability of glove materials is unpredictable and must therefore be tested prior to being used. The exact breakthrough time of glove material should be obtained from the protective glove manufacturer and must be strictly adhered to.

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9. Physical and chemical properties

State of matter:	Paste
Colour:	Black
Odour:	Weak
ph-value diluted:	Not determined
Boiling point / boiling range (in °C):	Not determined
Melting point / melting range (in °C):	Not determined
Decomposition	> 60 °C:
Flash point (in °C):	n.a.
Spontaneous ignition:	No
Fire supporting properties:	Yes
Lower explosion limit:	Not determined
Upper explosion limit	Not determined
Product is not an explosion hazard.	
Density (g/ml):	Not determined
Water solubility:	Soluble
Viscosity:	Not determined

10. Stability and reactivity

Conditions to be avoided

See section 7.

Not to be expected if properly stored and handled (stable).

Heating up, naked flames, ignition sources

Self accelerating decomposition: > 60°C

Materials to be avoided

See section 7.

Avoid contact with other chemicals.

Avoid contact with strong acids.

Avoid contact with strong alkalis.

Accelerants: Heavy metal salts, rust, amines, iron, copper, reduction agents

Dangerous decomposition products

See section 5 (special danger from the substance or the preparation itself, its products of combustion or resulting gases).

11. Toxicological information

Acute toxicity with immediate effect

Ingestion, LD50 rat oral (mg/kg):	>5000*
Inhalation, LC50 rat inhalation (mg/l/4h):	Not determined
Skin contact, LD50 rat dermal (mg/kg):	Not irritating
Eye contact:	Irritating

Delayed as well as chronic reactions

Sensitizing effect:	Yes (skin contact)
Carcinogenic effect:	Not determined
Mutagenic effect:	Not determined
Reproduction hazard effect:	Not determined
Anaesthetising effect:	Not determined

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Other remarks

Classification according to calculation procedure

* Dibenzoylperoxide

** Ethandiol

12. Ecological information

Water hazard class (Germany):

1

Self-assessment:

Yes (Regulation for water hazardous substances)

Persistence and degradability:

Easily biologically degradable * , ** , ***

Behaviour in sewage treatment plants:

In accordance with formulation contains
no AOX

Aquatic toxicity:

Daphnian toxicity:

EC50 Daphnia magna 2.9 mg/l/48h *

EC50 Daphnia magna 10,000 mg/l/48h *

Fish toxicity:

LC50 Poecilia reticulata 2 mg/l/96h *

NOEC Poecilia reticulata 0.7 mg/l/96h *

LC50 Salmo gairdneri > 18500 mg/l/96h **

Ecological toxicity:

Not determined

* Dibenzoylperoxide

** Ethandiol

***Glycerine

13. Disposal considerations

For the substance / preparation / residual amounts

Waste material key no: EU:

The waste material keys quoted are recommendations based on the anticipated usage of this product. Due to the special usage and disposal circumstances for the user in certain cases other waste keys may be allocated.

08 04 09 Adhesive and jointing compound waste products that contain solvents or other hazardous substances.

16 09 03 Peroxides, e.g. hydrogen peroxide

Recommendation:

Observe local authority regulations, for example a suitable incineration plant.

For contaminated packaging material

See section 13: For the substance / preparation / residual amounts.

Observe local authority regulations.

Completely empty the container.

Packaging that is not contaminated can be re-used.

Packaging that cannot be cleaned must be disposed of in the same manner as the substance.

Trade name:	Rawl RP30
Manufacturer/supplier:	Rawlplug Limited
Version dated:	30.07.2004
Revised:	30.09.2005

14. Transport information

General details

UN Number: 3269
A + B

Road / rail transport (GGVSE/ADR/RID)

Class / packaging group: 3/III
UN 3269 POLYESTER RESIN MULTI-COMPONENT SYSTEMS
Classification code: F1
LQ: 7

Maritime transport

IMDG class: 3/III (Class / packaging group)
EmS: F-E, S-D
Marine pollutant: n.a.
POLYESTER RESIN KIT

Air transport

IATA: 3/-/III (Class / extra hazard / packaging group)

Polyester resin kit

Additional remarks:

Hazard number and packaging code on request.

15. Regulatory information

Labelling according to hazardous materials including EU directives (67/548/EEC and 1999/45/EC)

Hazard symbol: Xi/O

Hazard designation:

R-phrases:

Irritating, oxidizing

7 Can cause a fire.

36 Irritating to eyes.

43 Sensitisation through contact with the skin possible.

S-phrases:

(2) Must not get into the hands of children.

3/7 Keep the container tightly closed and store in a cool place.

14.e Keep clear of dirt, rust, alkalis, acids and accelerants (e.g. heavy metal salts and amines).

26 In case of contact with the eyes immediately rinse thoroughly with water and seek medical attention.

36/37/39 Wear suitable protective clothing, protective gloves and safety glasses / face protection when working with the product.

(46) If ingested seek immediate medical attention and show packaging or labelling.

50.a Do not mix with accelerants for peroxides or reduction agents.

60 This product and its containers must be disposed of as hazardous waste material.

Additive:

Dibenzoyl-peroxide

Observe restrictions:

Yes

Trade name:	Rawl RP30
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Observe Children and Young Persons Act (German regulation)

Observe restriction directives 76/769/EEC, 1999/51/EC, 1999/77/EC

Observe accident regulation

VOC 1999/13/EC not determined.

VOC-CH not determined

MAK/BAT:

See section 8.

16. Other information

This information refers to the product as delivered.

Storage class according to VCI: 5.2

Revised points: 15

Observe BGV A1

Clean Air Act: 77-80% Class III

The following phrases represent the stated R-phrases for the ingredients (named in section 2).

2 Risk of explosion resulting from impact, friction, fire or other sources of ignition.

36 Irritating to eyes

43 Sensitisation through contact with the skin possible.

22 Detrimental to health if swallowed.

Legend:

n.a. = not applicable / n.v. = not available / n.g. = not tested

AG = Workplace limiting value / BG = Biological limiting value

VbF = Regulation regarding flammable fluids (Austrian regulation)

WGK = Water hazard class (German regulation)

WGK3 = Severely hazardous for water

WGK2 = Hazardous for water

WGK1 = Mildly hazardous for water

VOC = Volatile organic compounds

AOX = Adsorbable organic halogen compounds

The information presented here is intended to describe the product with regard to the requisite safety precautions. It is not there to make assurances about certain product properties and is based on present knowledge.

All liability is excluded.