



# SAFETY DATA SHEET

according to 1907/2006/EC, Article 31

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## RIW 44: Flexiseal Pro Hardener

Revision 0

Revision date 2015-03-10

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

#### 1.1. Product identifier

Product name	RIW 44: Flexiseal Pro Hardener
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#### 1.3. Details of the supplier of the safety data sheet

Company	RIW Limited
Address	Arc House Terrace Road South Binfield, Bracknell Berkshire RG42 4PZ
Web	www.riw.co.uk
Telephone	01344 397788
Fax	01344 862010
Email	enquiries@riw.co.uk
Email address of the competent person	enquiries@riw.co.uk

#### 1.4. Emergency telephone number

Emergency telephone number	01344 397788
Company	RIW Limited 0800 - 1700 Monday - Friday

### SECTION 2: Hazards identification

#### 2.1. Classification of the substance or mixture

2.1.1. Classification - 67/548/EEC	C; R34 Xn; R20/22-62 Xi; R43 Symbols: C: Corrosive.
Main hazards	Harmful by inhalation and if swallowed. Causes burns. May cause sensitisation by skin contact. Possible risk of impaired fertility.
2.1.2. Classification - EC 1272/2008	Acute Tox. 4: H302; Acute Tox. 4: H312; Skin Corr. 1B: H314; Skin Sens. 1: H317; Acute Tox. 4: H332;

#### 2.2. Label elements

Hazard pictograms	
Signal Word	Danger
Hazard Statement	Acute Tox. 4: H302 - Harmful if swallowed. Acute Tox. 4: H312 - Harmful in contact with skin. Skin Corr. 1B: H314 - Causes severe skin burns and eye damage. Skin Sens. 1: H317 - May cause an allergic skin reaction. Acute Tox. 4: H332 - Harmful if inhaled.
Precautionary Statement: Prevention	P260 - Do not breathe dust/fume/gas/mist/vapours/spray. P261 - Avoid breathing dust/fume/gas/mist/vapours/spray.

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## 2.2. Label elements

<b>Precautionary Statement: Response</b>	P264 - Wash thoroughly after handling. P270 - Do not eat, drink or smoke when using this product. P271 - Use only outdoors or in a well-ventilated area. P272 - Contaminated work clothing should not be allowed out of the workplace. P280 - Wear protective gloves/protective clothing/eye protection/face protection.
	P301+P312 - IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell. P301+P330+P331 - IF SWALLOWED: rinse mouth. Do NOT induce vomiting. P302+P352 - IF ON SKIN: Wash with plenty of soap and water. P303+P361+P353 - IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. P304+P340 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P310 - Immediately call a POISON CENTER or doctor/physician. P312 - Call a POISON CENTER or doctor/physician if you feel unwell. P321 - Specific treatment (see on this label). P322 - Specific measures (see on this label). P330 - Rinse mouth. P333+P313 - If skin irritation or rash occurs: Get medical advice/attention. P363 - Wash contaminated clothing before reuse.
<b>Precautionary Statement: Storage</b>	P405 - Store locked up.
<b>Precautionary Statement: Disposal</b>	P501 - Dispose of contents/container to licensed waste disposal site

## 2.3. Other hazards

<b>Other hazards</b>	None known.
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## SECTION 3: Composition/information on ingredients

## 3.1. Substances

67/548/EEC / 1999/45/EC

Chemical Name	Index No.	CAS No.	EC No.	REACH Registration Number	Conc. (%w/w)	Classification
Benzyl alcohol	603-057-00-5	100-51-6	202-859-9		20 - 30%	Xn; R20/22
3-Aminomethyl-3,5,5-trimethylcyclohexylamine	612-067-00-9	2855-13-2	220-666-8		1 - 10%	Xn; R21/22 C; R34 R43 R52/53
m-phenylenedibis(methylamine)		1477-55-0	216-032-5		1 - 10%	C; R34 Xn; R20/22 Xi; R43 R52/53
N,N-Dimethyl-1,3-diaminopropane	612-061-00-6	109-55-7	203-680-9		1 - 10%	R10 Xn; R22 C; R34 R43
4,4'-Isopropylidenediphenol	604-030-00-0	80-05-7	201-245-8		1 - 10%	Repr. Cat. 3; R62 Xi; R37-41 R43 R52
2,4,6-Tris(dimethylaminomethyl)phenol	603-069-00-0	90-72-2	202-013-9		1 - 10%	Xn; R22 Xi; R36/38

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## 3.1. Substances

## EC 1272/2008

Chemical Name	Index No.	CAS No.	EC No.	REACH Registration Number	Conc. (%w/w)	Classification
Benzyl alcohol	603-057-00-5	100-51-6	202-859-9		20 - 30%	Acute Tox. 4: H332; Acute Tox. 4: H302;
3-Aminomethyl-3,5,5-trimethylcyclohexylamine	612-067-00-9	2855-13-2	220-666-8		1 - 10%	Acute Tox. 4: H312; Acute Tox. 4: H302; Skin Corr. 1B: H314; Skin Sens. 1: H317; Aquatic Chronic 3: H412;
m-phenylenebis(methylamine)		1477-55-0	216-032-5		1 - 10%	Acute Tox. 4: H302; Skin Corr. 1B: H314; Skin Sens. 1: H317; Acute Tox. 4: H332; Aquatic Chronic 3: H412;
N,N-Dimethyl-1,3-diaminopropane	612-061-00-6	109-55-7	203-680-9		1 - 10%	Flam. Liq. 3: H226; Acute Tox. 4: H302; Skin Corr. 1B: H314; Skin Sens. 1: H317;
4,4'-Isopropylidenediphenol	604-030-00-0	80-05-7	201-245-8		1 - 10%	Repr. 2: H361f; STOT SE 3: H335; Eye Dam. 1: H318; Skin Sens. 1: H317;
2,4,6-Tris(dimethylaminomethyl)phenol	603-069-00-0	90-72-2	202-013-9		1 - 10%	Acute Tox. 4: H302; Eye Irrit. 2: H319; Skin Irrit. 2: H315;

## SECTION 4: First aid measures

## 4.1. Description of first aid measures

Inhalation	Inhalation of vapour may cause shortness of breath. Move the exposed person to fresh air. Seek medical attention.
Eye contact	Causes burns. Causes severe inflammation and may damage the cornea. Seek medical attention.
Skin contact	Causes burns. Wash off immediately with plenty of soap and water. Remove contaminated clothing. Seek medical attention if irritation or symptoms persist.
Ingestion	Ingestion causes burns to the respiratory tract. DO NOT INDUCE VOMITING. If swallowed, seek medical advice immediately and show this container or label.

## 4.2. Most important symptoms and effects, both acute and delayed

Inhalation	Inhalation may cause coughing, tightness of the chest and irritation of the respiratory system.
Eye contact	Causes serious eye damage.
Skin contact	Corrosive and Irritant Effects.
Ingestion	Ingestion may cause nausea and vomiting.

## SECTION 5: Firefighting measures

## 5.1. Extinguishing media

	Use as appropriate: Carbon dioxide (CO2), Dry chemical, Foam.
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## 5.2. Special hazards arising from the substance or mixture

	Corrosive. Burning produces irritating, toxic and obnoxious fumes.
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## 5.3. Advice for firefighters

	Wear suitable respiratory equipment when necessary.
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## SECTION 6: Accidental release measures

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

	Ensure adequate ventilation of the working area. Evacuate personnel to a safe area. Wear suitable protective equipment.
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## 6.2. Environmental precautions

	Do not allow product to enter drains. Prevent further spillage if safe.
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## 6.3. Methods and material for containment and cleaning up

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

Absorb with inert, absorbent material. Transfer to suitable, labelled containers for disposal. Clean spillage area thoroughly with plenty of water.

## 6.4. Reference to other sections

SECTION 13: Disposal considerations. SECTION 14: Transport information. SECTION 7: Handling and storage.

## SECTION 7: Handling and storage

## 7.1. Precautions for safe handling

Avoid contact with eyes and skin. Ensure adequate ventilation of the working area.

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

Keep in a cool, dry, well ventilated area. Keep containers tightly closed.

## SECTION 8: Exposure controls/personal protection

## 8.2. Exposure controls



## 8.2.1. Appropriate engineering controls

Ensure adequate ventilation of the working area.

## 8.2.2. Individual protection measures

Wear chemical protective clothing.

## Eye / face protection

Approved safety goggles.

## Skin protection - Handprotection

Chemical resistant gloves (PVC).

## Respiratory protection

Wear: Self-contained breathing apparatus.

## SECTION 9: Physical and chemical properties

## 9.1. Information on basic physical and chemical properties

<b>State</b>	Liquid
<b>Colour</b>	Amber
<b>Odour</b>	Ammoniacal
<b>pH</b>	Not determined
<b>Melting point</b>	Not determined
<b>Freezing Point</b>	Not determined
<b>Boiling point</b>	Not determined
<b>Flash point</b>	> 90 °C
<b>Evaporation rate</b>	Not applicable.
<b>Flammability limits</b>	Not applicable.
<b>Vapour Flammability</b>	Not applicable.
<b>Vapour pressure</b>	Not determined
<b>Vapour density</b>	Not determined
<b>Fat Solubility</b>	Not determined
<b>Partition coefficient</b>	Not determined
<b>Autoignition temperature</b>	Not determined
<b>Viscosity</b>	≈ 500 mPas (Cone & Plate)
<b>Explosive</b>	Not determined
<b>Oxidising</b>	Not determined
<b>Solubility</b>	Slightly soluble in water

## 9.2. Other information

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## 9.2. Other information

Conductivity	Not determined
Surface tension	Not determined
Specific gravity	≈ 1.07 g/cm <sup>3</sup>
Gas group	Not applicable.
VOC (Volatile organic compounds)	< 1 g/l

## SECTION 10: Stability and reactivity

## 10.2. Chemical stability

Stable under normal conditions.

## 10.3. Possibility of hazardous reactions

Acids. Strong oxidising agents.

## SECTION 11: Toxicological information

## 11.1. Information on toxicological effects

Skin corrosion/irritation	Causes burns.
Respiratory or skin sensitisation	May cause allergic reactions in susceptible people.
Germ cell mutagenicity	No mutagenic effects reported.
Carcinogenicity	No carcinogenic effects reported.

## 11.1.4. Toxicological Information

2,4,6-Tris(dimethylaminomethyl) phenol	Dermal Rat LD50: 1280 mg / kg	Oral Rat LD50: 1200 mg / kg
4,4'-Isopropylidenediphenol	Oral Rat LD50: 4040 mg / kg	Dermal Rabbit LD50: 3000 mg / kg
Benzyl alcohol	Dermal Rat LD50: 2000 mg / kg	
m-phenylenebis(methylamine)	Inhalation Rat LC50/2.6 mg / kg 4 h:	Oral Rat LD50: 1040 mg / kg

## SECTION 12: Ecological information

## 12.1. Toxicity

m-phenylenebis(methylamine)	Daphnia EC50/48h: 16.0000 mg/l Fish LC50/96h: 100.0000 mg/l	Algae IC50/72h: 12.0000 mg/l
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## 12.2. Persistence and degradability

Not readily biodegradable.

## SECTION 13: Disposal considerations

## General information

Dispose of in compliance with all local and national regulations.

## Disposal of packaging

After final product withdrawal, all residues must be removed from containers (drip-free, powder-free or paste-free). Do not empty into drains, dispose of this material and its container at hazardous or special waste collection point.

## SECTION 14: Transport information

## Hazard pictograms



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<b>14.1. UN number</b>	
	UN1760
<b>14.2. UN proper shipping name</b>	
	CORROSIVE LIQUID, N.O.S.
<b>14.3. Transport hazard class(es)</b>	
ADR/RID	8
Subsidiary risk	-
IMDG	8
Subsidiary risk	-
IATA	8
Subsidiary risk	-
<b>14.4. Packing group</b>	
Packing group	II
<b>14.5. Environmental hazards</b>	
Environmental hazards	No
Marine pollutant	No
<b>ADR/RID</b>	
Hazard ID	80
Tunnel Category	(E)
<b>IMDG</b>	
EmS Code	F-A S-B
<b>IATA</b>	
Packing Instruction (Cargo)	855
Maximum quantity	30 L
Packing Instruction (Passenger)	851
Maximum quantity	1 L

**SECTION 15: Regulatory information****15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture**

Regulations	COMMISSION REGULATION (EU) No 453/2010 of 20 May 2010 amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC. REGULATION (EC) No 1907/2006 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC.
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**SECTION 16: Other information****Other information**

Data sources	Data extracted from individual component Safety Data Sheets.
Text of risk phrases in Section 3	R10 - Flammable R20/22 - Harmful by inhalation and if swallowed. R21/22 - Harmful in contact with skin and if swallowed. R22 - Harmful if swallowed. R34 - Causes burns.

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## Other information

<p><b>Text of Hazard Statements in Section 3</b></p>	<p>R36/38 - Irritating to eyes and skin.  R37 - Irritating to respiratory system.  R41 - Risk of serious damage to eyes.  R43 - May cause sensitisation by skin contact.  R52/53 - Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.  R52 - Harmful to aquatic organisms.  R62 - Possible risk of impaired fertility.</p> <hr/> <p>Acute Tox. 4: H302 - Harmful if swallowed.  Acute Tox. 4: H332 - Harmful if inhaled.  Acute Tox. 4: H312 - Harmful in contact with skin.  Skin Corr. 1B: H314 - Causes severe skin burns and eye damage.  Skin Sens. 1: H317 - May cause an allergic skin reaction.  Aquatic Chronic 3: H412 - Harmful to aquatic life with long lasting effects.  Flam. Liq. 3: H226 - Flammable liquid and vapour.  Eye Dam. 1: H318 - Causes serious eye damage.  STOT SE 3: H335 - May cause respiratory irritation.  Repr. 2: H361f - Suspected of damaging fertility.  Skin Irrit. 2: H315 - Causes skin irritation.  Eye Irrit. 2: H319 - Causes serious eye irritation.</p> <hr/> <p><b>Product Subcategory</b>  Two-pack reactive performance coatings for specific end use such as floors - 500 g/l.</p> <hr/> <p><b>Maximum content of VOC</b>  1 g/l.</p>
<p><b>Further information</b></p>	<p>The information supplied in this Safety Data Sheet is designed only as guidance for the safe use, storage and handling of the product. This information is correct to the best of our knowledge and belief at the date of publication however no guarantee is made to its accuracy. This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any other process.</p>