



SAFETY DATA SHEET

according to 1907/2006/EC, Article 31

Page 1/7

RIW 12: RIW Flexiseal Primer CLP

Revision 0

Revision date 2015-03-11

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

1.1. Product identifier

Product name	RIW 12: RIW Flexiseal Primer CLP
--------------	----------------------------------

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

Product Use	[SU22] Professional uses: Public domain (administration, education, entertainment, services, craftsmen); [PC9a] Coatings and paints, thinners, paint removers;
-------------	--

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	Carc. Cat. 3; R40 Xn; R20-48/20 Xi; R36/37/38 R42/43 Symbols: Xn: Harmful.
Main hazards	Harmful by inhalation. Irritating to eyes, respiratory system and skin. Limited evidence of a carcinogenic effect. May cause sensitisation by inhalation and skin contact. Harmful: danger of serious damage to health by prolonged exposure through inhalation.
2.1.2. Classification - EC 1272/2008	Carc. 2: H351; Acute Tox. 4: H332; STOT RE 2: H373; Eye Irrit. 2: H319; STOT SE 3: H335; Skin Irrit. 2: H315; Resp. Sens. 1: H334; Skin Sens. 1: H317;

2.2. Label elements

Hazard pictograms	
Signal Word	Danger
Hazard Statement	Skin Irrit. 2: H315 - Causes skin irritation. Skin Sens. 1: H317 - May cause an allergic skin reaction. Eye Irrit. 2: H319 - Causes serious eye irritation.

RIW 12: RIW Flexiseal Primer CLP

Revision 0

Revision date 2015-03-11

2.2. Label elements

Precautionary Statement: Prevention	Acute Tox. 4: H332 - Harmful if inhaled. Resp. Sens. 1: H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled. STOT SE 3: H335 - May cause respiratory irritation. Carc. 2: H351 - Suspected of causing cancer . STOT RE 2: H373 - May cause damage to organs through prolonged or repeated exposure .
	P201 - Obtain special instructions before use. P202 - Do not handle until all safety precautions have been read and understood. P260 - Do not breathe dust/fume/gas/mist/vapours/spray. P261 - Avoid breathing dust/fume/gas/mist/vapours/spray. P264 - Wash thoroughly after handling. 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. P281 - Use personal protective equipment as required. P285 - In case of inadequate ventilation wear respiratory protection.
Precautionary Statement: Response	P261 - Avoid breathing dust/fume/gas/mist/vapours/spray. P302+P352 - IF ON SKIN: Wash with plenty of soap and water. P304+P340 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. P304+P341 - IF INHALED: If breathing is difficult, 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. P308+P313 - IF exposed or concerned: Get medical advice/attention. P312 - Call a POISON CENTER or doctor/physician if you feel unwell. P314 - Get medical advice/attention if you feel unwell. P321 - Specific treatment (see on this label). P332+P313 - If skin irritation occurs: Get medical advice/attention. P333+P313 - If skin irritation or rash occurs: Get medical advice/attention. P337+P313 - If eye irritation persists: Get medical advice/attention. P342+P311 - If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician. P363 - Wash contaminated clothing before reuse.
Precautionary Statement: Storage	P403+P233 - Store in a well-ventilated place. Keep container tightly closed. P405 - Store locked up.
Precautionary Statement: Disposal	P501 - Dispose of contents/container to licensed waste disposal site

2.3. Other hazards

Other hazards	EUH204 - Contains isocyanates. May produce an allergic reaction.
----------------------	--

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
4,4'-Methylenediphenyl diisocyanate	615-005-00-9	101-68-8	202-966-0	01-2119457014-47	30 - 40%	Carc. Cat. 3; R40 Xn; R20-48/20 Xi; R36/37/38 R42/43
Polyisocyanate Prepolymer based on MDI		67815-87-6			20 - 30%	Xn; R42/43
o-(p-Isocyanatobenzyl)phenylisocyanate	615-005-00-9	5873-54-1	227-534-9	01-2119480143-45	20 - 30%	Carc. Cat. 3; R40 Xn; R20-48/20 Xi; R36/37/38 R42/43
2,2'-Methylenediphenyl diisocyanate	615-005-00-9	2536-05-2	219-799-4		1 - 10%	Xn; R20 Xi; R36/37/38 R42/43
diphenylmethane-diisocyanate, isomers and homologues		9016-87-9			1 - 10%	Xn; R20-40-42/43-48/20 Xi; R36/37/38

RIW 12: RIW Flexiseal Primer CLP

Revision 0

Revision date 2015-03-11

3.1. Substances

EC 1272/2008

Chemical Name	Index No.	CAS No.	EC No.	REACH Registration Number	Conc. (%w/w)	Classification
4,4'-Methylenediphenyl diisocyanate	615-005-00-9	101-68-8	202-966-0	01-2119457014-47	30 - 40%	Carc. 2: H351; Acute Tox. 4: H332; STOT RE 2: H373; Eye Irrit. 2: H319; STOT SE 3: H335; Skin Irrit. 2: H315; Resp. Sens. 1: H334; Skin Sens. 1: H317;
Polyisocyanate Prepolymer based on MDI		67815-87-6			20 - 30%	Skin Sens. 1: H317; Resp. Sens. 1: H334;
o-(p-Isocyanatobenzyl)phenylisocyanate	615-005-00-9	5873-54-1	227-534-9	01-2119480143-45	20 - 30%	Carc. 2: H351; Acute Tox. 4: H332; STOT RE 2: H373; Eye Irrit. 2: H319; STOT SE 3: H335; Skin Irrit. 2: H315; Resp. Sens. 1: H334; Skin Sens. 1: H317;
2,2'-Methylenediphenyl diisocyanate	615-005-00-9	2536-05-2	219-799-4		1 - 10%	
diphenylmethane-diisocyanate, isomers and homologues		9016-87-9			1 - 10%	Skin Irrit. 2: H315; Skin Sens. 1: H317; Eye Irrit. 2: H319; Acute Tox. 4: H332; Resp. Sens. 1: H334; STOT SE 3: H335; Carc. 2: H351; STOT RE 2: H373;

SECTION 4: First aid measures

4.1. Description of first aid measures

Inhalation	Harmful by inhalation. Inhalation may cause nausea and vomiting. May cause dizziness and headache. Move the exposed person to fresh air. Seek medical attention.
Eye contact	May cause irritation to eyes. Rinse immediately with plenty of water for 15 minutes holding the eyelids open. Seek medical attention if irritation or symptoms persist.
Skin contact	May cause irritation to skin. May cause dermatitis. Wash off immediately with plenty of soap and water. Remove contaminated clothing. Seek medical attention if irritation or symptoms persist.
Ingestion	Harmful if swallowed. Ingestion may cause nausea and vomiting. Ingestion is irritating to the respiratory tract and may cause damage to the central nervous system. DO NOT INDUCE VOMITING. If swallowed, seek medical advice immediately and show this container or label.

Further information

	Notes to Physician: The product irritates the respiratory tract and may trigger sensitisation of the skin and respiratory tract. Treatment of acute irritation or bronchial constriction is primarily symptomatic. Extended medical treatment may be required depending on the degree of exposure and the severity of the symptoms.
--	---

SECTION 5: Firefighting measures

5.1. Extinguishing media

	Use as appropriate: Carbon dioxide (CO ₂), Dry chemical, Foam.
--	--

5.2. Special hazards arising from the substance or mixture

	Burning produces irritating, toxic and obnoxious fumes.
--	---

5.3. Advice for firefighters

	Self-contained breathing apparatus. Wear protective clothing.
--	---

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

	Ensure adequate ventilation of the working area. Wear suitable protective equipment.
--	--

6.2. Environmental precautions

RIW 12: RIW Flexiseal Primer CLP

Revision 0

Revision date 2015-03-11

6.2. Environmental precautions

	Do not allow product to enter drains. Prevent further spillage if safe.
--	---

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.
--	--

Further information

	Decontamination solution 1: 8-10% sodium carbonate and 2% liquid soap in water Decontamination solution 2: Liquid/yellow soap (potassium soap with ~ 15% anionic tenside): 20ml; Water: 700ml; Polyethylene Glycol (PEG 400): 350ml.
--	--

SECTION 7: Handling and storage

7.1. Precautions for safe handling

	Avoid contact with eyes and skin. Ensure adequate ventilation of the working area. Adopt best Manual Handling considerations when handling, carrying and dispensing.
--	--

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

8.1. Control parameters

8.1.1. Exposure Limit Values

4,4'-Methylenediphenyl diisocyanate	WEL 8-hr limit ppm:	WEL 8-hr limit mg/m ³ : 0.02
	WEL 15 min limit ppm:	WEL 15 min limit mg/m ³ :

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

	Self-contained breathing apparatus. Wear protective clothing.
--	---

Further information

	In case of hypersensitivity of the respiratory tract (e.g. asthmatics and those who suffer from chronic bronchitis) it is unadvisable to work with the product.
--	---

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

RIW 12: RIW Flexiseal Primer CLP

Revision 0

Revision date 2015-03-11

9.1. Information on basic physical and chemical properties

State	Liquid
Colour	Brown
Odour	Mild
pH	Not applicable.
Melting point	Not applicable.
Freezing Point	0 °C
Boiling point	> 350 °C
Flash point	> 210 °C
Evaporation rate	Not applicable.
Flammability limits	Not applicable.
Vapour Flammability	Not applicable.
Vapour pressure	0 Pa
Vapour density	Not determined
Relative density	1.17 (Water = 1 @ 20 °C)
Fat Solubility	Not determined
Partition coefficient	Not determined
Autoignition temperature	> 400 °C
Viscosity	≈ 220 mPas (Cone & Plate)
Explosive	Not determined
Oxidising	Not determined
Solubility	Insoluble in water

9.2. Other information

Conductivity	Not determined
Surface tension	Not determined
Gas group	Not applicable.
VOC (Volatile organic compounds)	0 g/l

SECTION 10: Stability and reactivity

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

Exothermic reaction with amines and alcohols; reacts with water forming CO₂; in closed containers, risk of bursting owing to increased pressure.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity	Harmful by inhalation.
Skin corrosion/irritation	CAUSES SKIN IRRITATION.
Respiratory or skin sensitisation	May cause sensitisation by inhalation and skin contact.
Germ cell mutagenicity	No mutagenic effects reported.
Carcinogenicity	Limited evidence of a carcinogenic effect.
Reproductive toxicity	No teratogenic effects reported.
STOT-single exposure	May cause respiratory irritation.
STOT-repeated exposure	May cause damage to organs through prolonged or repeated exposure .

11.1.4. Toxicological Information

RIW 12: RIW Flexiseal Primer CLP

Revision 0

Revision date 2015-03-11

11.1.4. Toxicological Information

4,4'-Methylenediphenyl diisocyanate	Inhalation Rat LC50/4 h: 0.368 mg/l Dermal Rabbit LD50: >9400 mg/kg	Oral Rat LD50: >2000 mg/kg
diphenylmethane-diisocyanate, isomers and homologues	Dermal Rat LD50: >10000 mg/kg	
o-(p-Isocyanatobenzyl)phenylisocyanate	Inhalation Rat LC50/4 h: 0.387 mg/l Dermal Rabbit LD50: >9400 mg/kg	Oral Rat LD50: >2000 mg/kg
RIW 12: RIW Flexiseal Primer CLP	Inhalation Rat LC50/4 h: 0.368 mg/kg Dermal Rabbit LD50: >9400 mg/kg	Oral Rat LD50: >2000 mg/kg

SECTION 12: Ecological information

12.1. Toxicity

4,4'-Methylenediphenyl diisocyanate	Fish LC50/96h: 1000 mg/l	
o-(p-Isocyanatobenzyl)phenylisocyanate	Fish LC50/96h: 1000 mg/l	
RIW 12: RIW Flexiseal Primer CLP	Algae IC50/72h: 1.6400 mg/l	Fish LC50/96h: 1000.0000 mg/l

12.2. Persistence and degradability

Not readily biodegradable.

12.3. Bioaccumulative potential

The substance hydrolyzes rapidly in water.

12.4. Mobility in soil

Not applicable.

12.5. Results of PBT and vPvB assessment

This substance does not meet the criteria for classification as PBT or vPvB.

Further information

Isocyanate reacts with water at the interface forming CO₂ and a solid insoluble product with high melting point (polyurea). This reaction is accelerated by surfactants (e.g. detergents) or by water soluble solvents. Previous experience shows that polyurea is inert and non-degradable.

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

ADR/RID

The product is not classified as dangerous for carriage.

IMDG

The product is not classified as dangerous for carriage.

IATA

The product is not classified as dangerous for carriage.

RIW 12: RIW Flexiseal Primer CLP

Revision 0

Revision date 2015-03-11

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.
--------------------	--

SECTION 16: Other information**Other information**

Data sources	Data extracted from individual component Safety Data Sheets.
Text of risk phrases in Section 3	R20 - Harmful by inhalation. R36/37/38 - Irritating to eyes, respiratory system and skin. R40 - Limited evidence of a carcinogenic effect. R42/43 - May cause sensitisation by inhalation and skin contact. R48/20 - Harmful: danger of serious damage to health by prolonged exposure through inhalation.
Text of Hazard Statements in Section 3	Skin Irrit. 2: H315 - Causes skin irritation. Skin Sens. 1: H317 - May cause an allergic skin reaction. Eye Irrit. 2: H319 - Causes serious eye irritation. Acute Tox. 4: H332 - Harmful if inhaled. Resp. Sens. 1: H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled. STOT SE 3: H335 - May cause respiratory irritation. Carc. 2: H351 - Suspected of causing cancer . STOT RE 2: H373 - May cause damage to organs through prolonged or repeated exposure .
Product Subcategory	One-pack performance coatings - 500 g/l.
Maximum content of VOC	0 g/l.
Further information	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.