# MATERIAL SAFETY DATA SHEET

**RIW 33** 

Supplier Manufacturer

RIW Ltd As supplier

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### 1. IDENTIFICATION OF PRODUCT

RIW CEMENTFLEX

### 2. HAZARDOUS COMPONENTS OF MIXTURE

SUBSTANCES PRESENTING A HEALTH HAZARD WITHIN THE MEANING OF THE CHEMICALS (HAZARD INFORMATION & PACKAGING) REGULATIONS 1994.

INGREDIENT	CONCENTRATION %	CAS NUMBER	HAZARD	R. PHRASES
Silica Flour	< 5.0 (Part B)	14808-60-7		
Ground granulated blast furnace slag	< 15.0 (Part B)	65996-69-2	Xi	R36/38
1.2 benzisothiazolin-3-one	< 0.05 (Part A)	2634-33-5		

### 3. HAZARDS IDENTIFICATION

Xi Irritant Irritating to eyes and skin.

\$36/37/39 see section 15

#### 4. FIRST AID MEASURES

INHALATION: Remove patient from exposure, keep warm and at rest. If dry powder has been inhaled, the nose and

throat should be thoroughly irrigated with water for at least 20 minutes. If distress is felt after inhalation of vapours, summon medical aid. Inhalation of free silica over a prolonged period can give

rise to fibrosis of the lungs.

SKIN CONTACT: Remove contaminated clothing. After contact with skin, wash immediately with plenty of clean water

(S 28). Seek medical attention if irritation persists.

EYE CONTACT: In case of contact with eyes, rinse immediately with plenty of clean water. Remove any large particles

with cotton wool bud. Contact lenses should be removed. Eye wash stations should be available in

areas where exposure is possible. Seek medical attention.

**INGESTION:** Do not induce vomiting. Wash mouth out with water and, if conscious, give plenty of water to drink.

Seek medical attention.

**NOTE** If symptoms persist, seek medical advice.

### 5. FIRE FIGHTING MEASURES

SUITABLE EXTINGUISHER MEDIA: Will not support combustion. Compatible with all standard fire fighting

techniques.

**EXPOSURE HAZARDS:** Fire or decomposition products may contain oxides of carbon. The

powder releases alkalis on contact with water and chemically hardens.

**SPECIAL PROTECTIVE EQUIPMENT:** In a sustained fire, self-contained breathing apparatus should be worn.

## 6. ACCIDENTAL RELEASE MEASURES

**PERSONAL PRECAUTIONS:** Ensure adequate ventilation.

Wear suitable protective clothing, gloves and eye/face protection

(S36/37/39).

Avoid contact with eyes (S25). Do not breathe dust (S22).

#### SEE "EXPOSURE CONTROLS/PERSONAL PROTECTION"

**ENVIRONMENTAL PRECAUTIONS:** If material enters drains or sewers, dilute as much as possible with water.

In case of contamination of streams, river or lakes, contact the National

Rivers Authority.

**CLEANING UP METHODS:** Carefully sweep or vacuum up any mixed mortar and/or dry powder. Soak

up polymer with sand or sawdust.

Transfer to marked containers to await disposal. Wash away any residue with plenty of clean water.

SEE "DISPOSAL CONSIDERATIONS" and "STABILITY AND REACTIVITY"

#### 7. HANDLING & STORAGE

HANDLING: Wear suitable protective clothing, gloves and eye/face protection (S36/37/39)

Eye wash stations should be available in areas where accidental exposure is possible.

The normal precautions relating to handling chemicals must be observed.

Use to minimise the creation of dust and ensure adequate ventilation to keep the airborne

concentrations below the recommended exposure limits.

## SEE "EXPOSURE CONTROLS/PERSONAL PROTECTION"

STORAGE: Store in dry frost free conditions, in original containers. Protect from high temperatures (40°C+) for

prolonged periods.

### 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

WORKPLACE EXPOSURE LIMITS EH40/2006 (Check current edition of EH40 to ensure limits have not changed.)

INGREDIENT		REFERENCE PERIOD				
		WEL 8 hour		WEL 15 minutes		
		ppm	mg/m <sup>3</sup>	ppm	mg/m <sup>3</sup>	
Silica crystalline	- respirable dust		0.3			
Ground granulated	- total inhalable dust		10			
Blast furnace slag	<ul> <li>respirable dust</li> </ul>		4			

Further information is given in Guidance Note EH 44 - Dust in the Workplace.

RESPIRATORY: Normal conditions of ventilation are usually adequate. Wear a fine particle mask or respirator, or use

local exhaust ventilation as necessary when mixing in confined areas with inadequate ventilation or whenever there is any risk of the exposure limits being exceeded. This applies not only to the user,

but to all people who cannot be vacated from the work area.

HAND: Use heavy duty gloves. Gloves may degrade or be damaged according to different circumstances of

use. Always ensure gloves you are using are in good condition. Barrier creams may help to protect exposed areas but are not substitutes for full physical protection. They should not be applied once

exposure has occurred.

EYE: Eye protection designed to protect against liquid splashes, conforming to EN 1166 Chemical Grade,

should be worn when handling dry powder or when there is risk of material entering the eye. Eye

protection is essential when handling alkaline material.

**SKIN:** Wear suitable overalls. Remove grossly contaminated clothing and wash skin with plenty of clean

water. Practice good personal hygiene.

# ALL PERSONAL PROTECTION EQUIPMENT MUST BE SELECTED TO MEET THE REQUIREMENTS OF THE COSHH REGULATIONS.

## 9. PHYSICAL / CHEMICAL DATA

Part A Part B

APPEARANCE: milky white liquid fine powder

ODOUR: slight none

**pH:** 7 12.5 when mixed with water

**RELATIVE DENSITY:** 1.04

**BULK DENSITY:** 1100 - 1550 kg/m<sup>3</sup>

**BOILING POINT:** 100°C

**FLAMMABILITY:** dewatered polymer readily burns

SOLUBILITY IN WATER: fully miscible insoluble

VAPOUR PRESSURE 23mbar

#### 10. STABILITY & REACTIVITY

#### STABLE UNDER NORMAL CONDITIONS OF STORAGE (SEE "HANDLING AND STORAGE")

**CONDITIONS TO AVOID:** Powder releases alkalis on contact with water and chemically

hardens.

MATERIALS TO AVOID: Powder reacts vigorously with strong alkalies.

Do not allow polymer to come into contact with metals or alloys

that are liable to corrosion.

HAZARDOUS DECOMPOSITION PRODUCTS: May contain oxides of carbon and nitrogen.

HAZARDOUS POLYMERISATION: None known.

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#### 11. TOXICOLOGICAL DATA

THIS IS NOT A FULLY TESTED PRODUCT, BUT ASSESSMENT OF THE HAZARDOUS SUBSTANCES SUGGESTS THE FOLLOWING RISKS:

INHALATION: Dust nuisance. Prolonged exposure to dust may cause irritation to the respiratory system. Prolonged

exposure to product may cause inflammation of mucus membranes. Inhalation of free silica over a

prolonged period can give rise to fibrosis of the lungs.

SKIN: In contact with water or body fluids, alkalis are released which can cause irritation of the skin. Levels

of 1,2 benzisothiazolin-3-one below 500 ppm are not likely to cause skin sensitisation.

**EYE:** Irritating to eyes.

**INGESTION:** Small amounts are unlikely to cause any significant reaction. Larger doses may result in irritation or

blockage of the gastro-intestinal tract. Unlikely to result in poisoning due to the large volume of

material which must be ingested.

The engineering controls and personal protection equipment advised in this Safety Data Sheet are to ensure the occupational exposure limits are not exceeded. Should this happen to anyone within the affected area, there could be delayed adverse health effects.

### 12. ECOLOGICAL DATA

Product should not be disposed of into rivers or other water courses without pre-treatment. Measures should be taken to prevent the release of dust to the environment. Appropriate additions of low concentrations to biological water treatment plants are not expected to cause any disturbances. Attention must be paid to local water treatment regulations.

**AQUATIC TOXICITY RATING:** LC<sub>50</sub> aquatic toxicity rating not determined. The addition of cementitious materials to

water will, however, cause the pH to rise and therefore be toxic to aquatic life in some circumstances. Part C contains tetraethylenepentamine which is a marine

pollutant.

### 13. DISPOSAL CONSIDERATIONS

The product is not classified as hazardous waste and is suitable for controlled waste site disposal. Do not allow into drains or water courses or dispose of where ground or surface waters may be affected. Large quantities of polymer must be coagulated before disposal.

# DISPOSE OF IN ACCORDANCE WITH LOCAL AND NATIONAL REGULATIONS

Further information on disposal methods and contractors is available from the National Association of Waste Disposal Contractors.

Tel: 020 7824 8882 Fax: 020 7824 8753

## 14. TRANSPORT INFORMATION

CONVEYANCE CLASSIFICATION: Not classified

## 15. REGULATORY INFORMATION

EC HAZARD CLASSIFICATION: Irritant

RISK PHRASES: (Part B) R36/38 : Irritating to eyes and skin.

SAFETY PHRASES: S26 : In case of contact with eyes, rinse immediately with plenty of

water and seek medical advice.

S36/37/39 : Wear suitable protective clothing, gloves and eye/face

protection.

NOTE: Soluble chromium (VI) is less than 2ppm by dry weight of cement when mixed with

water.

OCCUPATIONAL EXPOSURE LIMITS AND STANDARDS ARE ADVISED IN PUBLICATION EH40 FROM THE HSE

FOR THE PURPOSE OF REGULATION 7(1) OF THE COSHH REGULATIONS.

## 16. OTHER INFORMATION

**TRAINING ADVICE:** The user should be trained to handle the products to avoid the creation of dust and

be fully aware of the reactions and hazards. The normal precautions relating to

handling chemicals must be observed.

**RECOMMENDED USES:** The protection of concrete.

**DATA SOURCES:** EH40/2005 Occupational Exposure Limits 2005.

HSE Guidance Note EH44; Dust in the Workplace: General Principles of

Protection.

Control of Substances Hazardous to Health Regulations 1995.

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We believe all information given is accurate and is offered, in good faith, but without guarantee.

Since conditions of use are beyond our control all risks of use are assumed by the user.

Recipients of this MSDS must make their own assessment of the workplace risk as required by other health and safety legislation.

MSDS