

Substance name: UCCC BUILDING FILLER

1/ IDENTIFICATION

1.1 Product Identifier

Trade name UCCC BUILDING FILLER

Synonym Bog, Builders Plus Building Filler

Product code BFW, BFT.

EINECS or IUPAC Name

Molecular Formula Mixture

1.2 Relevant Identified Use of Substance or mixture and uses advised against

Recommended Use: Thermosetting two pack polyester filler for use in the building industry.

1.3 Details of Supplier

Company Identification: United Chemicals Composites & Colours Pty Ltd

(ABN 25 600 232 040) 30A Futura Road,

Keysborough, Vic. 3173, Australia

Ph. 61 (03) 9798 2650 Fax 61 (03) 9798 3562 email: sales@uccc.com.au Website: uccc.com.au

1.4 Emergency Telephone Number(s)

Phone: In Australia (all states)

Normal business hours (Mon-Fri, 9-5pm AEST) 1800 033 111

Outside business hours 1800 033 111

In New Zealand 24 hours 0800 734 607 POISONS INFORMATION SERVICE: 13 11 26 Australia; or

0800 734 607 New Zealand or 613 9663 2130 International

2/ HAZARD IDENTIFICATION

Classified as Hazardous Chemical according to the classification by Safe Work Australia. **Classified as Dangerous Goods** according to the Australian Code for the Transport of Dangerous Goods by Road and Rail.

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2.1 Classification of Substance or Mixture

Signal word: DANGER

GHS Classification	Pictogram	Hazard Statement
Flammable Liquid Category 3	GHS02	H226 Flammable liquid and vapour.
Acute Toxicity (Inhalation) Category 4 Specific Target Organ Toxicity (single exposure) Category 3 Specific target organ toxicity (repeated exposure) Category 1	GHS07	H332 Harmful if inhaled. H335 May cause respiratory irritation.
Serious Eye Damage/Irritation Category 2 Skin Corrosion/irritation Category 2	GHS08	H319 Causes serious eye irritation. H315 Causes skin irritation.

2.2 GHS Label Elements, including precautionary statements

GENERAL	
P101	If medical advice is needed, have product container or label at hand.
PREVENTATIVE	
P201	Obtain special instructions before use.
P202	Do not handle until all safety precautions have been read and understood.
P210	Keep away from heat/sparks/open flames/hot surfaces – No smoking.
P233	Keep container tightly closed.
P240	Ground/bond container and receiving equipment.
P241	Use explosion-proof electrical/ventilating/lighting//equipment.
P242	Use only non-sparking tools.
P243	Take precautionary measures against static discharge.

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P260	Do not breathe dust/fume/gas/mist/vapours/spray.
P261	Avoid breathing dust/fume/gas/mist/vapours/spray.
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.
P273	Avoid release to the environment.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P281	Use personal protective equipment as required.
RESPONSE	
P301+P310	IF SWALLOWED: immediately call a POISON CENTRE or doctor/physician.
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.
P308+P313	IF exposed or concerned: Get medical advice/attention.
P312	Call a POISON CENTRE or doctor/physician if you feel unwell.
P321	Specific treatment (see First Aid Measures on this MSDS).
P331	Do NOT induce vomiting.
P332+P313	If skin irritation occurs: Get medical advice/attention.
P337+P313	If eye irritation persists: Get medical advice/attention.
P370+P378	In case of fire: Use carbon dioxide, dry chemical, or foam for extinction.
STORAGE	
P403+P233	Store in a well-ventilated place. Keep container tightly closed and cool.
P405	Store locked up.
DISPOSAL	
P501	Dispose of contents/container in accordance with local regulations.

2.3 Other Hazards which do not result in classification:

Germ cell mutagenicity –Unknown

Carcinogenicity - Unknown

Reproductive toxicity – Unknown

Specific target organ toxicity – single exposure – Category 1 (central nervous system),

Specific target organ toxicity – repeated exposure – Category 1 (central nervous system)

Aspiration hazard - Category 1

Hazardous to the aquatic environment (acute) – Category 2

Hazardous to the aquatic environment (long term) - Not classified

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3/ COMPOSITION/INFORMATION ON INGREDIENTS

Substance/Mixture: Viscous paste with off-white or beige-brown colour.

Hazardous Component(s):

Composition

Substance name	Contents	CAS No.	EC No.	Classification
Polyester resin	30-<70%	Confidential		Not classified
Styrene monomer	10<30%	100-42-5		H226 Flammable liquid
				and vapour
Talc	10<50%	14807-96-6		Classified as non-
				hazardous
Calcium carbonate	10<30	1317-65-3		Classified as non-
				hazardous
Silica, fumed	1<10%	112945-52-5		Classified as non-
		& 7631-86-9		hazardous
Inorganic microspheres	1<10%	50815-87-7		Classified as non-
				hazardous
Titanium dioxide	0<10%	13463-67-7		Classified as non-
				hazardous
Additives	1<5%	Confidential		Not classified

Note. All chemical entities in these formulations comply with NICNAS legislation.

4/ FIRST AID MEASURES

Inhalation	If inhaled, remove person from contaminated area. Apply artificial respiration if not breathing. Seek medical attention
Skin Contact	If skin or hair contact occurs, remove contaminated clothing and flush skin and hair with running water. If symptoms develop, seek medical attention.
Eye Contact	If eye contact occurs, hold eyelids apart and flush eye continuously with running water. Continue flushing until advised to stop by the Poisons Information Centre or a doctor, or for at least 15 minutes. Seek immediate medical attention.
Ingestion	Do not induce vomiting. Wash out mouth thoroughly with water. Seek immediate medical attention.

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Symptoms caused by exposure

Inhalation	Harmful by inhalation. Inhalation of mists or vapours may result in respiratory irritation and possible harmful corrosive effects including lesions of the nasal septum, pulmonary oedema, pneumonitis and emphysema. Exposure to large concentrations over an extended period of time can result in muscle weakness, tingling in hands and feet, blurred vision, headaches, nausea, loss of appetite, hallucinations, and possible loss of consciousness. Repeated or prolonged exposure to this product can result in acute effects being felt with greater frequency and severity. Effects of exposure may increase in intensity with subsequent use.
Skin Contact	Harmful in contact with skin. Skin contact may cause redness, itching, irritation, severe pain and chemical burns with resultant tissue destruction. This product may cause sensitisation in some individuals. Defatting and drying of the skin will occur on exposure to the product's vapours.
Eye Contact	Risk of serious damage to eyes. Eye contact will cause stinging, blurring, tearing, severe pain and possible permanent corneal damage. Vapour may be irritating to the eyes and eye tissue.
Ingestion	Ingestion of any amount of this product may cause headaches, nausea, dizziness, vomiting, abdominal pain and chemical burns to the mouth, throat and stomach. Small amounts of liquid aspirated into the lungs during ingestion, or from vomiting, may cause chemical pneumonitis, or pulmonary oedema.

Medical attention and special treatment

Treat symptomatically. Avoid gastric lavage: risk of aspiration of product to the lungs with potential to cause chemical pneumonitis.

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5/ FIRE FIGHTING MEASURES

Suitable extinguishing equipment

Use carbon dioxide, dry chemical or foam. Alcohol resistant foam is preferred. If not available, normal foam can be used. Do not use water jet.

Specific Hazards arising from the substance

Flammable liquid and vapour. Vapour/air mixtures may ignite explosively. Flashback along the vapour trail may occur. Runoff to sewer may create fire or explosion hazard.

Under fire conditions this product may emit toxic and/or irritating black acrid fumes including carbon monoxide and carbon dioxide.

Avoid spraying water directly into storage containers due to danger of boil over.

Special protective equipment and precautions for fire fighters

Fire fighters should wear full protective clothing and self-contained breathing apparatus (SCBA) operated in positive pressure mode. In case of fire, the product may be violently or explosively reactive. Use water spray to disperse vapours. This product should be prevented from entering drains and watercourses. Hazchem code 3Y.

6/ ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Wear appropriate personal protective equipment and clothing to minimise skin/eye exposure and inhalation of vapours. Extinguish or remove all sources of ignition and stop any leak if safe to do so. Increase ventilation. Evacuate all unnecessary personnel.

Environmental precautions

If possible contain the spill. Place inert absorbent material (soil, sand, vermiculite or other inert material) onto spillage. Use clean non-sparking tools to collect the material and place into a suitable labelled container for disposal. Do not dilute material. Dispose of waste according to federal, Environmental Protection Authority and state regulations. If the spillage enters the waterways contact Environmental Protection Authority, or your local Waste Management Authority.

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7/ HANDLING AND STORAGE

Precautions for Safe Handling

Corrosive and flammable liquid. Attacks skin and eyes. May produce severe burns. Wear suitable protective clothing (eg. long sleeves and trousers or long coveralls, and safety shoes), appropriate chemical resistant gloves and eye/face protection (goggles or face shield) when mixing and using this substance. Use in designated areas with adequate ventilation. Avoid breathing in vapours, mist or fumes. Keep containers closed when not in use. Ensure a high level of personal hygiene is maintained when using this product, that is always wash hands after handling, and before eating, drinking, smoking or using the toilet facilities. Do not use near ignition sources. Do not pressurise, cut, heat or weld containers as they may contain hazardous residues. Prevent the build up of mists or vapours in the work atmosphere.

Conditions for Safe Storage, Including Any Incompatibilities.

Corrosive and flammable liquid for storage and handling purposes. Keep container tightly closed and store in a dry, cool, well-ventilated area, out of direct sunlight. Provide a catch-tank in a bunded area. Avoid sparks, flames and other ignition sources. Store well away from any sources of ignition and incompatible materials. Do not pressurise, cut, heat or weld containers as they may contain hazardous residues. Handle containers with care. Keep containers closed when not in use and securely sealed and protected against physical damage. Inspect regularly for deficiencies such as damage or leaks. Open containers slowly in order to control possible pressure release. The product has limited storage life due to inhibitor depletion and should be used within six months of delivery. Rapid polymerisation resulting in violent rupture of closed containers and possible fire from flammable vapours may be initiated by high temperatures or certain contaminants. Have appropriate fire extinguishers available in and near the storage area. Take precautions against static electricity discharges. Use proper grounding procedures. For information on the design of the storeroom, refer to the Australian Standard AS1940-The storage and handling of flammable and combustible liquids and AS3780-2008 The storage and handling of corrosive substances. Reference should also be made to all Local, State and Federal regulations. Do not store near strong oxidising agents, free radical initiators, reducing agents, tertiary amines, heavy metals, and mineral acids.

Incompatible Materials

Natural rubber, butyl rubber, EPDM, polystyrene, zinc, copper and their alloys.

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8/ EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure control measures

No exposure value assigned for this specific material by the National Occupational Health and Safety Commission (NOHSC), Australia or the Occupational Safety and Health Service (OSH) of the New Zealand Department of Labour. However, the available exposure limits for the ingredients are listed below:

National Occupational Health and Safety Commission (NOHSC) Australian Exposure standards:

Substance	TWA		STEL		Notices
Styrene	50ppm	213mg/m3	100ppm	426mg/m3	
Amorphous silica		2mg/m3		Not available	
Talc		2.5mg/m3		Not available	

Amorphous silica revised IDLH 3000mg/m3.

New Zealand Occupational Safety and Health Service (OSH) Workplace Exposure Standards:

Substance	TWA		STEL		Notices
Styrene	50ppm	213mg/m3	100ppm	426mg/m3	Sk
Amorphous silica		2mg/m3			
Talc		2.5mg/m3			

TWA (Time Weighted Average): The average airborne concentration of a particular substance when calculated over a normal eight-hour working day, for a five-day week.

STEL (Short Term Exposure Limit): The average airborne concentration over a 15 minute period which should not be exceeded at any time during a normal eight-hour workday.

'Sk' or 'Skin' Notice: Absorption through the skin may be a significant source of exposure. The exposure standard is invalidated if such contact should occur.

'Sen' Notice: Respiratory and/or skin sensitiser.

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Biological Monitoring

Substance name: styrene (CAS 100-42-5)

Determinant: Mandelic acid plus phenylglyoxylic acid in urine

BEI[®]: 400mg/g creatinine

Sampling time: end of shift.

Determinant: Styrene in venous blood

BEI®: 0.2mg/l

Sampling time: end of shift.

Source: American Conference of Industrial Hygienists (ACGIH)

Appropriate engineering controls

Provide sufficient ventilation to keep local airborne levels below the exposure limits. Where vapours or mists are generated, particularly in enclosed areas, and where natural ventilation is inadequate, a explosion-proof exhaust ventilation system is required. Refer to AS1940- The storage and handling of flammable and combustible liquids and AS/NZS 2430.3.1:2004: Classification of hazardous areas – examples of area classification – General, for further information concerning ventilation requirements.

Individual protection measures

Eye and Face protection	Safety glasses with side shields, chemical goggles or full-face shield as appropriate should be used. Final choice of appropriate eye/face protection will vary according to individual circumstances ie. methods of handling and engineering controls and according to risk assessments undertaken. Eye protection should conform with Australian Standard AS/NZS 1337 – Eye Protectors for Industrial Applications.
Skin protection	Wear gloves of impervious material such as PVC. Final choice of appropriate gloves will vary according to individual circumstances ie. methods of handling or according to risk assessments undertaken. Reference should be made to AS/NZS2161.1- Occupational protective gloves – Selection, use and maintenance. Wear appropriate clothing (eg. long coveralls) including chemical resistant apron where clothing is likely to be contaminated. It is advisable that a local supplier of personal protective clothing is consulted regarding the choice of material.

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Respiratory protection	If engineering controls are not effective in controlling airborne exposure then an approved respirator with a replaceable organic vapour filter should be used. Reference should be made to Australian Standard AS/NZS 1715 – Selection, use and maintenance of Respiratory Protective Devices; and AS/NZS 1716 – Respiratory Protective Devices, in order to make any necessary changes for individual circumstances (eg. half-face filter mask with Type "A" filter material).
Thermal hazards	Flammable. Gives off irritating or toxic fumes (or gases) in a fire. Above 31C explosive vapour/air mixtures may be formed. Above 31C, use a closed system, mechanical ventilation and explosion-proof electrical equipment.

9/ PHYSICAL AND CHEMICAL PROPERTIES

Parameter	Typical value
Appearance	Off white or beige-brown viscous paste
Odour	Characteristic pungent solvent odour
Odour threshold	Unknown
рН	Not applicable
Melting point/freezing point	Not applicable
Initial boiling point or boiling range	>145C*(may polymerise below boiling point)
Flash point	31C (closed cup)
Evaporation rate	0.49* (n-butyl acetate=1)
Flammability	No data
Upper/lower flammability or explosive limits	0.9%-6.8%* by vol.
Vapour pressure	<5mm Hg (20C)*
Vapour density	Heavier than air
Relative density @20C, kg/L	1.1 to 1.5
Water Solubility(ies) @20C	Insoluble
Partition coefficient: n-octanol/water (log Pow)	Not applicable
Auto-ignition temperature	490C*
Decomposition temperature	Unknown
Dynamic Viscosity @25C (Brookfield RVT)	150K-400K cp
Non-volatile content	50-70% w/w
Other information	
*Based on styrene	

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10/ STABILITY AND REACTIVITY

10.1 Reactivity

Stable under normal conditions of storage and handling.

10.2 Chemical stability

May undergo polymerisation. Store in a cool place to maximise shelf life.

10.3 Possibility of hazardous reactions

May occur in the presence of polymerisation accelerators.

10.4 Conditions to avoid

Avoid heat, direct sunlight, open flames or other sources of ignition such as sparks, static discharges. Avoid prolonged storage above 30C.

10.5 Incompatible materials

Strong oxidising agents. Alkylation catalysts and strong acids (H2SO4, H3PO4, BF3, AlCl3), halogens, halogenated organic compounds, and hydrogen halides, and metal salts. Avoid contact with zinc, copper and their alloys. Organic peroxides catalyse rapid polymerisation of styrene monomer.

10.6 Hazardous decomposition products

Fumes, smoke, carbon monoxide, carbon dioxide, phenols, and other organic complexes on incomplete combustion or oxidation.

11/ TOXICOLOGICAL INFORMATION

Acute toxicity	Oral or inhalation - Category 4. Warning.
, react terminary	LD50 (Oral, rat): 2650mg/kg (*styrene),
	LD50 (dermal, rabbit): >5010mg/kg*
	, , ,
	LC50 (4 hours, vapour inhalation, rat): 12g/m3*.
	LC50 (vapour inhalation, mouse) 6.8mg/l*
Skin corrosion/irritation	Material is irritating to the skin. Defatting and drying will occur on
	exposure to product vapors.
	*Category 2, Warning.
	Causes skin irritation. Rabbit FHSA rating 2.4 on a scale of 8.0,
	slightly irritating.
Serious eye damage/irritation	*Category 2. Warning. Causes serious eye irritation.
	Rabbit FHSA rating 10.3 on a scale of 110.0, slightly irritating.
Respiratory or skin	*Category 1, Danger. May cause allergy or asthma symptoms or
sensitisation	breathing difficulties if inhaled. May cause allergic skin reaction or
	sensitisation. No data available.
Germ cell mutagenicity	*Category 2. Warning. Suspected of causing genetic defects.
Carcinogenicity	*Category 2, Warning. Suspected of causing cancer.

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Reproductive toxicity	*Category 1B, Danger. H361d (Suspected of damaging the unborn child)
Specific Target Organ Toxicity (STOT)- single exposure	*Category 1 (central nervous system) Danger. Causes damage to organs. Category 3 (respiratory tract irritation) Warning. May cause respiratory irritation or may cause drowsiness or dizziness.
Specific Target Organ Toxicity (STOT)- repeated exposure	*Category 1(respiratory system, nervous system, blood system liver) Danger. Causes damage to organs through prolonged or repeated exposure. H372 (Causes damage to the hearing organs through prolonged or repeated exposure).
Aspiration hazard	*Category 1, Danger. May be fatal if swallowed and enters airways. Based on styrene's hydrocarbon composition and its dynamic viscosity of 0.772mm2/s (25C) (CERI calculated value).

^{*}Based on styrene.

12/ ECOLOGICAL INFORMATION

12.1 Ecotoxicity

Hazardous to the aquatic environment (acute) Category 2. Toxic to aquatic life. Based on 96 hours LC50 (fish) of 4.02mg/L (styrene, fathead minnows).

Daphnia Magna EC50 (24hr): styrene 4700μg/L

Blue-green algae (toxicity threshold 7-8 days): styrene 67mg/L Green algae EC50 (toxicity threshold 7-8 days): styrene 560µg/L

12.2 Persistence and degradability

Hazardous to the aquatic environment (long term). Not classified. This product is not considered to comply with international biodegradability criteria.

The major solvent in these formulations is styrene, which undergoes slow, but nearly complete biodegradation. Styrene released to soil will have a low mobility and will biodegrade. Styrene released to water will float and volatilise and will biodegrade. Styrene vapour degrades rapidly in the atmosphere.

12.3 Bio-accumulative potential

Bio-accumulation index low (styrene log Kow=2.95 (PHYSPROP Database 2005).

12.4 Mobility in soil

If product enters soil, it will be highly mobile and may contaminate groundwater.

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12.5 Other adverse effects. Unknown

13/ DISPOSAL INFORMATION

Disposal of spilled or waste material must be carried out in accordance with the relevant local and national government regulations. Advise flammable nature. Empty containers may contain flammable residues and vapour that are harmful. Do not puncture, cut or weld empty containers. Ensure that empty packaging is allowed to dry. Do not reuse empty containers without appropriate hazardous waste cleaning or reconditioning.

Special Conditions for Disposal

This product is NOT suitable for disposal by either landfill or via municipal sewers, drains, natural streams or rivers. This product must be disposed as a hazardous chemical in accordance with the local regulatory authority.

14/ TRANSPORT INFORMATION

1. UN Number:	3269
2. UN Proper Shipping Name:	Polyester Resin Kit
3. Australian Dangerous Goods class:	3
4. Australian Dangerous Goods Packing Group:	III
5. Hazchem Code:	3Y

14.7 Special Precautions

IERG Number 15

Not listed as a IMDG Marine Pollutant.

Refer to Section 7 Handling and Storage for special conditions and precautions.

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15/ REGULATORY INFORMATION

Australia:

Classified as a hazardous chemical according to the GHS criteria of Safe Work Australia. Classified as a Scheduled Poison according to the Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP).

Classified as Dangerous Goods according to the Australian Code for the Transport of Dangerous Goods by Road and Rail.

Dangerous Goods Initial Emergency Response Guide (SAA/SNZ HB76): 14

Poisons Schedule

Classified according to the SUSMP as: S5.

New Zealand:

Classified as Hazardous according to the New Zealand Hazardous Substances (Minimum degrees of Hazard) Regulations 2001.

All components of this product are listed on the New Zealand Inventory of Chemicals (NZIoC) or exempted.

Group standard:

Additives, Process Chemicals and Raw Materials (Flammable, Toxic (6.1 + 6.7), Corrosive) Group Standard 2006.

HSNO Approval Number HSR002499

Hazard Category Harmful, Corrosive, Flammable.

Australia (AICS)

All components of this product are listed on the Australian Inventory of Chemical Substances (AICS).

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16/ OTHER INFORMATION

Date of preparation or last revision of MSDS.

MSDS Version: 2, created June 2020.

References:

1/ Supplier Material Safety Data Sheets.

2/ Safe Work Australia website (June 2020).

Contact Person/Point: For further information or clarification, contact the Technical Manager, UCCC on Ph 03 9798 2650.

IMPORTANT ADVICE: This MSDS summarizes our best knowledge of the health and safety hazard information of the product and how to safely handle and use the product in the workplace. Each user should read this MSDS and consider the information in the context of how the product will be handled and used in the workplace including its use in conjunction with the other products. If clarification or further information is needed to ensure that an appropriate risk assessment can be made, the user should contact the supplier listed in section 1 of the Safety Data Sheet. Our responsibility for products sold is subject to our standard terms and conditions, a copy of which is sent to our customers and is also available on request.

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