

BITUPATCH



ASPHALT POT HOLE REPAIRER

Chemwatch: **5279-28**Version No: **5.1.1.1**

Safety Data Sheet according to HSNO Regulations

Chemwatch Hazard Alert Code: 1

Issue Date: 23/11/2017 Print Date: 01/12/2017 LGHS.NZL.EN

SECTION 1 IDENTIFICATION OF THE SUBSTANCE / MIXTURE AND OF THE COMPANY / UNDERTAKING

Product Identifier	
Product name	Cemix Bitupatch
Synonyms	Not Available
Other means of identification	Not Available
Relevant identified uses of th	ne substance or mixture and uses advised against
Relevant identified uses	Pothole repair material.
Details of the supplier of the	safety data sheet
Registered company name	Cemix (a part of Ardex NZ)
Address	19 Alfred Street Onehunga Auckland 1061 New Zealand
Telephone	+64 9 636 1000
Fax	+64 9 636 0000
Website	www.cemix.co.nz
Email	Not Available
Emergency telephone numbe	ur
Association / Organisation	Not Available
Emergency telephone numbers	0800 ASK CEMIX
Other emergency telephone numbers	Not Available

SECTION 2 HAZARDS IDENTIFICATION

Classification of the substance or mixture

Considered a Hazardous Substance according to the criteria of the New Zealand Hazardous Substances New Organisms legislation. Not regulated for transport of Dangerous Goods.

Classification [1]	Specific target organ toxicity - single exposure Category 3 (narcotic effects)				
Legend:	Classified by Chemwatch; 2. Classification drawn from CCID EPA NZ; 3. Classification drawn from EC Directive 1272/2008 - Annex VI				
Determined by Chemwatch using GHS/HSNO criteria	6.9 (narcotic)				

Label elements

Hazard pictogram(s)



SIGNAL WORD

WARNING

Hazard statement(s)

H336 May cause drowsiness or dizziness.

Precautionary statement(s) Prevention

P271 Use only outdoors or in a well-ventilated area

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P261

Avoid breathing mist/vapours/spray.

Precautionary statement(s) Response

P312	Call a POISON CENTER or doctor/physician if you feel unwell.
P304+P340	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

Precautionary statement(s) Storage

P405	Store locked up.
P403+P233	Store in a well-ventilated place. Keep container tightly closed.

Precautionary statement(s) Disposal

P501 Dispose of contents/container in accordance with local regulations.

SECTION 3 COMPOSITION / INFORMATION ON INGREDIENTS

Substances

See section below for composition of Mixtures

Mixtures

CAS No	%[weight]	Name
14808-60-7.	>60	graded sand
8052-42-4	<10	bitumen road making
Not Available	<3	proprietary polymer

SECTION 4 FIRST AID MEASURES

NZ Poisons Centre 0800 POISON (0800 764 766) | NZ Emergency Services: 111

Description of first aid measures

	· · · · · · · · · · · · · · · · · · ·
Eye Contact	If this product comes in contact with eyes: Wash out immediately with water. If irritation continues, seek medical attention. Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.
Skin Contact	If skin or hair contact occurs: Flush skin and hair with running water (and soap if available). Seek medical attention in event of irritation. Immediately drench burn area in cold running water. If hot bitumen adheres to the skin, DO NOT attempt to remove it (it acts as a sterile dressing). For burns to the head and neck and trunk, apply cold wet towels to the burn area, and change frequently to maintain cooling. Cooling should be maintained for no longer than thirty minutes. When hot bitumen completely encircles a limb, it may have a tourniquet effect and should be split as it cools. Transport to hospital or doctor.
Inhalation	If dust is inhaled, remove from contaminated area. Encourage patient to blow nose to ensure clear passage of breathing. If irritation or discomfort persists seek medical attention.
Ingestion	 If swallowed do NOT induce vomiting. If vomiting occurs, lean patient forward or place on left side (head-down position, if possible) to maintain open airway and prevent aspiration. Observe the patient carefully. Never give liquid to a person showing signs of being sleepy or with reduced awareness; i.e. becoming unconscious. Give water to rinse out mouth, then provide liquid slowly and as much as casualty can comfortably drink. Seek medical advice.

Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

Burns: No attempt should be made to remove the bitumen (it acts as a sterile dressing). Cover the bitumen with tulle gras and leave for two days when any detached bitumen can be removed. Re-dress and leave for a further week. If necessary refer to a burns unit. [Manufacturer]

SECTION 5 FIREFIGHTING MEASURES

Extinguishing media

- ► Foam.
- Dry chemical powder.
- ▶ BCF (where regulations permit).
- Carbon dioxide
- ▶ Water spray or fog Large fires only.

Special hazards arising from the substrate or mixture

Fire Incompatibility

Avoid contamination with oxidising agents i.e. nitrates, oxidising acids, chlorine bleaches, pool chlorine etc. as ignition may result

Advice for firefighters

Fire Fighting

- ▶ Alert Fire Brigade and tell them location and nature of hazard.
- Wear breathing apparatus plus protective gloves.

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	 Prevent, by any means available, spillage from entering drains or water courses. Use water delivered as a fine spray to control fire and cool adjacent area. DO NOT approach containers suspected to be hot. Cool fire exposed containers with water spray from a protected location.
Fire/Explosion Hazard	 Combustible. Slight fire hazard when exposed to heat or flame. Heating may cause expansion or decomposition leading to violent rupture of containers. On combustion, may emit toxic fumes of carbon monoxide (CO). May emit acrid smoke. Mists containing combustible materials may be explosive. Combustion products include: carbon dioxide (CO2) other pyrolysis products typical of burning organic material.
	May emit poisonous fumes.

SECTION 6 ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

See section 8

Environmental precautions

See section 12

Methods and material for containment and cleaning up

Minor Spills	 Clean up all spills immediately. Avoid contact with skin and eyes. Wear impervious gloves and safety goggles. Trowel up/scrape up. Place spilled material in clean, dry, sealed container. Flush spill area with water.
Major Spills	Minor hazard. ► Clear area of personnel. ► Alert Fire Brigade and tell them location and nature of hazard. ► Control personal contact with the substance, by using protective equipment as required. ► Prevent spillage from entering drains or water ways. ► Contain spill with sand, earth or vermiculite.

Personal Protective Equipment advice is contained in Section 8 of the SDS.

SECTION 7 HANDLING AND STORAGE

Precautions	for	safe	handl	ina

Safe handling	 Electrostatic discharge may be generated during pumping - this may result in fire. Ensure electrical continuity by bonding and grounding (earthing) all equipment. Restrict line velocity during pumping in order to avoid generation of electrostatic discharge (<=1 m/sec until fill pipe submerged to twice its diameter, then <= 7 m/sec). Avoid splash filling. Do NOT use compressed air for filling discharging or handling operations. Avoid all personal contact, including inhalation. Wear protective clothing when risk of exposure occurs. Use in a well-ventilated area. Prevent concentration in hollows and sumps. Do NOT enter confined spaces until atmosphere has been checked. DO NOT allow material to contact humans, exposed food or food utensils.
Other information	 Store in original containers. Keep containers securely sealed. No smoking, naked lights or ignition sources. Store in a cool, dry, well-ventilated area. Store away from incompatible materials and foodstuff containers. Protect containers against physical damage and check regularly for leaks.

Conditions for safe storage, including any incompatibilities

Suitable container	 Metal can or drum Packaging as recommended by manufacturer. Check all containers are clearly labelled and free from leaks.
Storage incompatibility	► Avoid reaction with oxidising agents

SECTION 8 EXPOSURE CONTROLS / PERSONAL PROTECTION

Control parameters

OCCUPATIONAL EXPOSURE LIMITS (OEL)

INGREDIENT DATA

I							
Source	Ingredient	Material name	TWA	STEL	Peak	Notes	

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New Zealand Workplace Exposure Standards (WES)	bitumen road making	Asphalt (petroleum) fumes	5 ppm	Not Available		Not Available	Not Available
EMERGENCY LIMITS							
Ingredient	Material name		TEEL-1		TEE	L-2	TEEL-3
graded sand	Silica, crystalline-quartz; (Silicon dioxide)		0.075 mg/m3		33 m	ıg/m3	200 mg/m3
bitumen road making	Petroleum asphalt; (Bitumen)		30 mg/m3	3	330 ı	mg/m3	2,000 mg/m3
Ingredient	Original IDLH		Revis	ed IDLH			
graded sand	Not Available		Not Available				
bitumen road making	Not Available		Not Available				
proprietary polymer	Not Available		Not A	/ailable			

MATERIAL DATA

Exposure controls

Engineering controls are used to remove a hazard or place a barrier between the worker and the hazard. Well-designed engineering controls can be highly effective in protecting workers and will typically be independent of worker interactions to provide this high level of protection. The basic types of engineering controls are: Appropriate engineering Process controls which involve changing the way a job activity or process is done to reduce the risk. controls Enclosure and/or isolation of emission source which keeps a selected hazard "physically" away from the worker and ventilation that strategically "adds" and "removes" air in the work environment. Ventilation can remove or dilute an air contaminant if designed properly. The design of a ventilation system must match the particular process and chemical or contaminant in use. Personal protection Safety glasses with side shields Chemical goggles. Contact lenses may pose a special hazard; soft contact lenses may absorb and concentrate irritants. A written policy document, describing the wearing Eye and face protection of lenses or restrictions on use, should be created for each workplace or task. This should include a review of lens absorption and adsorption for the class of chemicals in use and an account of injury experience. Medical and first-aid personnel should be trained in their removal and suitable equipment should be readily available. In the event of chemical exposure, begin eye irrigation immediately and remove contact lens as soon as practicable. Skin protection See Hand protection below ▶ Wear chemical protective gloves, e.g. PVC. Hands/feet protection ▶ Wear safety footwear or safety gumboots, e.g. Rubber **Body protection** See Other protection below Overalls. ► P.V.C. apron. Other protection ▶ Barrier cream. ▶ Skin cleansing cream. Eve wash unit. Thermal hazards Not Available

Respiratory protection

Type A-P Filter of sufficient capacity. (AS/NZS 1716 & 1715, EN 143:2000 & 149:2001, ANSI Z88 or national equivalent)

Where the concentration of gas/particulates in the breathing zone, approaches or exceeds the "Exposure Standard" (or ES), respiratory protection is required. Degree of protection varies with both face-piece and Class of filter; the nature of protection varies with Type of filter

Required Minimum Protection Factor	Half-Face Respirator	Full-Face Respirator	Powered Air Respirator
up to 10 x ES	A-AUS P2	-	A-PAPR-AUS / Class 1 P2
up to 50 x ES	-	A-AUS / Class 1 P2	-
up to 100 x ES	-	A-2 P2	A-PAPR-2 P2 ^

^ - Full-face

A(All classes) = Organic vapours, B AUS or B1 = Acid gasses, B2 = Acid gas or hydrogen cyanide(HCN), B3 = Acid gas or hydrogen cyanide(HCN), E = Sulfur dioxide(SO2), G = Agricultural chemicals, K = Ammonia(NH3), Hq = Mercury, NO = Oxides of nitrogen, MB = Methyl bromide, AX = Low boiling point organic compounds(below 65 degC)

Cartridge respirators should never be used for emergency ingress or in areas of unknown vapour concentrations or oxygen content. The wearer must be warned to leave the contaminated area immediately on detecting any odours through the respirator. The odour may indicate that the mask is not functioning properly, that the vapour concentration is too high, or that the mask is not properly fitted. Because of these limitations, only restricted use of cartridge respirators is considered appropriate.

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Appearance	Black paste with mild odour; does not mix with water.		
Physical state	Non Slump Paste	Relative density (Water = 1)	2-2.5
Odour	Not Available	Partition coefficient n-octanol / water	Not Available
Odour threshold	Not Available	Auto-ignition temperature (°C)	Not Available
pH (as supplied)	Not Applicable	Decomposition temperature	Not Available

Cemix Bitupatch

	1		1
Melting point / freezing point (°C)	Not Available	Viscosity (cSt)	Not Available
Initial boiling point and boiling range (°C)	Not Available	Molecular weight (g/mol)	Not Applicable
Flash point (°C)	>93	Taste	Not Available
Evaporation rate	Not Available	Explosive properties	Not Available
Flammability	Not Applicable	Oxidising properties	Not Available
Upper Explosive Limit (%)	Not Available	Surface Tension (dyn/cm or mN/m)	Not Available
Lower Explosive Limit (%)	Not Available	Volatile Component (%vol)	Not Available
Vapour pressure (kPa)	Not Available	Gas group	Not Available
Solubility in water (g/L)	Immiscible	pH as a solution (1%)	Not Applicable
Vapour density (Air = 1)	Not Available	VOC g/L	Not Available

SECTION 10 STABILITY AND REACTIVITY

Reactivity	See section 7
Chemical stability	Unstable in the presence of incompatible materials. Product is considered stable. Hazardous polymerisation will not occur.
Possibility of hazardous reactions	See section 7
Conditions to avoid	See section 7
Incompatible materials	See section 7
Hazardous decomposition products	See section 5

SECTION 11 TOXICOLOGICAL INFORMATION

Information on toxicological effects

mormation on toxicological	CITCOLO		
Inhaled	Inhalation of vapours may cause drowsiness and dizziness. This may be accand vertigo.	companied by narcosi	s, reduced alertness, loss of reflexes, lack of coordination
Ingestion	The material has NOT been classified by EC Directives or other classification systems as "harmful by ingestion". This is because of the lack of corroborating animal or human evidence. The material may still be damaging to the health of the individual, following ingestion, especially where pre-existing organ (e.g liver, kidney) damage is evident. Present definitions of harmful or toxic substances are generally based on doses producing mortality rather than those producing morbidity (disease, ill-health). Gastrointestinal tract discomfort may produce nausea and vomiting. In an occupational setting however, ingestion of insignificant quantities is not thought to be cause for concern.		
Skin Contact	The material is not thought to produce adverse health effects or skin irritation following contact (as classified by EC Directives using animal models). Nevertheless, good hygiene practice requires that exposure be kept to a minimum and that suitable gloves be used in an occupational setting. Open cuts, abraded or irritated skin should not be exposed to this material Entry into the blood-stream through, for example, cuts, abrasions, puncture wounds or lesions, may produce systemic injury with harmful effects. Examine the skin prior to the use of the material and ensure that any external damage is suitably protected.		
Еуе	Although the material is not thought to be an irritant (as classified by EC Directives), direct contact with the eye may produce transient discomfort characterised by tearing or conjunctival redness (as with windburn).		
Chronic	On the basis, primarily, of animal experiments, concern has been expressed that the material may produce carcinogenic or mutagenic effects; in respect of the available information, however, there presently exists inadequate data for making a satisfactory assessment.		
	TOXICITY	IRRITATION	
Cemix Bitupatch	Not Available	Not Available	
	TOXICITY	IRRITATION	
graded sand	Not Available	Not Available	
	TOXICITY	IRRITATION	
bitumen road making	Dermal (rabbit) LD50: >2000 mg/kg ^[1]	Not Available	
	Oral (rat) LD50: >5000 mg/kg ^[1]	1	
Legend:	Value obtained from Europe ECHA Registered Substances - Acute toxicity 2.* Value obtained from manufacturer's SDS. Unless otherwise specified data extracted from RTECS - Register of Toxic Effect of chemical Substances		
BITUMEN ROAD MAKING	WARNING: This substance has been classified by the IARC as Group 2B:	Possibly Carcinogen	ic to Humans.
GRADED SAND & BITUMEN ROAD MAKING	No significant acute toxicological data identified in literature search.		
	Carcinogenicity		
Acute Toxicity	\otimes	Carcinogenicity	0

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Serious Eye Damage/Irritation	\Diamond	STOT - Single Exposure	✓
Respiratory or Skin sensitisation	0	STOT - Repeated Exposure	0
Mutagenicity	0	Aspiration Hazard	0

🗶 – Data available but does not fill the criteria for classification Legend: — Data available to make classification

O - Data Not Available to make classification

SECTION 12 ECOLOGICAL INFORMATION

Toxicity

	ENDPOINT	TEST DURATION (HR)	SPECIES	VALUE	SOURCE
Cemix Bitupatch	Not Available	Not Available	Not Available	Not Available	Not Available
	ENDPOINT	TEST DURATION (HR)	SPECIES	VALUE	SOURCE
graded sand	Not Available	Not Available	Not Available	Not Available	Not Available
	ENDPOINT	TEST DURATION (HR)	SPECIES	VALUE	SOURCE
bitumen road making	Not Available	Not Available	Not Available	Not Available	Not Available

Legend:

Extracted from 1. IUCLID Toxicity Data 2. Europe ECHA Registered Substances - Ecotoxicological Information - Aquatic Toxicity 3. EPIWIN Suite V3.12 (QSAR) - Aquatic Toxicity Data (Estimated) 4. US EPA, Ecotox database - Aquatic Toxicity Data 5. ECETOC Aquatic Hazard Assessment Data 6. NITE (Japan) - Bioconcentration Data 7. METI (Japan) - Bioconcentration Data 8. Vendor Data

DO NOT discharge into sewer or waterways

Persistence and degradability

Ingredient	Persistence: Water/Soil	Persistence: Air
	No Data available for all ingredients	No Data available for all ingredients

Bioaccumulative potential

Ingredient	Bioaccumulation	
	No Data available for all ingredients	

Mobility in soil

Ingredient	Mobility
	No Data available for all ingredients

SECTION 13 DISPOSAL CONSIDERATIONS

Waste treatment methods

Product / Packaging disposal

- ► Containers may still present a chemical hazard/ danger when empty.
- ▶ Return to supplier for reuse/ recycling if possible.

Otherwise:

- ▶ If container can not be cleaned sufficiently well to ensure that residuals do not remain or if the container cannot be used to store the same product, then puncture containers, to prevent re-use, and bury at an authorised landfill.
- ▶ Where possible retain label warnings and SDS and observe all notices pertaining to the product.
- ▶ DO NOT allow wash water from cleaning or process equipment to enter drains
- It may be necessary to collect all wash water for treatment before disposal.
- ▶ In all cases disposal to sewer may be subject to local laws and regulations and these should be considered first. ▶ Where in doubt contact the responsible authority.
- $\blacktriangleright \ \ \text{Recycle wherever possible or consult manufacturer for recycling options}.$
- Consult State Land Waste Authority for disposal.
- Bury or incinerate residue at an approved site
- ▶ Recycle containers if possible, or dispose of in an authorised landfill.

Ensure that the disposal of material is carried out in accordance with Hazardous Substances (Disposal) Regulations 2001.

SECTION 14 TRANSPORT INFORMATION

Labels Required

Labels Required	Labers Required	
Marine Pollutant	NO	
HAZCHEM	Not Applicable	

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Air transport (ICAO-IATA / DGR): NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS

Sea transport (IMDG-Code / GGVSee): NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS

Transport in bulk according to Annex II of MARPOL and the IBC code

Not Applicable

SECTION 15 REGULATORY INFORMATION

Safety, health and environmental regulations / legislation specific for the substance or mixture

This substance is to be managed using the conditions specified in an applicable Group Standard

HSR Number	Group Standard
HSR002670	Surface Coatings and Colourants (Subsidiary Hazard) Group Standard 2006

GRADED SAND(14808-60-7.) IS FOUND ON THE FOLLOWING REGULATORY LISTS

International Agency for Research on Cancer (IARC) - Agents Classified by the IARC Monographs

New Zealand Inventory of Chemicals (NZIoC)

New Zealand Workplace Exposure Standards (WES)

New Zealand Hazardous Substances and New Organisms (HSNO) Act - Classification of

Chemicals

BITUMEN ROAD MAKING(8052-42-4) IS FOUND ON THE FOLLOWING REGULATORY LISTS

International Agency for Research on Cancer (IARC) - Agents Classified by the IARC

New Zealand Workplace Exposure Standards (WES)

Monographs

New Zealand Inventory of Chemicals (NZIoC)

Location Test Certificate

Subject to Regulation 55 of the Hazardous Substances (Classes 1 to 5 Controls) Regulations, a location test certificate is required when quantity greater than or equal to those indicated below are present.

Hazard Class	Quantity beyond which controls apply for closed containers	Quantity beyond which controls apply when use occurring in open containers
Not Applicable	Not Applicable	Not Applicable

Approved Handler

Subject to Regulation 56 of the Hazardous Substances (Classes 1 to 5 Controls) Regulations and Regulation 9 of the Hazardous Substances (Classes 6, 8, and 9 Controls) Regulations, the substance must be under the personal control of an Approved Handler when present in a quantity greater than or equal to those indicated below.

Class of substance	Quantities
Not Applicable	Not Applicable

Refer Group Standards for further information

Tracking Requirements

Not Applicable

National Inventory	Status
Australia - AICS	Y
Canada - DSL	Υ
Canada - NDSL	N (bitumen road making; graded sand)
China - IECSC	Υ
Europe - EINEC / ELINCS / NLP	Υ
Japan - ENCS	N (bitumen road making)
Korea - KECI	Υ
New Zealand - NZIoC	Υ
Philippines - PICCS	Υ
USA - TSCA	Υ
Legend:	Y = All ingredients are on the inventory N = Not determined or one or more ingredients are not on the inventory and are not exempt from listing(see specific ingredients in brackets)

SECTION 16 OTHER INFORMATION

Other information

Classification of the preparation and its individual components has drawn on official and authoritative sources as well as independent review by the Chemwatch Classification committee using available literature references.

The SDS is a Hazard Communication tool and should be used to assist in the Risk Assessment. Many factors determine whether the reported Hazards are Risks in the workplace or other settings. Risks may be determined by reference to Exposures Scenarios. Scale of use, frequency of use and current or available engineering controls must be considered.

Definitions and abbreviations

 ${\sf PC-TWA}.\ {\sf Permissible}\ {\sf Concentration-Time}\ {\sf Weighted}\ {\sf Average}$

PC-STEL: Permissible Concentration-Short Term Exposure Limit

IARC: International Agency for Research on Cancer

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ACGIH: American Conference of Governmental Industrial Hygienists

STEL: Short Term Exposure Limit

TEEL: Temporary Emergency Exposure Limit $_{\circ}$

IDLH: Immediately Dangerous to Life or Health Concentrations OSF: Odour Safety Factor

NOAEL :No Observed Adverse Effect Level LOAEL: Lowest Observed Adverse Effect Level TLV: Threshold Limit Value

LOD: Limit Of Detection OTV: Odour Threshold Value BCF: BioConcentration Factors BEI: Biological Exposure Index

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