

## SAFETY DATA SHEET

According to  
HSNO Hazardous Substances (Safety Data Sheets) Notice 2017

### Section 1. Identification of the material and the supplier

Product: **Cutback Bitumen (up to 7%)**  
Other names: **Cutback Bitumen**  
Product Use: Cutback Bitumen are used for the construction of bituminous road and pavement surfaces. The formulations will vary in the ranges shown in Section 3, depending on the type of product.

NZ Supplier: **Higgins Bitumen Bulk**  
Address: Napier Port,  
Breakwater Road,  
PO Box 421,  
Napier 4140, New Zealand  
Telephone: +64 6 834 0264  
Email: [HBB@Higgins.co.nz](mailto:HBB@Higgins.co.nz)

**Emergency Telephone: 111 (FIRE POLICE AMBULANCE)**  
**021 784 057 (National Bitumen Burns Centre)**  
**0800 764 766 (National Poison Centre)**

Date of SDS Preparation: 8 May 2026

### Section 2. Hazards Identification

**This substance is NOT hazardous according to the EPA Hazardous Substances (Classification) Notice 2020.**

#### Other Hazards

Risk of burns when handled, stored and transported at elevated temperatures.

There is a risk of water vapour pressure explosion if heated above 100°C in the presence of water.

Toxic, flammable and explosive levels of hydrocarbon vapour, hydrogen sulphide and other poisonous gases/vapors can accumulate in the head spaces of tanks and other confined spaces when handling hot bitumen.

### Section 3. Composition / Information on Ingredients

Ingredients	Wt%	CAS NUMBER.
Bitumen	>60	8052-42-4
Kerosene	1-7	8008-20-6

### Section 4. First Aid Measures

Routes of Exposure:

If in Eyes: If hot material contacts the eyes, immediately cool the affected area under cold water for at least 20 minutes. **DO NOT** attempt to remove the product from burnt areas. Refer to the CCNZ Bitumen Burns Card (see Section 16) and seek immediate medical assistance. Excessive exposure to

fumes can cause eye irritations including redness, swelling, stinging and tearing. Remove affected person to a ventilated area. Flood eyes with plenty of water, holding eyelids open. If irritation due to fumes develops and persists, seek medical attention.

- If on Skin If hot material contacts the skin, immediately cool the affected area under cold water for at least 20 minutes. **DO NOT** attempt to remove the product from burnt areas. Refer to the CCNZ Bitumen Burns Card (see Section 16) and seek immediate medical assistance. Material that contacts the skin at ambient temperatures and **does not** result in burns can be removed using vegetable based oils, or industrial hand cleaners. Do not use thinners or solvents. Repeated skin contact may cause skin irritations or dermatitis.
- If Swallowed Do not induce vomiting, wash out mouth thoroughly. If symptoms develop seek medical assistance.
- If Inhaled Remove affected person to a ventilated area. If symptoms persist, seek medical advice. If not breathing, apply artificial respiration and seek urgent medical advice.

**Most important symptoms and effects, both acute and delayed**

Symptoms: Various studies have concluded that there is no evidence of long-term health effects arising from the use of bitumen. Ingestion may cause pain, nausea or gastrointestinal irritations. Do not induce vomiting, seek immediate medical assistance. Inhalation of fumes, mists or aerosols is likely to cause irritations to the nose or throat or coughing. However, in cases where inhalation may have caused an effect, remove the affected persons to a well-ventilated area. If symptoms persist, seek medical advice. If not breathing, apply artificial respiration and seek urgent medical advice.

**Section 5. Fire Fighting Measures**

<b>Hazard Type</b>	This product contains kerosene and will generate flammable or explosive vapours in the head space of empty or full tanks, containers and vessels, especially when heated. Kerosene vapour is explosive in the 1 – 6% range. Limit oxygen, and maintain 8 metre distance to ignition sources. There is a significant risk of violent explosion if this product is heated above 100°C in the presence of water.
<b>Hazardous Combustion Products:</b>	Complete or incomplete combustion can produce oxides of carbon, sulfur and nitrogen, hydrogen sulphide and polyaromatic hydrocarbons.
<b>Suitable Extinguishing media</b>	For large fires use foam or dry chemicals to extinguish fire. For small fires use CO <sub>2</sub> , dry powder, foam, sand or soil. Do not use: Do not use high-pressure water hoses as these may cause the bitumen to react explosively and/or spread the burning material.
<b>Precautions for firefighters and special protective clothing</b>	Fire fighters should wear full protective clothing and self-contained breathing apparatus.
<b>HAZCHEM CODE</b>	2Y (if transport in temperatures >100°C)

**Section 6. Accidental Release Measures**

Wear suitable personal protective clothing as described in Section 8 to prevent skin or eye contact with the material. Whenever possible isolate the cause of the spill (i.e. close valves, empty ruptured vessels etc).

**Small Spills:**

Use absorbent material such as sand or soil to contain the spill. Allow the material to cure and solidify before removing using a shovel or other suitable equipment.

### Large Spills:

If the spill occurs on land, use absorbent material such as sand or soil to contain the spill. Allow the material to cure and solidify before removing using earth moving or excavation equipment. Do not allow the material to enter storm water drains, sewage drains or the aquatic environment. If a spillage enters the aquatic environment, contain the spill before removing using a pump.

### Environmental Impact:

This product is immiscible with water in all proportions and is harmful to aquatic organisms and should not be allowed to enter storm water, sewage drains or other bodies of water.

### Waste Disposal:

This product can be mixed with soil or aggregates and disposed of as clean fill in Local Authority waste disposal facilities.

## Section 7. Handling and Storage

### Precautions for Handling:

- Use a well-ventilated area. Do not store or use in confined spaces.
- Buildup of mists or vapors in the atmosphere must be prevented. Avoid breathing in spray mists or vapors.
- Do not use welding or other ignition sources and avoid sparks. Do not smoke.
- Wear personal protective clothing when handling (see Section 8).
- Avoid accidental release to the environment.

### Precautions for Storage:

- Material can be stored at temperatures between 130 – 160°C. Do not heat above 177°C. If storing for prolonged periods of time it is advisable not to heat product overnight and or unattended.
- Store away from heat, sources of ignition, oxidizing agents, foodstuffs, clothing and out of direct sunlight.
- Keep containers closed when not in use and securely sealed and protected against physical damage. Inspect regularly for damages or leaks.
- Do not allow water to contact hot bitumen due to danger of boil over.
- "Code of Practice RNZ9904: The Safe Handling of Bituminous Materials used in Roding" provides more information on the safe handling and storage of bituminous materials.

## Section 8 Exposure Controls / Personal Protection

### WORKPLACE EXPOSURE STANDARDS (provided for guidance only)

### WORKPLACE EXPOSURE STANDARDS (provided for guidance only)

Asphalt Fumes:	0.5mg/m <sup>3</sup>	8 Hour TWA	(NZ)
Oil mist, mineral:	5mg/m <sup>3</sup>	8 Hour TWA	(NZ)
	10mg/m <sup>3</sup>	15 min STEL	(NZ)
Kerosene:	100mg/m <sup>3</sup>	8 Hour TWA	(NIOSH)
Carbon Dioxide:	5,000ppm (9000mg/m <sup>3</sup> )	8 Hour TWA	(NZ)
	30,000ppm (54,000mg/m <sup>3</sup> )	15 min STEL	(NZ)
Carbon Monoxide:	20ppm (200ppm Ceiling)	8 Hour TWA	(NZ)
	100ppm	15 min STEL	(NZ)
Hydrogen Sulphide:	5ppm (7mg/m <sup>3</sup> )	8 Hour TWA	(NZ)
	10ppm (14mg/m <sup>3</sup> )	15 min STEL	(NZ)

Workplace Exposure Standard – Short-term exposure limit (WES-STEL). The 15-minute time weighted average exposure standard. Applies to any 15-minute period in the working day and is designed to protect the worker against adverse effects of irritation, chronic or irreversible tissue change, or narcosis that may increase the likelihood of accidents. The WES-STEL is not an alternative to the WES-TWA; both the short-term and time-weighted average exposures apply. Exposures at concentrations between the WES-TWA and the WESSTEL should be less than 15 minutes, should occur no more than four times per day, and there should be at least 60 minutes between successive exposures in this range. Workplace Exposure Standards and Biological Exposure Indices. February 2025, Edition 15.

**Notes:**

This product can form mists or aerosols during use.

**Engineering Controls**

Provide adequate ventilation to ensure fumes remain at a minimum level. Where vapors or mist are generated, particularly in closed areas, and natural ventilation is inadequate, a local exhaust ventilation system is required. Ensure that product cannot be heated above 160°C.

**Personal Protection Equipment**

<b>Eyes</b>	Full face shields are required when transferring hot bitumen between vessels using flexible hoses, or when filling mobile tanks.
<b>Hands and Skin</b>	Wear leather or other impervious gloves to prevent burns and splashes when handling hot valves and hoses. Wear full length overalls that fully cover the arms and legs. The overalls must be zipped up. It is advisable to wear a hat to prevent hot bitumen splashes causing burns to the head. The head should be covered when handling bitumen to prevent burns from splashes or accidental release. Wear safety boots that are oil resistant and have slip resistant soles. Overalls should cover the top of the boot.
<b>Respiratory</b>	Respiratory protection or breathing apparatus are not usually required unless engineering controls are inadequate for providing sufficient ventilation.

## Section 9 Physical and Chemical Properties

<b>Appearance</b>	Black liquid
<b>Odour</b>	Petroleum solvent odour.
<b>Odour Threshold</b>	Not available
<b>pH</b>	Not available
<b>Boiling Point</b>	approximately 147°C - 199°C for solvent content
<b>Melting Point</b>	Not available
<b>Freezing Point</b>	Not available
<b>Flash Point</b>	>92°C
<b>Flammability</b>	Liquid is combustible Vapour above liquid surface is flammable
<b>Upper and Lower Explosive Limits</b>	1% - 6% for kerosene vapour in air
<b>Vapour Pressure</b>	3.2 mm Hg @ 15°C for solvent content
<b>Vapour Density</b>	Not available
<b>Density @ 20°C</b>	1.00 - 1.05 g/cm <sup>3</sup>
<b>Solubility</b>	Insoluble in water
<b>Partition Coefficient: N octanol/water</b>	Not available
<b>Auto-ignition Temperature</b>	>210°C
<b>Decomposition Temperature</b>	Not available
<b>Viscosity (165°C)</b>	Not available
<b>Particle Characteristics</b>	Not applicable

## Section 10. Stability and Reactivity

<b>Stability of Substance</b>	This product is stable under normal conditions.
<b>Reactivity</b>	Violent, explosive reaction when heated above 100°C in the presence of water.
<b>Conditions to Avoid</b>	Do not heat above 177°C.
<b>Incompatible Materials</b>	Product will degrade in presence of strong oxidizing and

	reducing agents, such as acids and alkalis.
<b>Hazardous Decomposition Products</b>	Normal combustion forms CO <sub>2</sub> , H <sub>2</sub> O, NO <sub>x</sub> , and SO <sub>x</sub> . Incomplete combustion may produce CO, H <sub>2</sub> S, PCA, PAH, and volatile hydrocarbon and particulate matter.

## Section 11 Toxicological Information

### Acute Effects:

<b>Swallowed</b>	Not triggered however ingestion may cause pain, nausea or gastrointestinal irritations. Ingestion of hot bitumen can cause serious burns.
<b>Dermal</b>	Not triggered.
<b>Inhalation</b>	Not triggered however inhalation of fumes, mists and aerosols may cause throat or lung irritations, nausea, headaches, or dizziness. Symptoms are usually alleviated once the affected person is removed to a well-ventilated area.
<b>Eye</b>	Not triggered however excessive exposure to fumes may cause slight to moderate eye irritation including redness, tearing, swelling and stinging. Irritation quickly subsides once removed from the fumes. Contact with hot bitumen can cause serious burns.
<b>Skin</b>	Not triggered however repeated skin contact may cause skin irritations and dermatitis. However, this is possibly caused by use of oils, soaps and detergents that are used to remove material from skin. Contact with hot bitumen can cause serious burns

### Chronic Effects:

<b>Carcinogenicity</b>	Not triggered.
<b>Reproductive Toxicity</b>	Not triggered.
<b>Germ Cell Mutagenicity</b>	Not triggered.
<b>Aspiration</b>	Not triggered.
<b>STOT/SE</b>	Not triggered.
<b>STOT/RE</b>	Not triggered.
<b>Chronic</b>	Prolonged and/or repeated skin exposure can cause drying and defatting, possibly leading to irritation and dermatitis. Possible risk of irreversible effects. Numerous studies have concluded that bitumen does not cause any increase in the occurrence of carcinogenic, mutagenic or reproductive toxicity effects in workers. Test data suggests that kerosene does not have any significant mutagenic or reproductive toxicity effects. Limited, but inconclusive data suggests that kerosene may produce some carcinogenic effects.

## Section 12. Ecotoxicological Information

May be harmful to aquatic environment when present in sufficiently large quantities.

<b>Persistence and degradability</b>	Based on its use as a road surfacing material, bitumen is expected to be highly persistent and not degradable in the environment.
<b>Bioaccumulation</b>	No data Available
<b>Mobility in Soil</b>	Insoluble in water. Semi-solid at ambient temperature.
<b>Other adverse effects</b>	No data available

## Section 13. Disposal Considerations

### Disposal Method:

Mix product with sand, soil or aggregate and allow to cure (dry). Dispose of as clean fill in accordance with local authority regulations. Do not dispose of into aquatic environments including drains, streams, rivers, lakes, ponds or the ocean. See section 6 for additional information. Packaging can often be recycled, otherwise dispose of packaging in a landfill in accordance with local authority regulations.

**Disposal methods to avoid:** None known.

#### Section 14 Transport Information

This product is **NOT** classified as a Dangerous Good for transport in NZ ; NZS 5433:2020 **when temperature is below 100°C.**

**At temperatures above 100°C** the following is applicable:

**This product is classified as a Dangerous Good for transport in NZ ; NZS 5433:2020**

#### Road, Rail, Sea and Air Transport

<b>UN No</b>	<b>3256</b>
<b>Class - Primary</b>	<b>3</b>
<b>Packing Group</b>	<b>III</b>
<b>Proper Shipping Name</b>	<b>ELEVATED TEMPERATURE LIQUID, N.O.S.</b>
<b>Marine Pollutant</b>	<b>No</b>
<b>Hazchem Code</b>	<b>2Y</b>

#### Section 15 Regulatory Information

**This substance is NOT hazardous according to the EPA Hazardous Substances (Classification) Notice 2020.**

#### Section 16 Other Information

##### Glossary

Cat	Category
EC <sub>50</sub>	Median effective concentration.
EEL	Environmental Exposure Limit.
EPA	Environmental Protection Authority
HSNO	Hazardous Substances and New Organisms.
LC <sub>50</sub>	Lethal concentration that will kill 50% of the test organisms inhaling or ingesting it.
LD <sub>50</sub>	Lethal dose to kill 50% of test animals/organisms.
LEL	Lower explosive level.
OSHA	American Occupational Safety and Health Administration.
TEL	Tolerable Exposure Limit.
TLV	Threshold Limit Value-an exposure limit set by responsible authority.
UEL	Upper Explosive Level
WES	Workplace Exposure Limit

##### References:

1. EPA Hazardous Substances (Safety Data Sheets) Notice 2017.
2. EPA Hazardous Substances (Hazard Classification) Notice 2020.
3. Workplace Exposure Standards and Biological Exposure Indices, February 2025 edition 15.
4. NIOSH Pocket Guide to Chemical Hazards, National Institute for Occupational Safety and Health (NIOSH).
5. Assigning a hazardous substance to HSNO Approval (June 2014).
6. Transport of Dangerous goods on land NZS 5433:2020.
7. HSW (Hazardous Substances) Regulations 2017.
8. CCNZ, BPG01 - Best Practice Guideline: Safe Handling of Bituminous Materials Used for Rooding.

## Disclaimer

This document has been prepared by TCC (NZ) Ltd and serves as the suppliers Safety Data Sheet ('SDS'). It is based on information concerning the product which has been provided to TCC (NZ) Ltd or obtained from third party sources and is believed to represent the current state of knowledge as to the appropriate safety and handling precautions for the product at the time of issue. Further clarification regarding any aspect of the product should be obtained directly from the manufacturer. While TCC (NZ) have taken all due care to include accurate and up-to-date information in this SDS, it does not provide any warranty as to accuracy or completeness. As far as lawfully possible, TCC (NZ) Ltd accept no liability for any loss, injury or damage (including consequential loss) which may be suffered or incurred by any person as a consequence of their reliance on the information contained in this SDS

The information herein is given in good faith, but no warranty, express or implied is made.

Please contact the New Zealand distributor, if further information is required.

Issue Date:                    8 May 2026                    Review Date:                    May 2031