AntiFlush Seal

Safety Data Sheet

AntiFlush Seal is a high-performance bitumen emulsion designed to combat flushing by sealing off water vapour venting through chip seal layers.

Section 1: Identification of the substance and supplier

Product Name	AntiFlush Seal
Product Properties	Polymer Modified Emulsion
Recommended Use	Product is predominantly used in road making
Company Details	Road Science (ABN 9429039194114)
Address	345 Matakokiri Drive, Omanawa, Tauranaga, New Zealand
Telephone Number	0800 180 200
Specified Jurisdiction	European Union
Relevant Law	Regulation (EU) 2015/830
Emergency Telephone Number	**07 575 1150 24hr / 7 days or National Poisons Centre 0800 POISON (0800 764 766)**

Section 2: Hazard identification

GHS classification of the substance/mixture: Not classified as hazardous according to the hazardous substances (Hazard Classification) Notice 2020, New Zealand. Not classified as Dangerous Goods for transport according to the New Zealand Standard NZS 5433:2020 Transport of Dangerous Goods on Land.

Other information: This product contains an ototoxic substance. Combination with noise exposure, even at safe levels, could still cause auditory injuries and hearing loss.

Section 3: Composition/information on ingredients

Chemical characterisation	Liquid	
Chemical Name	CAS No.	Proportion
Bitumen	8052-42-4	30 - 60%
Ethanol	64-17-5	1 - 5%
Amides, tall oil fatty, N-[3-(dimethylamino)propyl]	68650-79-3	0.1-<1%
Hydrochloric acid	7647-01-0	0.01-<0.1%
Ingredients determined to be non hazardous, including water		Balance

Section 4: First aid measures

Inhalation: If inhaled, remove affected person from contaminated area. Keep at rest until recovered. If symptoms develop and/or persist seek medical attention.

Ingestion: Do not induce vomiting. Wash out mouth thoroughly with water. Seek medical attention.

Skin: Wash affected area thoroughly with soap and water. If symptoms develop seek medical attention.

Eye: If in eyes, hold eyelids apart and flush eyes continuously with running water. Remove contact lenses. Continue flushing for several minutes until all contaminants are washed out completely. If symptoms develop/or persist seek medical attention.

First-aid Facilities: Eyewash and normal wash room facilities

Advice to Doctor: Treat symptomatically

Other information: For advice in an emergency, contact a Poisons Information Centre or a Doctor at once (0800 764 766)

Section 5: Fire fighting measures

Suitable Extinguishing Media: Carbon dioxide, dry chemical, foam, water mist or water spray

Hazards from Combustion Products: Under fire conditions this product may emit toxic and/or irritating fumes, smoke, and gases including carbon monoxide, carbon dioxide, and oxides of nitrogen

Specific hazards arising from the chemical: This product will burn if exposed to fire

Decomposition Temperature: N/A

Precautions in connection with fire: Fire fighters should wear self-contained breathing apparatus (SCBA) operated in positive pressure mode and full protective clothing to prevent exposure to vapours of fumes. Water spray may be used to cool down heat-exposed containers. Fight fire from safe location. This product should be prevented from entering drains and watercourses.

Section 6: Accidental release measures

Emergency Procedures: Wear appropriate personal protective equipment and clothing to prevent exposure. Extinguish or remove all sources of ignition and stop leak if safe to do so. Increase ventilation. Evacuate all unprotected personnel. If possible, contain the spill. Place inert absorbent, non-combustible material onto spillage. Use clean non-sparking tools to collect the material and place into suitable labelled containers for subsequent recycling or disposal. Disport of waste according to the applicable local and national regulations. If contamination of sewers or waterways occurs, inform the local water and waster management authorities in accordance with local regulations.

Section 7: Handling and storage

Precautions for Safe Handling: Avoid inhalation of vapours and mists, and skin or eye contact. Use only in well ventilated areas. Keep containers sealed when not in uses. Prevent build up of mists or vapours in the work atmosphere. Do not use near ignition sources. Do not pressurise, cut, heat, or weld containers as they may contain hazardous residue/

Conditions for Safe Storage: Store in a cool, dry, well-ventilated area away from sources of ignition, foodstuffs, clothing, and incompatible materials such as oxidising agents. Keep containers closed when not in uses, securely sealed and protected against physical damage. Inspect regularly for deficiencies such as damage or leaks. Have appropriate fire extinguishers available in and near the storage area. Take precautions against static electricity discharges. Use proper grounding procedures. Ensure that storage conditions comply with applicable local and national regulations.

For information on the design of the storeroom, reference should be made to Australian Standard AS1940 - The storage and handling of flammable and combustible liquids.

Section 8: Exposure controls/personal protection

Occupational Exposure Limits (OEL)	No exposure standards have been established for this material. However, the available exposure limits for ingredients are listed below.	
Ingredient	**Exposure limit**	**Notes**
Asphalt (petroleum) fumes	TWA: 0.5 mg/m^3	Skin
Ethanol	TWA: 200 ppm; 380 mg/m^3 STEL: 800 ppm; 1520 mg/m^3	Oto
Hydrogen chloride	Ceiling: 2 ppm; 2.98 mg/m^3	

Acronyms:

TWA (Time weighted average): The average airborne concentration of a particullar 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 window.

Ceiling: A concentration that should not be exceeded during any part of the working day

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

Oto: Ototoxin

Source: Workplace exposure standards and biological exposure indicies

Biological limit values	No biological limits allocated
Appropriate engineering controls	Provide sufficient ventilation to keep airborne levels below the exposure limits or as low as possible. Where vapours or mists are generated, particularly in enclosed areas, and natural ventilation is inadequate, a flame-proof exhaust ventilation system is required. Refer to relevant regulations for further information concerning ventilation requirements.
Respiratory protection	If engineering controls are not effective in controlling airborne exposure then an approved respirator with a replaceable vapour/mist filter should be used. Refer to relevant regulations for further information concerning respiratory protective requirements. Reference should be made to Australian Standards 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
Eye 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. Eye protection devices should conform to relevant regulations. Eye protection should conform with Australian / New Zealand standards AS/NZS 1337 (series) Eye Protectors for Industrial Applications.
Hand protection	Wear gloves of impervious material. Final choice of appropriate gloves will vary according to individual circumstances. i.e. methods of handling or according to risk assessments undertaken. Occupational protective gloves should conform to relevant regulations. Reference should be made to AS/NZS 2161.1 Occupational protective gloves - Selection, use and maintenance.
Thermal hazards	No further relevant information available
Body protection	Suitable protective work wear e.g. cotton overalls buttoned at neck and wrist is recommended. Chemical resistant apron is recommended with large quantities handled.

Section 9: Physical and chemical properties

Toxicology information	No toxicity data available for this material	
Ingestion	Ingestion of this product may irritate the gastric tract causing nausea and vomiting	
Inhalation	In	
Odour	No data available	
Decomposition temperature	No data available	
Freezing point	No data available	
Boiling point	100°C	
Solubility in water	Soluble	
Specific gravity	No data available	
pH	>2	
Vapour pressure	No data available	
Vapour density (Air = 1)	No data available	
Evaporation rate	No data available	
Odour threshold	No data available	
Viscosity	No data available	
Volatile component	No data available	
Partition coefficient: n-octanol/water	No data available	
Density	No data available	
Flashpoint	No data available	
Flammability	Not flammable	
Auto ignition temperature	Not self-igniting	
Flammability limits	Lower: No data available	Upper: No data available
Oxidising properties	No data available	
Particle size	No data available	

Section 10: Stability and Reactivity

Reactivity: Reacts with incompatible materials

Chemical Stability: Stable under normal conditions of storage and handling

Conditions to Avoid: Heat, open flames and other sources of ignition

Incompatible Materials: Peroxides, strong oxidising agents, strong acids, and strong bases

Hazardous Decomposition Products: Under fire conditions this product may emit toxic and/or irritating fumes, smoke, and gases including carbon monoxide, carbon dioxide, and oxides of nitrogen

Possibility of hazardous reactions: Reacts with incompatible materials

Hazardous polymerisation: Not available

Section 11: Toxicological information

Toxicology information	No toxicity data available for this material	
Ingestion	Ingestion of this product may irritate the gastric tract causing nausea and vomiting	
Inhalation	Inhalation of mists or vapours may irritate the respiratory system	
Skin	May be irritating to skin. The symptoms may include redness, itching, swelling	
Eye	May be irritating to eyes. The symptoms may include redness, itching, and tearing	
Respiratory sensitisation	Not expected to be a respiratory sensitiser	
Skin sensitisation	Not expected to be a skin sensitiser	
Germ cell mutagenicity	Not considered to be a mutagenic hazard	
Carcinogenicity	Not considered to be a carcinogenic hazard. Bitumens, occupational exposure to hard bitumens and their emissions during mastic asphalt work and bitumens, occupational exposure to straight-run bitumens and their emissions during road paving are listed as a Group 2B: Possibly carcinogenic to humans according to International Agency for Research on Cancer (IARC). Hydrochloric acidis listed as a Group 3: Not classifiable as a carcinogenicity to humans according to International Agency for Research on Cancer (IARC)	
Reproductive toxicity	Not considered to be toxic to reproduction	
STOT	Single exposure: Not expected to cause toxicity to a specific target organ	Repeated exposure: Not expected to cause toxicity to a specific target organ
Aspiration hazard	Not expected to be an aspiration hazard	

Section 12: Ecological information

Ecotoxicity: No ecological data available for this material

Persistence and degradability: Not available

Mobility: Not available

Bioaccumulated potential: Not available

Other adverse effects: Not available

Environmental protection: Prevent this material from entering waterways, drains, and sewers

Persistence and degradability: Not available

Hazardous to the ozone layer: This product is not expected to deplete the ozone layer

Section 13: Disposal considerations

Product disposal: This product can be disposed through a licensed commercial waste collection service. This product is non-hazardous and therefore the New Zealand HSNO regulations disposal do not apply, however other regulations may apply.

This product is a non-hazardous, combustible substance; It should be recycled whenever possible of sent to an approved high temperature incineration plant for disposal.

Container disposal: The product is non-hazardous, therefore, the packaging may be re0used or recycled if it has been treated to remove any residual contents of the substance. Any wash-off water from the container cleaning process should be sent to a suitable waste water treatment plant before discharge into the environment.

In New Zealand, the packaging (that may or may not contain any residual substance) that is lawfully disposed of by householders or other consumers through public or commercial waste collection service is a means of compliance with regulations

Section 14: Transport information

Transport information	Road and rail transport: Not classified as dangerous goods for transport according to the New Zealand Standard NZS 5433:2020 Transport of Dangerous Goods on Land	Marine transport (IMO/IMDG): Not classified as dangerous goods by the criteria of the International Maritime Dangerous Goods Code (IMDG Code) for transport by sea	Air transport: Not classified as dangerous goods by criteria of the International Air Transport Association (IATA) Dangerous Good Regulations for transport by air
UN Number	None allocated		
Proper shipping name	None allocated		
Hazard class (es)	None allocated		
Special precautions for user	Not available		
IMDG marine pollutant	No.		
Transport in bulk	Not available		

Section 15: Regulatory information

Regulatory information	Not classified as hazardous according to the Hazardous Substances (Hazard Classification) Notice 2020, New Zealand.
Tolerable exposure limit (TEL)	Not available.
Environmental exposure limit (EEL)	Not available.
Certified handler	Not available.
Tracking	Not available.
Controlled substance licence requirements	Not available.
Montreal protocol	Not listed.
Stockholm convention	Not listed.
Rotterdam convention	Not listed.
Agricultural compounds, including veterinary medicines (ACVM)	Not available.

Section 16: Other information

Revision Indicator:	Issued: 20 July 2023 Revised: 1 October 2025
SDS Regulation:	The content and format of this SDS is in accordance with HSNO Approved Code of Practice (No. HSNO CoP 8-1 09-06): Preparation of Safety Data Sheets.
Uses and Restrictions:	This product must not be used in applications other than those recommended in Section 1, without first seeking the advice of the supplier.
SDS Distribution:	The information in this document should be made available to all who may handle the product.

Literature references:

Hazardous Substances and New Organisms Act (1996).

Health and Safety at Work (Hazardous Substances) Regulations (2017).

Workplace Exposure Standards and Biological Exposure Indices.
Agriculture Compounds and Veterinary Medicines Act (1997).
Montreal Protocol on Substances that Deplete the Ozone Layer.

Stockholm Convention on Persistent Organic Pollutants (POPs).
Rotterdam Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade.

Transport of Dangerous Goods on Land NZS 5433.
Recommendations on the Transport of Dangerous Goods - Model Regulations. Dangerous Goods Emergency Action Code List.

Hazardous Substances (Safety Data Sheets) Notice (2017).
Assigning a hazardous substance to a group standard.

Adopted biological exposure determinants,

American Conference of Industrial Hygienists (ACGIH).

Need more information? At Road Science, we're committed to providing innovative solutions backed by engineering expertise. If you have any questions about this product, need technical guidance, or want to discuss how it fits your specific project needs, our team is here to help. Contact us today for expert advice and tailored support. Contact us via **0800 180 200** or visit our website at **roadscience.co.nz** to learn more.