

BIOSYMPH LIMITED

MATERIAL SAFETY DATA SHEET

Section 1. Identification of the material and the supplier

Product: Asphalt Renew
 Product Code: AR - xx
 Product Use: Coating for Asphalt, concrete and cement surfaces
 New Zealand Supplier: Biosymph Limited
 Address: 2287 Kakaramea Road
 RD10 Whatawhata 3290
 Hamilton
 Telephone: +64 (0)7 829 8606 or +64 (0)22 607 6400 (mob)
 eMail: admin@biosymph.co.nz

Emergency Telephone: 0800 POISON [0800 76 47 66] (National Poisons Centre)

Date of MSDS Revision: 10 July 2020 version 2

Section 2. Hazards Identification

This product is classified as hazardous according to Schedules 1 to 6 of the Hazardous Substances (Minimum Degrees of Hazard) Regulations 2001 of the HSNO Act, 1996.

ERMA Approval Code: Surface Coatings and Colourants (flammable) HSR002662

Pictograms



WARNING

ECOTOXIC

HSNO Classification	Hazard Code	Hazard Statement
3.1C	H226	Flammable liquid and vapour
6.1E	H333	May be harmful if inhaled
6.3B	H316	Causes mild skin irritation
9.1B	H411	Toxic to aquatic life with long lasting effects

Prevention Code	Prevention Statement
P102	Keep out of reach of children
P103	Read label or visit our website www.biosymph.co.nz before use
P202	Do not handle until all safety precautions have been read and understood
P210	Keep away from heat and flames
P233	Keep container tightly closed
P240	Ground container and receiving equipment
P241	Use explosion-proof electrical lighting
P242	Use only non-sparking tools
P243	Take precautionary measures against static discharge
P260	Do not breathe vapours
P273	Avoid release to the aquatic environment
P280	Wear protective gloves / eye protection

Response Code	Response Statement
P303+361+353	IF ON SKIN (or hair): Remove immediately all contaminated clothing. Rinse skin with water
P370+378	In case of fire: Use foam, CO2 or dry powder
P304+312	IF INHALED: Call the POISON CENTRE or a doctor
P301+310+P331	IF SWALLOWED: Immediately call a POISON CENTRE or doctor Do NOT induce vomiting
P332+P313	If skin irritation occurs: get medical advice
P391	Collect spillage
P101	If medical advice is needed, have product container or label at hand.
P314	Get medical advice if you feel unwell.
P308+P313	IF exposed or concerned: Get medical advice

Storage Code	Storage Statement
P403+P233+P235	Store in a well-ventilated place. Keep container tightly closed. Keep cool.
P405	Store locked up

Disposal Code	Disposal Statement
P501	Crush or puncture container to prevent further use if not recycled. Dispose of at an approved waste disposal site, in accordance with Regional Authority or local council regulations.

Section 3. Composition / Information on Ingredients

Ingredients	Wt%	CAS NUMBER.
Mixed petroleum solvents	40-60	Not available
Drying Oils	5-10	Not available
Cut-back bitumen	18-20	8052-42-4

Section 4. First Aid Measures

For advice, contact National Poisons Centre (0800 POISON; 0800 764 766) or a doctor.
Have product container or label available

Recommended on site emergency facilities: Eye wash station

Routes of Exposure:

If in Eyes	Remove excess contamination around eyes with olive oil. Wash eyes with a gentle stream of water to dislodge solid particles. Seek medical attention.
If on Skin	Remove contaminated clothing. Physically scrape off excess and use olive oil to dissolve residues. Finally wash skin or hair with soap and water.
If Swallowed	DO NOT INDUCE VOMITING. Seek immediate medical attention.
If Inhaled	Remove patient from contaminated area to fresh air. If patient does not recover normal breathing and is distressed, seek medical advice.

Section 5.	Fire Fighting Measures
-------------------	-------------------------------

Hazard Type	Flammable liquid
Hazards from decomposition products	Carbon dioxide, nitrogen oxides, unburnt hydrocarbons
Suitable Extinguishing media	Carbon dioxide, dry chemical or foam
Precautions for firefighters and special protective clothing	Product will float on water. Prevent run-off to waterways.
HAZCHEM CODE	3Y

Section 6.	Accidental Release Measures
-------------------	------------------------------------

Land Spill or Leaks

Small leaks or spills may be mixed with dry zeolite absorbent (kitty litter), sand or soil and swept up for domestic rubbish disposal.
 For large spills, evacuate all unnecessary personnel and eliminate any sources of ignition.
 Use non-sparking equipment to dyke the spill with appropriate spill media (zomite, sand or soil) and shovel into recovery drums.
 If the spill enters any waterway, sewer or stormwater, notify the Environmental Response unit at the nearest council offices.

Section 7.	Handling and Storage
-------------------	-----------------------------

Approved Handlers: Not required.

Precautions for safe handling: Open containers cautiously as they may be under pressure. DO NOT store in confined spaces.
 Build-up of vapours must be prevented. Avoid inhalation.
 Do not use near welding or other sources of ignition.

Conditions for safe storage: Store in a cool, dry, well-ventilated area away from food, animal feedstuffs, strong acids, alkalis and oxidizers. Protect from physical damage.
 Regularly inspect bulk containers for leaks or cracks.
 Ensure fire extinguishers are properly located and serviced.
 See NZ EPA "Site Storage Conditions for Class 3.1 flammable liquids"

Section 8	Exposure Controls / Personal Protection
------------------	--

WORKPLACE EXPOSURE STANDARDS (provided for guidance only)

Substance	CAS #	TWA ppm	mg/m ³	STEL ppm	mg/m ³
Asphalt			5		

Workplace Exposure Standard – Time Weighted Average (WES-TWA). *The time-weighted average exposure standard designed to protect the worker from the effects of long-term exposure.* Workplace Exposure Standard – Short-Term Exposure Limit (WESSTEL). *The 15-minute 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.*

Engineering Controls: Always provide good ventilation to keep vapours below the lower explosion limit

Personal Protective Equipment: Always wear suitable protective gloves (nitrile) and eye protection. In confined spaces, an organic vapour respiratory cartridge mask must be used.

General: When large quantities are used, a plastic apron and rubber boots are recommended.

Section 9 Physical and Chemical Properties

Physical State:	black liquid
Odour:	petroleum bitumen odour
pH:	not applicable
Solubility:	soluble in organic solvents; insoluble in water
Relative Vapour Density (air=1):	not available
Boiling point:	initial 110°C
Ignition Point:	not available
Flash Point:	approx. 30-40°C
Specific Gravity:	less than 1.0
Vapour Pressure:	2.25 kPa
% Volatiles:	70%
Evaporation Rate:	not available

Section 10. Stability and Reactivity

Chemical Stability	Stable under normal conditions. Does not polymerise
Conditions to Avoid	Heat, direct sunlight, open flames
Incompatibility	Strong oxidizers, acids, alkalis
Hazardous Decomposition Products	Fumes of nitrogen, carbon oxides and acrid unburnt hydrocarbons

Section 11 Toxicological Information

Acute Oral Toxicity	LD₅₀ Rat (oral) 2000-5000 mg / kg bw
Acute Dermal Toxicity	LD₅₀ Rat (dermal) 2000-5000 mg / kg bw
Chronic Effects	Inhalation of vapours will irritate respiratory system. Prolonged skin exposure will cause redness followed by dermatitis

Section 12. Ecotoxicological Information

HSNO Classifications:	Class 9.1B harmful to aquatic organisms
Environmental Precautions:	Prevent from entering waterways or contaminating groundwater
Ecotoxicity Data:	Not available
Environmental Fate:	Persistent and non-biodegradable
Environmental Exposure Limits:	Not set

Section 13. Disposal Considerations

Disposal Methods:

Care should be taken to ensure compliance with national, regional and local authority regulations. Packaging may still contain fumes and vapours that are flammable. Ensure that empty packaging is allowed to dry. If not recycled, puncture and crush before disposal to landfill. Do not use containers for storing other products.

Dispose of in approved hazardous landfills or by incineration.

Section 14 Transport Information

Classified as a Dangerous Good for transport.

Road and Rail Transport:

UN No.	1993
Proper Shipping Name	Flammable liquid N.O.S (bitumen paint)
Class-primary	3
PG	III
Hazchem code	3Y

Marine Transport

UN No.	1993
Proper Shipping Name	Flammable liquid N.O.S (bitumen paint)
Class-primary	3
PG	III

Air Transport

UN No.	1993
Proper Shipping Name	Flammable liquid N.O.S (bitumen paint)
Class-primary	3
PG	III



Section 15 Regulatory Information

ERMA Approval Code:	HSR002662
HSNO Controls:	
Tracking:	Not required
Approved Handlers:	Not required
Location Test Certificate:	500 L in containers \geq 5L; 1500 L in containers $<$ 5L; 250 L open
Hazchem signage:	1000 L
Emergency Response Plan:	10,000 L

Section 16 Other Information

1. This product may not be used as a marine anti-fouling paint, for pruning wounds on trees or shrubs or in the commercial treatment of timber.
2. Hazardous Substances Data Bank (HSDB), a database of the National Library of Medicine's TOXNET system (<http://toxnet.nlm.nih.gov>).
3. HSNO Approved Code of Practice: Preparation of Safety Data Sheets, September 2006.

Abbreviations:

CAS No	Chemical Abstracts Number
EPA	Environmental Protection Authority
HSNO	Hazardous Substances and New Organisms
NZIoC	New Zealand Inventory of Chemicals
STEL	Short Term Exposure Limit
TWA	Time Weighted Average
WES	Workplace Exposure Standard

References:

Supplier Material Safety Data Sheets

EPA website: www.epa.govt.nz

Hazardous Substances Data Bank (HSDB), a database of the National Library of Medicine's TOXNET system (<http://toxnet.nlm.nih.gov>).

Disclaimer:

This document has been compiled by Biosymph Limited and serves as the manufacturer's Material Safety Data Sheet ('MSDS'). It is based on information concerning the product which has been provided 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. The information sourced for the preparation of this document was correct and complete at the time of writing to the best of the writer's knowledge. The document represents the commitment to the company's responsibilities surrounding the supply of this product, undertaken in good faith. While Biosymph Ltd has taken all due care to include accurate and up-to-date information in this MSDS, it does not provide any warranty as to accuracy or completeness. As far as lawfully possible, Biosymph Ltd accepts 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 MSDS. The information herein is given in good faith, but no warranty, express or implied is made.

This document should be taken as a safety guide for the product and its recommended uses, but is in no way an absolute authority.

Please consult the relevant legislation and regulations governing the use and storage of this type of product.

For further information, please contact Biosymph Ltd.

Issue Date: 14 March 2018

Review Date: 14 March 2023

END OF MATERIAL SAFETY DATA SHEET