

SAFETY DATA SHEET



Revision date: 15-Aug-2022

Revision Number 1

1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Product identifier

Product Name BITULASTIC BITUBIND

Product Code(s) 000000054318

Other means of identification

UN number 1999

Synonyms MANUFACTURER'S PRODUCT CODE: 220-2160

Pure substance/mixture Mixture

Recommended use of the chemical and restrictions on use

Recommended use Bitumen pavement rejuvenation.

Uses advised against No information available.

Supplier

Bituminous Products Pty Ltd
ABN No: 19 106 887 094
33 Violet Street
REVESBY NSW 2212

Business Phone: 02 9772 4433
Facsimile: 02 9792 1016

Emergency telephone number

Emergency telephone number **1 800 033 111 (ALL HOURS)**

Please ensure you refer to the limitations of this Safety Data Sheet as set out in the "Other Information" section at the end of this Data Sheet.

2. HAZARDS IDENTIFICATION

GHS Classification

Classified as dangerous goods in accordance with the Australian Code for the Transport of Dangerous Goods by Road and Rail (ADG).

Classified as a hazardous chemical in accordance with the criteria of Safe Work Australia - Globally Harmonized System (GHS).

Flammable liquids	Category 3
Aspiration hazard	Category 1
Skin corrosion/irritation	Category 2
Specific target organ toxicity (single exposure)	Category 3

SIGNAL WORD

Danger

Label elementsFlame
Health hazard
Exclamation mark**Hazard statements**H226 - Flammable liquid and vapor
H304 - May be fatal if swallowed and enters airways
H315 - Causes skin irritation
H335 - May cause respiratory irritation**Precautionary Statements - Prevention**Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking
Keep container tightly closed
Ground/bond container and receiving equipment
Use only non-sparking tools
Take precautionary measures against static discharge
Use explosion-proof electrical, ventilating, lighting equipment
Avoid breathing dust / fume / gas / mist / vapours / spray
Wash hands and face thoroughly after handling
Use only outdoors or in a well-ventilated area
Wear protective gloves / protective clothing / eye protection / face protection**Precautionary Statements - Response**Specific treatment (see First aid on this SDS)
IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower
Take off contaminated clothing and wash before reuse
IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
Call a POISON CENTER or doctor/physician if you feel unwell
Do NOT induce vomiting
IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician
In case of fire: Use CO₂, dry chemical, or foam for extinction**Precautionary Statements - Storage**Store locked up
Store in a well-ventilated place. Keep container tightly closed**Precautionary Statements - Disposal**

Dispose of contents/container in accordance with local, regional, national, and international regulations as applicable

Other hazards which do not result in classification

AUH066 - Repeated exposure may cause skin dryness or cracking

General Hazards**Poisons Schedule (SUSMP)** 6**3. COMPOSITION/INFORMATION ON INGREDIENTS****Mixture**

Chemical name	CAS No.	Weight-%
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Xylene	1330-20-7	60--80
Other component(s)	-	to 100

4. FIRST AID MEASURES

Description of first aid measures

General advice	For advice, contact a Poisons Information Centre (e.g. phone Australia 13 11 26; New Zealand 0800 764 766) or a doctor. Show this safety data sheet to the doctor in attendance.
Inhalation	Remove to fresh air. If breathing is difficult, (trained personnel should) give oxygen. If breathing has stopped, give artificial respiration. Get medical attention immediately.
Eye contact	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get medical attention if symptoms occur.
Skin contact	Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Call a physician if symptoms occur.
Ingestion	Clean mouth with water. Drink 1 or 2 glasses of water. Do NOT induce vomiting. Get medical attention if symptoms occur.
Self-protection of the first aider	Remove all sources of ignition. Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination. Use personal protective equipment as required. See section 8 for more information.

Most important symptoms and effects, both acute and delayed

Symptoms	Erythema (skin redness). Coughing and/ or wheezing. Difficulty in breathing. Aspiration risk: may cause lung damage if swallowed.
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Indication of any immediate medical attention and special treatment needed

Note to physicians	Treat symptomatically. Product may be removed from skin using cotton wool pads soaked in castor oil or hand cleaner. Delayed pulmonary edema may occur.
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5. FIRE FIGHTING MEASURES

Suitable Extinguishing Media

Suitable Extinguishing Media	Alcohol resistant foam is the preferred firefighting medium but, if it is not available, normal protein foam can be used.
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Unsuitable extinguishing media	Do not use a solid water stream as it may scatter and spread fire.
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Specific hazards arising from the chemical

Specific hazards arising from the chemical	Flammable. Risk of ignition. Keep product and empty container away from heat and sources of ignition. Most vapors are heavier than air. Vapors may spread along ground and collect in low or confined areas (sewers, basements, tanks). Pay attention to flashback. Flash back possible over considerable distance. Vapors can form explosive mixtures with air.
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Hazardous combustion products	Carbon monoxide. Carbon dioxide (CO ₂).
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Special protective actions for fire-fighters

Special protective equipment for	Firefighters should wear self-contained breathing apparatus and full firefighting turnout
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fire-fighters gear. Use personal protection equipment.

Hazchem code 2W

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal precautions Evacuate personnel to safe areas. Avoid contact with skin, eyes, and clothing. Ensure adequate ventilation. Keep people away from and upwind of spill/leak. Do not touch or walk through spilled material. ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Pay attention to flashback. Take precautionary measures against static discharges. Use personal protective equipment as required. Wash thoroughly after handling. See section 8 for more information.

Other information Ventilate the area.

For emergency responders Use personal protection recommended in Section 8.

Environmental precautions

Environmental precautions Prevent further leakage or spillage if safe to do so. Prevent product from entering drains. Refer to protective measures listed in Sections 7 and 8.

Methods and material for containment and cleaning up

Methods for containment Stop leak if you can do it without risk. Do not touch or walk through spilled material. Dike far ahead of spill to collect runoff water. Keep out of drains, sewers, ditches and waterways. Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal.

Methods for cleaning up Take precautionary measures against static discharges. Dam up. Soak up with inert absorbent material. Pick up and transfer to properly labelled containers. Use non-sparking tools.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on safe handling Avoid contact with skin and eyes. Avoid breathing vapors or mists. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Use grounding and bonding connection when transferring this material to prevent static discharge, fire or explosion. Use spark-proof tools and explosion-proof equipment. Use personal protection equipment. Ensure adequate ventilation. Do not use pressure to empty drums.

General hygiene considerations Regular cleaning of equipment, work area and clothing is recommended. Wash hands before breaks and immediately after handling the product.

Conditions for safe storage, including any incompatibilities

Storage Conditions Keep containers tightly closed in a dry, cool and well-ventilated place. Keep away from heat, sparks, flame and other sources of ignition (i.e., pilot lights, electric motors and static electricity). Store away from foodstuffs. Keep container closed when not in use.

This material is a Scheduled Poison and must be stored, maintained and used in accordance with the relevant regulations.

Incompatible materials Oxidizing agents.

Poisons Schedule (SUSMP)

6

8. EXPOSURE CONTROLS/PERSONAL PROTECTION**Control parameters****Exposure Limits**

No value assigned for this specific material by Safe Work Australia. However, Workplace Exposure Standard(s) for constituent(s):

Xylene (o-, m-, p- isomers): 8hr TWA = 350 mg/m³ (80 ppm), 15 min STEL = 655 mg/m³ (150 ppm)

Ethyl benzene: 8hr TWA = 434 mg/m³ (100 ppm), 15 min STEL = 543 mg/m³ (125 ppm)

As published by Safe Work Australia Workplace Exposure Standards for Airborne Contaminants.

TWA - The time-weighted average airborne concentration of a particular substance when calculated over an eight-hour working day, for a five-day working week.

STEL (Short Term Exposure Limit) - the airborne concentration of a particular substance calculated as a time-weighted average over 15 minutes, which should not be exceeded at any time during a normal eight hour work day. According to current knowledge this concentration should neither impair the health of, nor cause undue discomfort to, nearly all workers.

These Workplace Exposure Standards are guides to be used in the control of occupational health hazards. All atmospheric contamination should be kept to as low a level as is workable. These workplace exposure standards should not be used as fine dividing lines between safe and dangerous concentrations of chemicals. They are not a measure of relative toxicity.

Appropriate engineering controls**Engineering controls**

Apply technical measures to comply with the occupational exposure limits. Ensure adequate ventilation, especially in confined areas.

If in the handling and application of this material, safe exposure levels could be exceeded, the use of engineering controls such as local exhaust ventilation must be considered and the results documented. If achieving safe exposure levels does not require engineering controls, then a detailed and documented risk assessment using the relevant Personal Protective Equipment (PPE) (refer to PPE section below) as a basis must be carried out to determine the minimum PPE requirements.

Individual protection measures, such as personal protective equipment

The selection of PPE is dependent on a detailed risk assessment. The risk assessment should consider the work situation, the physical form of the chemical, the handling methods, and environmental factors.

OVERALLS, SAFETY SHOES, SAFETY GLASSES, GLOVES, RESPIRATOR.

**Eye/face protection**

Glasses.

Skin and body protection

Wear suitable protective clothing. Overalls. Antistatic boots.

Hand protection

Impervious gloves.

Respiratory protection	If determined by a risk assessment an inhalation risk exists, wear an organic vapour respirator meeting the requirements of AS/NZS 1715 and AS/NZS 1716.
Environmental exposure controls	No information available.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state	Liquid
Appearance	Paint
Color	Black
Odor	Hydrocarbon Characteristic
Odor threshold	No information available.

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
pH	No data available	None known
pH (as aqueous solution)	No data available	None known
Melting point / freezing point	No data available	None known
Boiling point / boiling range	>149°C	None known
Flash point	26°C	CC (closed cup)
Evaporation rate	No data available	None known
Flammability (solid, gas)	No data available	None known
Flammability Limit in Air		None known
Upper flammability or explosive limits	7% volume	
Lower flammability or explosive limits	1% volume	
Vapor pressure	<3.3 kPa	None known
Vapor density	No data available	None known
Relative density	0.91 @25°C	None known
Water solubility	Immiscible in water	None known
Solubility(ies)	No data available	None known
Partition coefficient	No data available	None known
Autoignition temperature	250°C	None known
Decomposition temperature	No data available	None known
Kinematic viscosity	No data available	None known
Dynamic viscosity	No data available	None known

Other information

10. STABILITY AND REACTIVITY

Reactivity

Reactivity	Reacts with strong oxidising agents.
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Chemical stability

Stability	Stable under normal conditions.
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Explosion data

Sensitivity to mechanical impact None.

Sensitivity to static discharge Yes.

Possibility of hazardous reactions

Possibility of hazardous reactions None under normal processing.

Conditions to avoid

Conditions to avoid Heat, flames and sparks. Static discharge (electrostatic discharge).

Incompatible materials

Incompatible materials Oxidizing agents.

Hazardous decomposition products

Hazardous decomposition products Carbon monoxide. Carbon dioxide (CO₂).

11. TOXICOLOGICAL INFORMATION

Acute toxicity

Information on likely routes of exposure

Product Information No adverse health effects expected if the chemical is handled in accordance with this Safety Data Sheet and the chemical label. Symptoms or effects that may arise if the chemical is mishandled and overexposure occurs are:

Inhalation Irritating to respiratory system. May cause central nervous system depression with nausea, headache, dizziness, vomiting, and incoordination. Aspiration into lungs can produce severe lung damage.

Eye contact May cause irritation.

Skin contact May cause irritation. Repeated exposure may cause skin dryness or cracking.

Ingestion Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhoea. Aspiration may cause pulmonary edema and pneumonitis.

Symptoms Erythema (skin redness). Coughing and/ or wheezing. Difficulty in breathing. Aspiration risk: may cause lung damage if swallowed.

Numerical measures of toxicity - Product Information

Refer to component information below.

Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Xylene	= 3500 mg/kg (Rat)	> 4350 mg/kg (Rabbit) > 1700 mg/kg (Rabbit)	= 5000 ppm (Rat) 4 h = 29.08 mg/L (Rat) 4 h

See section 16 for terms and abbreviations

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Skin corrosion/irritation Causes skin irritation. Classification is based on mixture calculation methods based on component data.

Serious eye damage/eye irritation No information available.

Respiratory or skin sensitization No information available.

Germ cell mutagenicity No information available.

Carcinogenicity	Refer to 'Chronic effects' section below.
Reproductive toxicity	No information available.
STOT - single exposure	May cause respiratory irritation. Classification is based on mixture calculation methods based on component data.
STOT - repeated exposure	No information available.
Aspiration hazard	May be fatal if swallowed and enters airways. Classification is based on mixture calculation methods based on component data.
Chronic effects:	Xylene has been classified by the International Agency for Research on Cancer (IARC) as a Group 3 agent. Group 3 - The agent is not classifiable as to its carcinogenicity to humans. Mixed xylenes contain ethylbenzene, which has been classified by the International Agency for Research on Cancer (IARC) as a Group 2B agent. Group 2B - The agent is possibly carcinogenic to humans.

12. ECOLOGICAL INFORMATION

Ecotoxicity

Ecotoxicity Keep out of waterways.

Chemical name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
Xylene	-	LC50: =13.4mg/L (96h, Pimephales promelas) LC50: 2.661 - 4.093mg/L (96h, Oncorhynchus mykiss) LC50: >780mg/L (96h, Cyprinus carpio) LC50: 30.26 - 40.75mg/L (96h, Poecilia reticulata) LC50: 13.5 - 17.3mg/L (96h, Oncorhynchus mykiss) LC50: 13.1 - 16.5mg/L (96h, Lepomis macrochirus) LC50: =19mg/L (96h, Lepomis macrochirus) LC50: 7.711 - 9.591mg/L (96h, Lepomis macrochirus) LC50: 23.53 - 29.97mg/L (96h, Pimephales promelas) LC50: =780mg/L (96h, Cyprinus carpio)	-	EC50: =3.82mg/L (48h, water flea) LC50: =0.6mg/L (48h, Gammarus lacustris)

Persistence and degradability

Persistence and degradability No information available.

Bioaccumulative potential

Bioaccumulation No information available.

Component Information

Chemical name	Partition coefficient
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Xylene	2.77 - 3.15
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Mobility**Mobility in soil**

Mobility No information available.

Other adverse effects**13. DISPOSAL CONSIDERATIONS****Waste treatment methods**

Waste from residues/unused products Should not be released into the environment. Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation.

Contaminated packaging Empty containers pose a potential fire and explosion hazard. Do not cut, puncture or weld containers. Empty containers should be taken to an approved waste handling site for recycling or disposal.

14. TRANSPORT INFORMATION**ADG**

Classified as Dangerous Goods by the criteria of the Australian Dangerous Goods Code (ADG Code) for Transport by Road and Rail; DANGEROUS GOODS.

UN number	1999
Proper shipping name	TARS, LIQUID
Hazard class	3
Packing group	III
Hazchem code	2W

IATA

Classified as Dangerous Goods by the criteria of the International Air Transport Association (IATA) Dangerous Goods Regulations for transport by air; DANGEROUS GOODS.

UN number	1999
UN proper shipping name	TARS, LIQUID
Transport hazard class(es)	3
Packing group	III

IMDG

Classified as Dangerous Goods by the criteria of the International Maritime Dangerous Goods Code (IMDG Code) for transport by sea; DANGEROUS GOODS.

UN number	1999
UN proper shipping name	TARS, LIQUID
Transport hazard class(es)	3
Packing group	III
Marine pollutant	No

15. REGULATORY INFORMATION**Safety, health and environmental regulations/legislation specific for the substance or mixture****National regulations**

Australia

Classified as dangerous goods in accordance with the Australian Code for the Transport of Dangerous Goods by Road and Rail (ADG).

Classified as a hazardous chemical in accordance with the criteria of Safe Work Australia - Globally Harmonized System (GHS).

See section 8 for national exposure control parameters

Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP)

Classified as a scheduled poison according to the Standard for Uniform Scheduling of Medicines and Poisons (SUSMP)

Poisons Schedule (SUSMP) 6

Major hazard (accident/incident planning) regulation

Verify that license requirements are met

Hazardous chemical

Threshold quantity (T)

Liquids that meet the criteria for Class 3 Packing Group II or III

50 000

National pollutant inventory

Subject to reporting requirement

Chemical name	National pollutant inventory
Xylene - 1330-20-7	10 tonne/yr Threshold category 1 including individual or mixed isomers

International Inventories

AIIC

All the constituents of this material are listed on the Australian Inventory of Industrial Chemicals.

Legend:

AIIC - Australian Inventory of Industrial Chemicals

International Regulations

The Montreal Protocol on Substances that Deplete the Ozone Layer Not applicable

The Stockholm Convention on Persistent Organic Pollutants Not applicable

The Rotterdam Convention Not applicable

16. OTHER INFORMATION

Supplier Safety Data Sheet 02/ 2018

Reason(s) For Issue: First Issue Primary SDS

Issuing Date: 15-Aug-2022

This Safety Data Sheet has been prepared by Ixom Operations Pty Ltd (Toxicology and SDS Services).

Revision Note:

The symbol (*) in the margin of this SDS indicates that this line has been revised.

Key or legend to abbreviations and acronyms used in the safety data sheet

Legend Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

TWA	TWA (time-weighted average)	STEL	STEL (Short Term Exposure Limit)
Ceiling	Maximum limit value	*	Skin designation

C Carcinogen

Key literature references and sources for data used to compile the SDS

EPA (Environmental Protection Agency)
Acute Exposure Guideline Level(s) (AEGl(s))
U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act
U.S. Environmental Protection Agency High Production Volume Chemicals
Food Research Journal
Hazardous Substance Database
International Uniform Chemical Information Database (IUCLID)
Japan GHS Classification
Australian Industrial Chemicals Introduction Scheme (AICIS)
NIOSH (National Institute for Occupational Safety and Health)
National Library of Medicine's ChemID Plus (NLM CIP)
National Library of Medicine's PubMed database (NLM PUBMED)
National Toxicology Program (NTP)
New Zealand's Chemical Classification and Information Database (CCID)
Organization for Economic Co-operation and Development Environment, Health, and Safety Publications
Organization for Economic Co-operation and Development High Production Volume Chemicals Program
Organization for Economic Co-operation and Development Screening Information Data Set
RTECS (Registry of Toxic Effects of Chemical Substances)
World Health Organization

Disclaimer

This Safety Data Sheet has been compiled in accordance with GHS Guidance for the preparation of Safety Data Sheets and COP Preparation of SDS for Hazardous Chemicals Safe Work Australia.

Where applicable, specific chemical composition details are provided to allow the product to be classified according to UN Number, HAZCHEM coding etc. The information contained herein is based on the data available to BITUMINOUS PRODUCTS PTY LTD from both our suppliers and technical sources and from recognized published references and is believed to be both accurate and reliable. BITUMINOUS PRODUCTS PTY LTD has made no effort to censor or to conceal deleterious aspects of this product. Since we cannot anticipate or control the many different conditions under which this information and our products may be used, each user should review these recommendations in the specific context of the intended application and confirm whether they are appropriate.

Due care should be taken to make sure that the use or disposal of the product is in compliance with the appropriate Federal, State, and Local Government regulations.

End of Safety Data Sheet