SAFETY DATA SHEET

Revision date: 01-Aug-2024

Revision Number 1

Section 1: Identification

Product identifier

Product Name A15E + SASOBIT

Product Code(s) 000000054354

Other means of identification

UN number or ID number 3257

Synonyms 220-252406; A20E + Sasobit; 220-252012; A20E + Wax; 220-252030.

Pure substance/mixture Mixture

Recommended use of the chemical and restrictions on use

Recommended use Polymer-modified bitumen binder.

Uses advised against No information available.

Details of manufacturer or importer

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.

Section 2: Hazard identification

Classified as a hazardous substance in accordance with the criteria of Safe Work Australia - Globally Harmonized System (GHS). Not classified as Dangerous Goods by the criteria of the Australian Dangerous Goods Code (ADG Code) for transport by Road and Rail; NON-DANGEROUS GOODS.

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

GHS Classification

Skin corrosion/irritation	Category 2
Carcinogenicity	Category 1B
Reproductive toxicity	Category 2

Label elements

Signal word
DANGER

Hazard statements
H315 - Causes skin irritation
H350 - May cause cancer
H361d - Suspected of damaging the unborn child

H314 - Causes severe skin burns and eye damage

Precautionary Statements - Prevention
Obtain special instructions before use.
Do not handle until all safety precautions have been read and understood.
Do not breathe dust/fume/gas/mist/vapors/spray.
Wash hands thoroughly after handling.
Wear protective gloves/clothing and eye/face protection.
Use personal protective equipment as required.
Precautionary Statements - Response
IF exposed or concerned: Get medical advice/attention.
Specific treatment (see First aid on this SDS).
IF ON SKIN: Wash with plenty of water and soap.
If skin irritation occurs: Get medical advice/attention.
Take off contaminated clothing and wash before reuse.
IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
Immediately call a POISON CENTER or doctor/physician.
IF INHALED: Remove person to fresh air and keep comfortable for breathing.
Immediately call a POISON CENTER or doctor/physician.
IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
Precautionary Statements - Storage
Store locked up.
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
Repeated exposure may cause skin dryness or cracking.
Elevated temperature liquid at or above 100°C.

Section 3: Composition and information on ingredients

Chemical name	CAS No.	Weight-%
Asphalt (Bitumen)	8052-42-4	90-<98
Styrene, 1,3-butadiene polymer	9003-55-8	2-<10
Distillates, petroleum, hydrotreated heavy naphthenic	64742-52-5	2-<10
Residues, petroleum, vacuum	64741-56-6	2-<10
Lubricating oils (petroleum), hydrotreated, used	64742-58-1	2-<10
Other non-hazardous components	-	to 100

Section 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. Contact with molten materials requires immediate medical assistance.

Skin contact Contact with product at elevated temperatures can result in thermal burns. If spilt on large areas of skin or hair, immediately drench with running water and continue to wash skin and hair with plenty of water. Rinse immediately with plenty of water and seek medical advice.

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 Irritation/Corrosion. Erythema (skin redness). Contact with hot material can cause thermal burns. May cause blindness. Inhalation of high vapor concentrations may cause symptoms like headache, dizziness, tiredness, nausea and vomiting.

Effects of Exposure No information available.

Indication of any immediate medical attention and special treatment needed

Note to physicians Treat symptomatically. Molten product should only be removed by a burns specialist.

Section 5: Firefighting measures

Suitable Extinguishing Media

Suitable extinguishing media Dry chemical, CO2, water spray or regular foam.

Unsuitable extinguishing media Do not use a solid water stream as it may scatter and spread fire.

Specific hazards arising from the chemical

Specific hazards arising from the chemical Elevated temperature liquid is combustible.

Hazardous combustion products Carbon monoxide. Carbon dioxide (CO2). Sulfur compounds.

Special protective actions for fire-fighters

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

Hazchem code 2Y

Section 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures

Personal precautions Evacuate personnel to safe areas. Avoid contact with skin, eyes or 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. Remove ignition sources. Provide adequate ventilation. Do not touch or walk through spilled material. Dike far ahead of spill; use dry sand to contain the flow of material. Keep out of drains, sewers, ditches and waterways.

Methods for cleaning up Use only non-sparking tools. For the molten material: Contain - prevent run off into drains and waterways. Allow material to solidify. Collect in properly labelled containers for disposal. Use personal protective equipment as required.

Section 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. Not to be used by pregnant workers and workers who have recently given birth or who are breastfeeding.

Vapours can build up in the headspace of tanks. These can cause flammability/explosion hazards, even at temperatures below the normal flash point. Tank headspaces should always be regarded as potentially flammable and care should be taken to avoid static electricity discharge and all ignition sources during filling, sampling etc from storage tanks. Ensure equipment used is properly earthed or bonded. Will present a flammability hazard if heated above the flash point but bulk liquids at normal storage temperatures present a low fire hazard. Product should not be overheated in storage because of the risk of fire. Do NOT pressurise, cut, heat or weld empty containers as they may contain hazardous residues.

Toxic quantities of hydrogen sulphide (H2S) may be present in storage and rundown tanks, marine vessel compartments, sump pits or other confined spaces which contain or have contained this material. When opening valves, hatched or dome covers, stand upwind, keep face as far from the opening as possible and avoid breathing any gases or vapours. When exposure concentrations are unknown, respiratory protection must be used. These devices should not be relied on for life-threatening concentrations. As an indicator of H2S

concentration, the rotten eggs odour is unreliable because it may be masked by other odours. In addition, H2S fatigues the sense of smell rapidly. Therefore, DO NOT ATTEMPT RESCUE WITHOUT WEARING APPROVED SUPPLIED-AIR respiratory equipment.

General hygiene considerations Regular cleaning of equipment, work area and clothing is recommended. Wash hands before breaks and immediately after handling the product. Do not eat, drink or smoke when using this product.

Conditions for safe storage, including any incompatibilities

Storage Conditions Keep 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). Protect from moisture. Prohibit water contacting hot bitumen because of the danger of boil-over. Particular care should be taken to ensure that bulk storage tanks are watertight and that any steam heating coils are regularly checked for leaks.
The storage temperature in bulk storage should not fluctuate above and below 100°C as this increases the risk of water condensation leading to boil-over. Care must always be exercised when heating bitumen.

Highly toxic hydrogen sulphide gas may be emitted from hot product and accumulate in enclosed spaces or tanks. Extreme care must therefore be taken during venting of tanks and enclosed spaces which have, at any time, contained hot product. Under no circumstances should entry be made into small enclosures without taking full precautions. Confined spaces contaminated with hydrogen sulphide must always be considered as constituting potentially life-threatening environments.
Pyrophoric (self-heating) deposits, which may cause fire or explosion, may be formed in storage. Avoid exposure of tank vapour space to fresh air, and maintain stable storage temperatures. Regular inspection for such deposits will indicate when tank cleaning is necessary.

Incompatible materials Oxidizing agents.

Section 8: Exposure controls and personal protection

Control parameters

Exposure Limits No value assigned for this specific material by Safe Work Australia. However, Workplace Exposure Standard(s) for constituents and decomposition product(s):

Chemical name	Australia	New Zealand	ACGIH TLV
Asphalt (Bitumen) 8052-42-4	TWA: 5 mg/m³	TWA: 5 mg/m³	TWA: 0.5 mg/m³ Benzene-soluble aerosol fume, inhalable particulate matter

Chemical name	European Union	United Kingdom	Germany DFG
Asphalt (Bitumen) 8052-42-4	-	TWA: 5 mg/m³ STEL: 10 mg/m³	TWA: 1.5 mg/m³ Peak: 3 mg/m³ Sk*
Residues, petroleum, vacuum 64741-56-6	-	-	TWA: 1.5 mg/m³ Peak: 3 mg/m³ Sk*

Chemical name	Australia	ACGIH	European Union
Asphalt (Bitumen) 8052-42-4	-	2.5 µg/L	-

Bitumen fumes: 8hr TWA = 5 mg/m³
Hydrogen sulfide: 8hr TWA = 14 mg/m³ (10 ppm); 15 min STEL = 21 mg/m³ (15 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 Ensure that eyewash stations and safety showers are close to the workstation location. Ensure adequate ventilation, especially in confined areas. Apply technical measures to comply with the occupational exposure limits.

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. If splashes are likely to occur:. Face protection shield.

Skin and body protection Wear suitable protective clothing. Overalls. Antistatic boots.

Hand protection Heat-resistant gauntlet gloves.

Respiratory protection If determined by a risk assessment an inhalation risk exists, wear an organic vapour/particulate respirator or an air supplied mask meeting the requirements of AS/NZS 1715 and AS/NZS 1716.

Environmental exposure controls No information available.

Thermal hazards No information available.

Section 9: Physical and chemical properties

Information on basic physical and chemical properties

Physical state No information available
Appearance Solid at ambient temperatures. Liquid at elevated temperatures above 100°C.

Color	Black
Odor	Characteristic Bitumen
Odor threshold	No information available

Property	**Values**	**Remarks • Method**
pH	No data available	None known
pH (as aqueous solution)	No data available	None known
Melting point / freezing point	60°C to >90°C	None known
Boiling point / boiling range	No data available	None known
Flash point	>250°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	No data available	
Lower flammability or explosive limits	No data available	
Vapor pressure	No data available	None known
Vapor density	No data available	None known
Relative density	1.02 @25°C	None known
Water solubility	No data available	None known
Solubility(ies)	Insoluble in water	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

Section 10: Stability and reactivity

Reactivity

Reactivity Reacts with strong oxidising agents.

Chemical stability

Stability Stable under normal ambient and anticipated storage and handling conditions of temperature and pressure.

Explosion data
Sensitivity to mechanical impact None.
Sensitivity to static discharge None.

Possibility of hazardous reactions

Possibility of hazardous reactions None under normal processing.

Conditions to avoid

Conditions to avoid Direct sunlight. Ignition sources. To avoid thermal decomposition, do not overheat. Protect from moisture.

Incompatible materials

Incompatible materials Oxidizing agents.

Hazardous decomposition products

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

Section 11: Toxicological information

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 Inhalation of vapours may cause headaches and/or dizziness. Overexposure to vapour may result in respiratory tract irritation.

This product can release hydrogen sulfide (H2S). The primary hazard of H2S is inhalation overexposure. Odour is an unreliable indicator of concentration as olfactory fatigue occurs rapidly. Inhalation of H2S at airborne levels of approximately 50-70 ppm may result in irritation of the eyes and respiratory tract mucosa. Overexposure to higher concentrations may produce signs and symptoms of headache, dizziness, nausea, vomiting, coughing and a sensation of dryness and pain of the nose, throat and chest. An atmosphere containing 1000-2000 ppm H2S may be immediately hazardous to life. Prolonged or frequently repeated exposure to H2S may result in chronic health effects characterised by local irritation of the eyes, respiratory tract and skin. Small amounts of H2S can be absorbed through the skin, but absorption is too slow to result in poisoning. Inhalation of vapours may irritate the throat.

Eye contact May cause irritation. Contact with product at elevated temperatures can result in thermal burns.

Skin contact Causes skin irritation. Hot liquid can cause severe burns.

Ingestion Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea. Contact with hot material can cause thermal burns.

Symptoms Irritation/Corrosion. Erythema (skin redness). Contact with hot material can cause thermal burns. Blindness. Inhalation of high vapor concentrations may cause symptoms like headache, dizziness, tiredness, nausea and vomiting.

Acute toxicity .

Numerical measures of toxicity - Product Information
No information available

Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Asphalt (Bitumen)	> 5000 mg/kg (Rat)	> 2000 mg/kg (Rabbit)	> 94.4 mg/m³ (Rat) 4.5 h
Distillates, petroleum, hydrotreated heavy naphthenic	> 5000 mg/kg (Rat)	> 5000 mg/kg (Rabbit)	-
Residues, petroleum, vacuum	> 5000 mg/kg (Rat)	> 2000 mg/kg (Rabbit)	-
Lubricating oils (petroleum), hydrotreated, used	> 2000 mg/kg (Rat)	> 4480 mg/kg (Rabbit)	-

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 May cause cancer. Classification is based on mixture calculation methods based on component data.

Chemical name	Australia	European Union	IARC
Asphalt (Bitumen) - 8052-42-4	-	-	Group 2B
Styrene, 1,3-butadiene polymer - 9003-55-8	-	-	Group 3
Distillates, petroleum, hydrotreated heavy naphthenic - 64742-52-5	Carc. 1B	Carc. 1B	Group 1
Residues, petroleum, vacuum - 64741-56-6	-	-	Group 2B
Lubricating oils (petroleum), hydrotreated, used - 64742-58-1	Carc. 1B	-	-

IARC (International Agency for Research on Cancer)
Group 1 - Carcinogenic to Humans
Group 2B - Possibly Carcinogenic to Humans
Group 3 - Not Classifiable as to Carcinogenicity in Humans

Reproductive toxicity Suspected of damaging the unborn child. Classification is based on mixture calculation methods based on component data.

STOT - single exposure No information available.

STOT - repeated exposure No information available.

Aspiration hazard No information available.

Section 12: Ecological information

Ecotoxicity

Aquatic ecotoxicity Keep out of waterways.

Chemical name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
Distillates, petroleum, hydrotreated heavy naphthenic	-	LC50: >5000mg/L (96h, Oncorhynchus mykiss)	-	EC50: >1000mg/L (48h, Daphnia magna)
Residues, petroleum, vacuum	-	LC50: =48mg/L (96h, Brachydanio rerio)	-	-

Terrestrial ecotoxicity There is no data for this product.

Persistence and degradability

Persistence and degradability No information available.

Bioaccumulative potential

Bioaccumulation There is no data for this product.

Component Information

Chemical name	Partition coefficient
Asphalt (Bitumen)	6

Mobility

Mobility No information available.

Other adverse effects

Other adverse effects No information available.

Section 13: Disposal considerations

Waste treatment methods

Waste from residues/unused products Dispose of in accordance with federal, state and local regulations.

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.

See section 8 for more information

Section 14: Transport information

ADG Not classified as Dangerous Goods by the criteria of the Australian Dangerous Goods Code (ADG Code) for transport by Road and Rail; NON-DANGEROUS GOODS.

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

UN number or ID number 3257
Proper shipping name ELEVATED TEMPERATURE LIQUID, N.O.S. (CONTAINS ASPHALT)
Transport hazard class(es) 9
Packing group III
Hazchem code 2Y

IATA Not classified as Dangerous Goods by the criteria of the International Air Transport Association (IATA) Dangerous Goods Regulations for transport by air; NON-DANGEROUS GOODS.

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

IMDG Not classified as Dangerous Goods by the criteria of the International Maritime Dangerous Goods Code (IMDG Code) for transport by sea; NON-DANGEROUS GOODS.

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

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code
No information available

Section 15: Regulatory information

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

National regulations

Australia

Classified as a hazardous substance in accordance with the criteria of Safe Work Australia - Globally Harmonized System (GHS). Not classified as Dangerous Goods by the criteria of the Australian Dangerous Goods Code (ADG Code) for transport by Road and Rail; NON-DANGEROUS GOODS.

Classified as Dangerous Goods at elevated temperatures by the criteria of the Australian Dangerous Goods Code (ADG Code) for Transport by Road and Rail; DANGEROUS GOODS.
See section 8 for national exposure control parameters

Standard for Uniform Scheduling of Medicines and Poisons (SUSMP)
No poisons schedule number allocated
Poison Schedule Number Not applicable

Australian Industrial Chemicals Introduction Scheme (AICIS)
Contact supplier for inventory compliance status

Chemical name	Australian Industrial Chemicals Introduction Scheme (AICIS)	Additional information
Asphalt (Bitumen) - 8052-42-4	Present	-
Styrene, 1,3-butadiene polymer - 9003-55-8	Present	-
Distillates, petroleum, hydrotreated heavy naphthenic - 64742-52-5	Present	-
Residues, petroleum, vacuum - 64741-56-6	Present	-
Lubricating oils (petroleum), hydrotreated, used - 64742-58-1	Present	-
Other non-hazardous components - -	Present	-

Illicit Drug Precursors/Reagents
This product does not contain any substance(s) on the Illicit Drug Precursors/Reagents list.

International Inventories
AIIC All the constituents of this material are listed on the Australian Inventory of Industrial Chemicals or are exempt.

NZIoC	Contact supplier for inventory compliance status.
TSCA	Contact supplier for inventory compliance status.
DSL/NDSL	Contact supplier for inventory compliance status.
EINECS/ELINCS	Contact supplier for inventory compliance status.
ENCS	Contact supplier for inventory compliance status.
IECSC	Contact supplier for inventory compliance status.
KECL	Contact supplier for inventory compliance status.
PICCS	Contact supplier for inventory compliance status.

Legend:
AIIC- Australian Inventory of Industrial Chemicals
NZIoC - New Zealand Inventory of Chemicals
TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List
EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances
ENCS - Japan Existing and New Chemical Substances
IECSC - China Inventory of Existing Chemical Substances
KECL - Korean Existing and Evaluated Chemical Substances
PICCS - Philippines Inventory of Chemicals and Chemical Substances

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

Section 16: Other information

Supplier Safety Data Sheet 08/ 2018

Reason(s) For Issue:	First Issue Primary SDS
Prepared By	This Safety Data Sheet has been prepared by IXOM Operations Pty Ltd (Toxicology and SDS Services).
Revision date:	01-Aug-2024

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
SVHC: Substances of Very High Concern for Authorization:
PBT: Persistent, Bioaccumulative, and Toxic (PBT) Substances
vPvB: Very Persistent and very Bioaccumulative (vPvB) Substances
STOT: Specific Target Organ Toxicity
ATE: Acute Toxicity Estimate
LC50: 50% Lethal Concentration
LD50: 50% Lethal Dose

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
Agency for Toxic Substances and Disease Registry (ATSDR)
U.S. Environmental Protection Agency ChemView Database
European Food Safety Authority (EFSA)
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)
National Institute of Technology and Evaluation (NITE)
Australia National Industrial Chemicals Notification and Assessment Scheme (NICNAS)
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)
U.S. 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
World Health Organization

Disclaimer
This Safety Data Sheet has been complied 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