

SAFETY DATA SHEET



Revision date: 01-Feb-2023

Revision Number 1

1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Product identifier

Product Name VIVASOL 2046

Product Code(s) 000000054350

Other means of identification

CAS No. 64742-81-0

Recommended use of the chemical and restrictions on use

Recommended use Industrial solvent.

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

Not 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 4
Aspiration hazard	Category 1
Carcinogenicity	Category 2

SIGNAL WORD

Danger

Label elements

**Hazard statements**

H227 - Combustible liquid

H304 - May be fatal if swallowed and enters airways

H351 - Suspected of causing cancer

Precautionary Statements - Prevention

Obtain special instructions before use

Do not handle until all safety precautions have been read and understood

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking

Wear protective gloves / protective clothing / eye protection / face protection

Use personal protective equipment as required

Precautionary Statements - Response

If exposed or concerned: Get medical advice/attention

IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician

Do NOT induce vomiting

In case of fire: Use extinguishing media as outlined in Section 5 of this Safety Data Sheet to extinguish.

Precautionary Statements - Storage

Store in a well-ventilated place. Keep cool

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

AUH066 - Repeated exposure may cause skin dryness or cracking

Harmful to aquatic life with long lasting effects

General Hazards

Poisons Schedule (SUSMP) 5

3. COMPOSITION/INFORMATION ON INGREDIENTS**Substance**

Chemical name	CAS No.	Weight-%
Kerosine (petroleum), hydrodesulfurized	64742-81-0	100
Naphthalene	91-20-3	<3

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. Immediate medical attention is required. 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 skin with soap and water. Call a physician if symptoms occur.
Ingestion	Clean mouth with water. Do NOT induce vomiting. If vomiting occurs spontaneously, keep head below hips to prevent aspiration. Call a physician immediately.
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 Aspiration risk: may cause lung damage if swallowed.

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. Aspiration may cause pulmonary edema and pneumonitis. Delayed pulmonary edema may occur.

5. FIRE FIGHTING MEASURES

Suitable Extinguishing Media

Suitable Extinguishing Media Dry chemical, CO₂, water spray or regular foam.

Unsuitable extinguishing media High volume water jet.

Specific hazards arising from the chemical

Specific hazards arising from the chemical Combustible liquid. May form flammable vapour mixtures with air. The product is insoluble and floats on water. Environmentally hazardous.

Hazardous combustion products Carbon monoxide. Carbon dioxide (CO₂). Nitrogen oxides.

Special protective actions for fire-fighters

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

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. 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 a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal. Do not flush residues with water. Retain as contaminated waste. Use personal protective equipment as required. 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. Empty containers pose a potential fire and explosion hazard. Do not cut, puncture or weld containers.

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. Store away from foodstuffs and sources of heat or ignition. Keep container closed when not in use.

Classified as a C1 (COMBUSTIBLE LIQUID) for the purpose of storage and handling, in accordance with the requirements of AS 1940. Refer to State Regulations for storage and transport requirements.

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) 5

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):

Naphthalene: 8hr TWA = 52 mg/m³ (10 ppm), 15 min STEL = 79 mg/m³ (15 ppm), Carcinogen Category 2

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.

Carcinogen Category 2 - substances suspected of having carcinogenic potential. The available information is not adequate for making a satisfactory assessment.

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/particulate 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	No information available
Color	Colourless
Odor	Paraffinic

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	200-240°C (typical)	None known
Flash point	75-77°C (typical)	Pensky-Martens Closed Cup (PMCC)
Evaporation rate	0.01 (n-Butyl acetate=1)	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	800-830 kg/m ³ @15°C	None known
Water solubility	Negligible	None known
Solubility(ies)	No data available	None known
Partition coefficient	No data available	None known
Autoignition temperature	No data available	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 No information available.

Chemical stability

Stability Stable under normal conditions.

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). Do not contaminate food or feed stuffs.

Incompatible materials

Incompatible materials Oxidizing agents.

Hazardous decomposition products

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

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	Breathing in vapour can result in headaches, dizziness, drowsiness, and possible nausea. 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	Aspiration risk: may cause lung damage if swallowed.

Numerical measures of toxicity - Product Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Kerosine (petroleum), hydrodesulfurized	> 5000 mg/kg (Rat)	> 2000 mg/kg (Rabbit)	> 5200 mg/m ³ (Rat) 4 h
Naphthalene	= 490 mg/kg (Rat) = 1110 mg/kg (Rat)	= 1120 mg/kg (Rabbit) > 20 g/kg (Rabbit)	> 340 mg/m ³ (Rat) 1 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	No information available.
Serious eye damage/eye irritation	No information available.
Respiratory or skin sensitization	No information available.
Germ cell mutagenicity	No information available.
Carcinogenicity	Suspected of causing cancer. Classification is based on mixture calculation methods based on component data. The table below indicates whether each agency has listed any ingredient as a carcinogen.

Chemical name	Australia
Naphthalene - 91-20-3	Carc. 2

Reproductive toxicity	No information available.
STOT - single exposure	No information available.
STOT - repeated exposure	No information available.
Aspiration hazard	May be fatal if swallowed and enters airways.
Chronic effects:	Naphthalene has been classified by the International Agency for Research on Cancer

(IARC) as a Group 2B. Group 2B - The agent is possibly carcinogenic to humans.

12. ECOLOGICAL INFORMATION

Ecotoxicity

Ecotoxicity Keep out of waterways. Harmful to aquatic life with long lasting effects.

Chemical name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
Kerosine (petroleum), hydrodesulfurized	-	LC50: =45mg/L (96h, Pimephales promelas) LC50: =1740mg/L (96h, Lepomis macrochirus)	-	LC50: =4720mg/L (48h, Den-dronereides heteropoda)
Naphthalene	EC50: =0.4mg/L (72h, Skeletonema costatum)	LC50: 5.74 - 6.44mg/L (96h, Pimephales promelas) LC50: =1.6mg/L (96h, Oncorhynchus mykiss) LC50: 0.91 - 2.82mg/L (96h, Oncorhynchus mykiss) LC50: =1.99mg/L (96h, Pimephales promelas) LC50: =31.0265mg/L (96h, Lepomis macrochirus)	-	LC50: =2.16mg/L (48h, Daphnia magna) EC50: =1.96mg/L (48h, Daphnia magna) EC50: 1.09 - 3.4mg/L (48h, Daphnia magna)

Persistence and degradability

Persistence and degradability No information available.

Bioaccumulative potential

Bioaccumulation May cause bioaccumulation.

Component Information

Chemical name	Partition coefficient
Naphthalene	3.6

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

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.

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.

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.

Marine pollutant No

15. REGULATORY INFORMATION

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

National regulations

Australia

Not 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) 5

National pollutant inventory

Subject to reporting requirement

Chemical name	National pollutant inventory
Naphthalene - 91-20-3	20 MW Threshold category 2b total 60000 MWH Threshold category 2b total 1 tonne/h Threshold category 2a total 25 tonne/yr Threshold category 1a total 400 tonne/yr Threshold category 2a total 2000 tonne/yr Threshold category 2b total

International Inventories

AIIC

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

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 03/ 2022

Reason(s) For Issue: First Issue Primary SDS

Issuing Date: 01-Feb-2023

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