SAFETY DATA SHEET

Avgas 100

Section 1. Identification

GHS product identifier Avgas 100

Product code SAV2104.

SDS # SAV2104

Relevant identified uses of the substance or mixture and uses advised against

Use of the substance/ mixture Use only as a motor fuel for aviation. Should NOT be used as a solvent nor cleaning agent.
For specific application advice see appropriate Technical Data Sheet or consult our company representative.

Manufacturer

Supplier

Woodham Petroleum Services
160 Fox Street
Walgett NSW 2832,
ABN 45 654 386 035

www.woodhampetroleum.com.au

Tel: +61 (03) 9268 4111

EMERGENCY TELEPHONE NUMBER 1800 638 556 (24 hour)

OTHER PRODUCT INFORMATION Technical Helpline Number: 1300 139 700

Section 2. Hazard(s) identification

Classification of the substance or mixture

FLAMMABLE LIQUIDS - Category 2
ACUTE TOXICITY (oral) - Category 3
ACUTE TOXICITY (dermal) - Category 3
ACUTE TOXICITY (inhalation) - Category 3
SKIN CORROSION/IRRITATION - Category 2
CARCINOGENICITY - Category 1
REPRODUCTIVE TOXICITY - Category 1A
SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE (Narcotic effects) - Category 3
SPECIFIC TARGET ORGAN TOXICITY - REPEATED EXPOSURE - Category 2
ASPIRATION HAZARD - Category 1

GHS label elements

Hazard pictograms

Signal word DANGER

Hazard statements

H225 - Highly flammable liquid and vapour.
H301 + H311 + H331 - Toxic if swallowed, in contact with skin or if inhaled.
H304 - May be fatal if swallowed and enters airways.
H315 - Causes skin irritation.
H336 - May cause drowsiness or dizziness.
H350 - May cause cancer.
H360 - May damage fertility or the unborn child.
H373 - May cause damage to organs through prolonged or repeated exposure.

Precautionary statements

Section 2. Hazard(s) identification

General

P102 - Keep out of reach of children.
P101 - If medical advice is needed, have product container or label at hand.

Prevention

P201 - Obtain special instructions before use.
P202 - Do not handle until all safety precautions have been read and understood.
P280 - Wear protective gloves, protective clothing, eye protection, face protection, or hearing protection.
P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P271 - Use only outdoors or in a well-ventilated area.
P260 - Do not breathe vapour.
P270 - Do not eat, drink or smoke when using this product.
P264 - Wash hands thoroughly after handling.

Response

P308 + P313 - IF exposed or concerned: Get medical attention.
P304 + P340, P311 - IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or doctor.
P301 + P310, P330, P331 - IF SWALLOWED: Immediately call a POISON CENTER or physician. Rinse mouth. Do NOT induce vomiting.
P303 + P361 + P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water.
P302 + P312 - IF ON SKIN: Call a POISON CENTER or doctor if you feel unwell.
P332 + P313 - If skin irritation occurs: Get medical attention.

Storage

P405 - Store locked up.
P403 + P233 - Store in a well-ventilated place. Keep container tightly closed.

Disposal

P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations.

Supplemental label elements

Not applicable.

Other hazards which do not result in classification

Static accumulating flammable liquid can become electrostatically charged even in bonded and grounded equipment. Sparks may ignite liquid and vapour may cause flash fire or explosion.

Section 3. Composition and ingredient information

Substance/mixture

Mixture

A complex mixture of volatile hydrocarbons containing paraffins, naphthenes, olefins and aromatics with carbon numbers predominantly between C4 and C12. May also contain small quantities of proprietary performance additives. Contains lead. May be dyed.

Ingredient name	% (w/w)	CAS number
Gasoline	≥90	CAS: 86290-81-5
1,2-dibromoethane	<1	CAS: 106-93-4
lead alkyls	≤0.2	CAS: 78-00-2

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health and hence require reporting in this section.

The total concentration of ingredients in this product, reported or not in this section, is 100%.

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First aid measures

Description of necessary first aid measures

Eye contact

In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Eyelids should be held away from the eyeball to ensure thorough rinsing. Check for and remove any contact lenses. Get medical attention.

Inhalation

If inhaled, remove to fresh air. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. Get medical attention. If exposure to vapour, mists or fumes causes drowsiness, headache, blurred vision or irritation of the eyes, nose or throat, remove immediately to fresh air. Keep patient warm and at rest. If any symptoms persist obtain medical advice.

Skin contact

In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Drench contaminated clothing with water before removing. This is necessary to avoid the risk of sparks from static electricity that could ignite contaminated clothing. Contaminated clothing is a fire hazard. Contaminated leather, particularly footwear, must be discarded. Clean shoes thoroughly before reuse. Get medical attention. If skin irritation or rash occurs: Get medical attention.

Ingestion

Do not induce vomiting. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Aspiration hazard if swallowed. Can enter lungs and cause damage. Get medical attention immediately.

Most important symptoms/effects, acute and delayed

See Section 11 for more detailed information on health effects and symptoms.

Indication of immediate medical attention and special treatment needed, if necessary

Notes to physician

Treatment should in general be symptomatic and directed to relieving any effects. Product can be aspirated on swallowing or following regurgitation of stomach contents, and can cause severe and potentially fatal chemical pneumonitis, which will require urgent treatment. Because of the risk of aspiration, induction of vomiting and gastric lavage should be avoided. Gastric lavage should be undertaken only after endotracheal intubation. Monitor for cardiac dysrhythmias.

Specific treatments

No specific treatment.

Protection of first-aiders

No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

Section 5. Firefighting measures

Extinguishing media

Suitable extinguishing media

In case of fire, use water fog, foam, dry chemical or carbon dioxide extinguisher or spray.

Unsuitable extinguishing media

Do not use water jet.

Specific hazards arising from the chemical

Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain. Highly flammable liquid and vapour. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. Runoff to sewer may create fire or explosion hazard. Vapours can form explosive mixtures with air. Vapours are heavier than air and can spread along the ground or float on water surfaces to remote ignition sources. Vapours may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back. This product is a poor conductor of electricity and can become electrostatically charged. If sufficient charge is accumulated, ignition of flammable mixtures can occur. To reduce

Section 5. Firefighting measures

potential for static discharge, use proper bonding and grounding procedures. This liquid may accumulate static electricity when filling properly-grounded containers. Static accumulation may be significantly increased by the presence of small quantities of water or other contaminants. Liquid will float and may reignite on surface of water.

Hazardous thermal decomposition products

Combustion products may include the following:
carbon oxides (CO, CO_2) (carbon monoxide, carbon dioxide)

Special protective actions for fire-fighters

No action shall be taken involving any personal risk or without suitable training. Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.

Special protective equipment for fire-fighters

Fire-fighters should wear positive pressure self-contained breathing apparatus (SCBA) and full turnout gear.

Hazchem code

3YE

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

Immediately contact emergency personnel. No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. No flares, smoking or flames in hazard area. Do not breathe vapour or mist. Provide adequate ventilation. Put on appropriate personal protective equipment. Floors may be slippery; use care to avoid falling. Eliminate all ignition sources.

For emergency responders

Entry into a confined space or poorly ventilated area contaminated with vapour, mist or fume is extremely hazardous without the correct respiratory protective equipment and a safe system of work. Wear self-contained breathing apparatus. Wear a suitable chemical protective suit. Chemical resistant boots. See also the information in "For non-emergency personnel".

Environmental precautions

Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Water polluting material. May be harmful to the environment if released in large quantities. In case of small spillages in closed waters (i.e. ports), contain product with floating barriers or other equipment. Collect spilled product by absorbing with specific floating absorbents. If possible, large spillages in open waters should be contained with floating barriers or other mechanical means. If this is not possible, control the spreading of the spillage, and collect the product by skimming or other suitable mechanical means. The use of dispersants should be advised by an expert, and, if required, approved by local authorities. Collect recovered product and other contaminated materials in suitable tanks or containers for recycle, recovery or safe disposal.

Methods and material for containment and cleaning up

Small spill

Eliminate all ignition sources. Stop leak if without risk. Move containers from spill area. Absorb with an inert material and place in an appropriate waste disposal container. Use spark-proof tools and explosion-proof equipment. Dispose of via a licensed waste disposal contractor. The method and equipment used must be in conformance with appropriate regulations and industry practice on explosive atmospheres.

Section 6. Accidental release measures

Large spill

Eliminate all ignition sources. Stop leak if without risk. Move containers from spill area. Approach the release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Dike spill area and do not allow product to reach sewage system and surface or ground water. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations. Use spark-proof tools and explosion-proof equipment. Contaminated absorbent material may pose the same hazard as the spilt product. The method and equipment used must be in conformance with appropriate regulations and industry practice on explosive atmospheres. Dispose of via a licensed waste disposal contractor.

Section 7. Handling and storage

Precautions for safe handling

Protective measures

Put on appropriate personal protective equipment (see Section 8). Avoid exposure - obtain special instructions before use. Avoid exposure during pregnancy. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Do not breathe vapour or mist. Do not swallow. Aspiration hazard if swallowed. Can enter lungs and cause damage. Never siphon by mouth. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use only non-sparking tools. Take precautionary measures against electrostatic discharges. Empty containers retain product residue and can be hazardous. Do not reuse container. Avoid contact of spilt material and runoff with soil and surface waterways. Handling operations that can promote accumulation of static charges include but are not limited to: mixing, filtering, pumping at high flow rates, splash filling, creating mists or sprays, tank and container filling, tank cleaning, sampling, gauging, switch loading, vacuum truck operations. Restrict flow velocity according to API 2003 (2008), NFPA 77 (2007), and Laurence Britton, “Avoiding Static Ignition Hazards in Chemical Operations”. To reduce potential for static discharge, ensure that all equipment is properly grounded and bonded and meets appropriate electrical classification requirements.

Advice on general occupational hygiene

Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Wash thoroughly after handling. Remove contaminated clothing and protective equipment before entering eating areas. Contaminated work clothing should not be allowed out of the workplace. See also Section 8 for additional information on hygiene measures.

Conditions for safe storage, including any incompatibilities

Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. Eliminate all ignition sources. Separate from oxidising materials. Keep container tightly closed and sealed until ready for use. Store and use only in equipment/containers designed for use with this product. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination.

Light hydrocarbon vapours can build up in the headspace of tanks. These can cause flammability/explosion hazards even at temperatures below the normal flash point (note: flash point must not be regarded as a reliable indicator of the potential flammability of vapour in tank headspaces). Tank headspaces should always be regarded as potentially flammable and care should be taken to avoid static electrical discharge and all ignition sources during filling, ullaging and sampling from storage tanks. Do not enter storage tanks. If entry to vessels is necessary, follow permit to work procedures. Entry into a confined space or poorly ventilated area contaminated with vapour, mist or fume is extremely hazardous without the correct

Section 7. Handling and storage

respiratory protective equipment and a safe system of work. When the product is pumped (e.g. during filling, discharge or ullaging) and when sampling, there is a risk of static discharge. Ensure equipment used is properly earthed or bonded to the tank structure. Electrical equipment should not be used unless it is intrinsically safe (i.e. will not produce sparks). Explosive air/vapour mixtures may form at ambient temperature. If product comes into contact with hot surfaces, or leaks occur from pressurised fuel pipes, the vapour or mists generated will create a flammability or explosion hazard. Product contaminated rags, paper or material used to absorb spillages, represent a fire hazard, and should not be allowed to accumulate. Dispose of safely immediately after use.

Section 8. Exposure controls and personal protection

Control parameters

Occupational exposure limits

Ingredient name	Exposure limits
Gasoline	**ACGIH TLV (United States)** A3. TWA 8 hours: 300 ppm. Issued/Revised: 5/1996. TWA 8 hours: 890 mg/m³. Issued/Revised: 5/1996. STEL 15 minutes: 500 ppm. Issued/Revised: 5/1996. STEL 15 minutes: 1480 mg/m³. Issued/Revised: 5/1996.
1,2-dibromoethane	**ACGIH TLV (United States)** A3. Absorbed through skin.
lead alkyls	**Safe Work Australia (Australia)** Absorbed through skin. TWA 8 hours: 0.1 mg/m³ (as Pb). Issued/Revised: 5/1995.

Biological exposure indices

No exposure indices known.

Appropriate engineering controls

All activities involving chemicals should be assessed for their risks to health, to ensure exposures are adequately controlled. Personal protective equipment should only be considered after other forms of control measures (e.g. engineering controls) have been suitably evaluated. Personal protective equipment should conform to appropriate standards, be suitable for use, be kept in good condition and properly maintained.
Your supplier of personal protective equipment should be consulted for advice on selection and appropriate standards. For further information contact your national organisation for standards.
Provide exhaust ventilation or other engineering controls to keep the relevant airborne concentrations below their respective occupational exposure limits.
The final choice of protective equipment will depend upon a risk assessment. It is important to ensure that all items of personal protective equipment are compatible.

Environmental exposure controls

Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

Individual protection measures

Section 8. Exposure controls and personal protection

Hygiene measures

Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye/face protection

Chemical splash goggles.

Skin protection

Hand protection

Wear chemical resistant gloves.

Do not re-use gloves. Protective gloves must give suitable protection against mechanical risks (i.e. abrasion, blade cut and puncture). Protective gloves will deteriorate over time due to physical and chemical damage. Inspect and replace gloves on a regular basis. The frequency of replacement will depend upon the circumstances of use.

Recommended: Gloves made from fluoroelastomer resistant to hydrocarbons and a wide range of chemicals.
Wear a chemically resistant multi-layer laminate inner glove inside an outer nitrile glove. The purpose of the outer glove is to protect the inner glove from cuts and mechanical damage. The presence of aromatic hydrocarbons in the product will significantly shorten the length of time that nitrile gloves will provide protection. Do not re-use nitrile gloves if exposed to aromatic hydrocarbons.

Skin protection

Use of protective clothing is good industrial practice.
Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
Cotton or polyester/cotton overalls will only provide protection against light superficial contamination that will not soak through to the skin. Overalls should be laundered on a regular basis. When the risk of skin exposure is high (e.g. when cleaning up spillages or if there is a risk of splashing) then chemical resistant aprons and/or impervious chemical suits and boots will be required.
Wear suitable protective clothing.
Footwear highly resistant to chemicals.
When there is a risk of ignition wear inherently fire resistant protective clothes and gloves.
When there is a risk of ignition from static electricity, wear anti-static protective clothing. For greatest effectiveness against static electricity, overalls, boots and gloves should all be anti-static.
When the risk of skin exposure is high (from experience this could apply to the following tasks: cleaning work, maintenance and service, filling and transfer, taking samples and cleaning up spillages) then a chemical protective suit and boots will be required.
Work clothing / overalls should be laundered on a regular basis. Laundering of contaminated work clothing should only be done by professional cleaners who have been told about the hazards of the contamination. Always keep contaminated work clothing away from uncontaminated work clothing and uncontaminated personal clothes.

Other skin protection

Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Respiratory protection

Use with adequate ventilation.
If there is a requirement for the use of a respiratory protective device, but the use of breathing apparatus (independent of ambient atmosphere) is not required, then a suitable filtering device must be worn.
The filter class must be suitable for the maximum contaminant concentration (gas/vapour/aerosol/particulates) that may arise when handling the product.

CAUTION: The protection provided by air-purifying respirators is limited. Use a positive pressure air-supplied respirator if there is any potential for an uncontrolled

Section 8. Exposure controls and personal protection

release, if exposure levels are not known, or if concentrations exceed the protection limits of air-purifying respirator.

Recommended: Gas filter suitable for gases and vapours. Filter type: AX
Gas filter suitable for gases and vapours. Filter type: A
Combined filter suitable for gases, vapours and particles (dust, smoke, mist, aerosol). Filter type: AP

Refer to standards: Respiratory protection:AS/NZS 1715 and AS/NZS 1716
Gloves:AS/NZS 2161.1
Eye protection:AS/NZS 1336 and AS/NZS 1337

Section 9. Physical and chemical properties

The conditions of measurement of all properties are at standard temperature and pressure unless otherwise indicated.

Appearance

Physical state Liquid.

Colour Green.

Odour Petrol

Odour threshold 0.025 ppm (Based on Petrol)

pH Not applicable. Based on: Solubility in Water (Very slightly soluble in water)

Melting point <-58°C (<-72.4°F)

Boiling point or initial boiling point and boiling range 40 to 170°C (104 to 338°F)

Flash point Closed cup: <-40°C (<-40°F) [Pensky-Martens]

Evaporation rate Not available.

Flammability Highly flammable liquid and vapour.

Lower and upper explosion limit/flammability limit Lower: 1.4%
Upper: 7.6%
(Based on Concawe Category: Low boiling point naphtha (Gasoline))

Vapour pressure 38 to 49 kPa (285 to 367.5 mm Hg) [37.8°C (100°F)]

Relative vapour density 3 to 4 [Air = 1]

Relative density <1

Density 710 kg/m³ (0.71 g/cm³) at 15°C

Solubility(ies)

Media	Result
water	Very slightly soluble

Solubility in water Not available.

Partition coefficient: n-octanol/water Not applicable. Based on Low boiling point naphtha - Substance is a hydrocarbon UVCB. Standard tests for this endpoint are intended for single substances and are not appropriate for this complex substance.

Auto-ignition temperature 280 to 470°C (536 to 878°F) (Based on Concawe Category: Low boiling point naphtha (Gasoline))

Decomposition temperature Not observed to decompose by final boiling point: >170°C (>338°F)

Viscosity Kinematic: <7 mm²/s (<7 cSt) at 40°C

Particle characteristics

Median particle size Not applicable.

Section 10. Stability and reactivity

Reactivity	No specific test data available for this product. Refer to Conditions to avoid and Incompatible materials for additional information.
Chemical stability	The product is stable.
Possibility of hazardous reactions	Under normal conditions of storage and use, hazardous reactions will not occur. Under normal conditions of storage and use, hazardous polymerisation will not occur.
Conditions to avoid	Avoid all possible sources of ignition (spark or flame). Avoid excessive heat.
Incompatible materials	Reactive or incompatible with the following materials: oxidising materials.
Hazardous decomposition products	Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

Product/ingredient name	Result
Gasoline	**Rat - Oral - LD50** >5000 mg/kg Equivalent to OECD 401 **Rabbit - Dermal - LD50** >2000 mg/kg OECD 402 **Rat - Inhalation - LC50 Vapour** >7630 mg/m³ [4 hours] Equivalent to OECD 403 **Rat - Inhalation - LC50 Vapour** >5610 mg/m³ [4 hours] Equivalent to OECD 403
1,2-dibromoethane	**Rat - Oral - LD50** 108 mg/kg **Rat - Dermal - LD50** 300 mg/kg

Conclusion/Summary[Product] Toxic if swallowed, in contact with skin or if inhaled. (Based on Tetraethyl lead)

Skin corrosion/irritation

Product/ingredient name	Result
Gasoline	**Rabbit - Skin - Irritant** OECD 404

Serious eye damage/eye irritation

Product/ingredient name	Result
Gasoline	**Rabbit - Eyes - Non-irritating to the eyes.** Equivalent to OECD 405

Respiratory corrosion/irritation

Not available.

Respiratory or skin sensitization

Section 11. Toxicological information

Product/ingredient name	Result
Gasoline	**Guinea pig - skin** Equivalent to OECD 406 Result: Not sensitising

Germ cell mutagenicity

Product/ingredient name	Result
Gasoline	**In vitro - Non-mammalian species** Equivalent to OECD 471 Result: Negative **In vitro - Mammal - species unspecified** Equivalent to OECD 476 Result: Negative **In vivo - Unspecified - Germ** EPA OPPTS 870.5395 Result: Negative **In vivo - Unspecified - Germ** Equivalent to OECD 475 Result: Negative

Ingredient name	Conclusion/Summary
Gasoline	May cause genetic defects.

Carcinogenicity

Product/ingredient name	Result
Gasoline	**Rat - Inhalation - Unspecified** Equivalent to OECD 451 113 weeks Result: Negative **Mouse - Dermal - Unspecified** Equivalent to OECD 451 102 weeks Result: Negative

Conclusion/Summary[Product] May cause cancer. (Based on 1,2-dibromoethane)

Ingredient name	Conclusion/Summary
Gasoline	May cause cancer

Reproductive toxicity

Product/ingredient name	Result
Gasoline	**Rat - Inhalation** OECD 416 Fertility effects: Negative **Rat - Inhalation** OECD 414 14 days Developmental: Negative

Conclusion/Summary[Product] Development: May damage the unborn child. (Based on Tetraethyl lead)
Fertility: Suspected of damaging fertility. (Based on Tetraethyl lead)
Effects on or via lactation: Not classified.

Section 11. Toxicological information

Ingredient name	Conclusion/Summary
Gasoline	Development: Suspected of damaging the unborn child. (Based on Toluene) Fertility: Not classified. Based on available data, the classification criteria are not met. Effects on or via lactation: Not classified. Based on available data, the classification criteria are not met.
lead alkyls	Development: May damage the unborn child. Fertility: Suspected of damaging fertility. Effects on or via lactation: Not classified. Based on available data, the classification criteria are not met.

Specific target organ toxicity (single exposure)

Product/ingredient name	Result
Gasoline	SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE (Narcotic effects) - Category 3
1,2-dibromoethane	SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE (Respiratory tract irritation) - Category 3

Specific target organ toxicity (repeated exposure)

Product/ingredient name	Result
Tetraethyl lead (Lead alkyls)	-
1,2-dibromoethane	-

Aspiration hazard

Product/ingredient name	Result
Gasoline	ASPIRATION HAZARD - Category 1

Information on likely routes of exposure

Routes of entry anticipated: Dermal, Inhalation, Eyes.

Potential acute health effects

Eye contact No known significant effects or critical hazards.

Inhalation Toxic if inhaled. Can cause central nervous system (CNS) depression. May cause drowsiness or dizziness.

Skin contact Toxic in contact with skin. Causes skin irritation.

Ingestion Toxic if swallowed. Irritating to mouth, throat and stomach. Aspiration hazard if swallowed -- harmful or fatal if liquid is aspirated into lungs.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact Adverse symptoms may include the following:
pain or irritation
watering
redness

Inhalation Adverse symptoms may include the following:
nausea or vomiting
headache
drowsiness/fatigue
dizziness/vertigo
unconsciousness

Section 11. Toxicological information

Skin contact

Adverse symptoms may include the following:
irritation
redness
reduced foetal weight
increase in foetal deaths
skeletal malformations

Ingestion

Adverse symptoms may include the following:
nausea or vomiting
reduced foetal weight
increase in foetal deaths
skeletal malformations

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

Inhalation

Vapour, mist or fume may irritate the nose, mouth and respiratory tract.

Product/ingredient name	Result
Gasoline	**Chronic - Rat - Inhalation - NOAEC** Equivalent to EPA OPPTS 870.3465 [STOT - RE] >1 mg/l [5 days per week] [90 days] **Chronic - Rat - Inhalation - NOAEC** Equivalent to OECD 453 [STOT - RE] >1 mg/l [5 days per week] [2 years] **Sub-chronic - Rat - Inhalation - NOAEC Vapour** Equivalent to OECD 412 [NOAEC] 9840 mg/m³ [5 days per week] [4 weeks]

Ingredient name	Conclusion/Summary
Gasoline	STOT - SE: May cause drowsiness or dizziness. Target Organs: Central Nervous System (CNS). Based on Acute effects on humans. STOT - RE: Not classified. Based on available data, the classification criteria are not met. Assessment was by using a weight of evidence approach.

General

May cause damage to organs through prolonged or repeated exposure. Solvent "sniffing" (abuse) or intentional overexposure to vapours can produce serious central nervous system effects, including unconsciousness, and possibly death.

Carcinogenicity

May cause cancer. Risk of cancer depends on duration and level of exposure.

Mutagenicity

No known significant effects or critical hazards.

Developmental effects

May damage the unborn child.

Fertility effects

Suspected of damaging fertility.

Numerical measures of toxicity

Acute toxicity estimates

Product/ingredient name	Oral (mg/kg)	Dermal (mg/kg)	Inhalation (gases) (ppm)	Inhalation (vapours) (mg/l)	Inhalation (dusts and mists) (mg/l)
Avgas 100	100	300	N/A	3	N/A
1,2-dibromoethane	108	300	N/A	0.05	N/A
lead alkyls	0.5	5	10	N/A	N/A

Other information

Lead is a cumulative poison. It can cause anaemia, central nervous system effects, gastro-intestinal symptoms and kidney damage.

Section 12. Ecological information

Toxicity

Product/ingredient name	Result
Gasoline	**Acute - EC50 - Fresh water** Modelled data [toxicity to microorganisms] Micro-organism 15.41 mg/l - Nominal [40 hours] Effect: growth inhibition **Acute - LL50 - Fresh water** OECD 203 Fish 10 mg/l - Nominal [96 hours] Effect: Mortality **Acute - LL50 - Fresh water** EPA 66013-75-009 Fish 8.2 mg/l - Nominal [96 hours] Effect: Mortality **Chronic - NOELR - Fresh water** OECD 204 Fish 2.6 mg/l - Nominal [14 days] Effect: Mortality **Chronic - LL50 - Fresh water** OECD 204 Fish 5.2 mg/l - Nominal [14 days] Effect: Mortality **Acute - EL50 - Fresh water** OECD 202 Daphnia 4.5 mg/l - Nominal [48 hours] Effect: Mobility **Acute - NOELR - Fresh water** OECD 202 Daphnia 0.5 mg/l - Nominal [48 hours] Effect: Mobility **Chronic - NOELR - Fresh water** OECD 211 Daphnia 2.6 mg/l - Nominal [21 days] Effect: Reproduction **Chronic - EL50 - Fresh water** OECD 211 Daphnia 10 mg/l - Nominal [21 days] Effect: Reproduction **Chronic - NOELR - Fresh water** OECD 211 Daphnia 16 mg/l - Nominal [21 days] Effect: Mobility **Chronic - EL50 - Fresh water** OECD 211 Daphnia >40 mg/l - Nominal [21 days] Effect: Mobility **Acute - EL50 - Fresh water** OECD 201

Section 12. Ecological information

Algae
3.1 mg/l - Nominal [72 hours]
Effect: (growth rate)

Acute - NOELR - Fresh water
OECD 201
Algae
0.5 mg/l - Nominal [72 hours]
Effect: (growth rate)

Acute - EL50 - Fresh water
OECD 201
Algae
3.7 mg/l - Nominal [96 hours]
Effect: (growth rate)

Chronic - PNEC
Modelled data [ ]
soil, plants
>0.4 mg/kg

Chronic - NOELR - Fresh water
OECD 211 [Daphnia Magna Reproduction Test]
Fish
2.6 mg/l - Nominal [21 days]
Effect: Reproduction

Chronic - EL50 - Fresh water
OECD 211 [Daphnia Magna Reproduction Test]
Fish
10 mg/l - Nominal [21 days]
Effect: Reproduction

Persistence and degradability

Expected to be biodegradable.

Not available.

Bioaccumulative potential

This product is not expected to bioaccumulate through food chains in the environment.

Mobility in soil

Soil/water partition coefficient Not available.

Mobility Spillages may penetrate the soil causing ground water contamination.

Other ecological information Spills may form a film on water surfaces causing physical damage to organisms. Oxygen transfer could also be impaired.

Section 13. Disposal considerations

Disposal methods The generation of waste should be avoided or minimised wherever possible. Significant quantities of waste product residues should not be disposed of via the foul sewer but processed in a suitable effluent treatment plant. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Vapour from product residues may create a highly flammable or explosive atmosphere inside the

Section 13. Disposal considerations

container. Do not cut, weld or grind used containers unless they have been cleaned thoroughly internally. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.

Special Precautions for Landfill or Incineration

No additional special precautions identified.

Section 14. Transport information

	ADG	IMDG	IATA
UN number	UN1203	UN1203	UN1203
UN proper shipping name	GASOLINE or MOTOR SPIRIT	GASOLINE or MOTOR SPIRIT. Marine pollutant	GASOLINE or MOTOR SPIRIT
Transport hazard class(es)	3 	3 	3 
Packing group	II	II	II
Environmental hazards	Yes. The environmentally hazardous substance mark is not required.	Yes.	Yes. The environmentally hazardous substance mark is not required.
Additional information	**Hazchem code** 3YE **Initial emergency response guide** 14	The marine pollutant mark is not required when transported in sizes of ≤5 L or ≤5 kg. **Emergency schedules** F-E, S-E	The environmentally hazardous substance mark may appear if required by other transportation regulations.

Special precautions for user

Contains lead.

Transport in bulk according to IMO instruments

Proper shipping name

MARPOL Annex 1 rules apply for bulk shipments by sea.
Category: gasoline and spirits

Section 15. Regulatory information

Standard for the Uniform Scheduling of Medicines and Poisons

7, 6

Consumer products - This material is a scheduled poison and must be stored, maintained and used in accordance with the relevant regulations.

Industrial Products - Labelling requirements for SUSMP do not apply to a poison that is packed and sold solely for industrial, laboratory or manufacturing use. However, this product is labelled in accordance with NOSHC National Code of Practice for labelling of workplace substances.

Model Work Health and Safety Regulations - Scheduled Substances

Ingredient name	Schedule
1,2-dibromoethane	Restricted carcinogen [When used as a fumigant; Restricted use - Genuine research or analysis]
lead alkyls	Restricted hazardous chemical [For abrasive blasting at a concentration of greater than 0.1% as lead or which would expose the operator to levels in excess of those set in the regulations covering lead]

Section 15. Regulatory information

Montreal Protocol

Not listed.

Stockholm Convention on Persistent Organic Pollutants

Not listed.

Rotterdam Convention on Prior Informed Consent (PIC)

List name	Ingredient name	Status
Industrial Pesticide	Tetraethyl lead; Plumbane, tetraethyl; TEL EDB; Bromofume; EDB; 1,2-dibromoethane	Listed Listed

International lists

National inventory

REACH Status
The company, as identified in Section 1, sells this product in the EU in compliance with the current requirements of REACH.

Australia inventory (AIIC)
Contact supplier for regulatory information.

Canada inventory
At least one component is not listed.

China inventory (IECSC)
At least one component is not listed.

Japan inventory (CSCL)
At least one component is not listed.

Korea inventory (KECI)
At least one component is not listed.

Philippines inventory (PICCS)
At least one component is not listed.

Taiwan Chemical Substances Inventory (TCSI)
Not determined.

United States inventory (TSCA 8b)
At least one component is not listed.

Section 16. Any other relevant information

History

Date of printing 3/11/2026

Date of issue/Date of revision 3/11/2026

Date of previous issue 2/15/2021

Version 3

Prepared by Product Stewardship

Key to abbreviations

ADG = Australian Dangerous Goods
ATE = Acute Toxicity Estimate
BCF = Bioconcentration Factor
GHS = Globally Harmonized System of Classification and Labelling of Chemicals
IATA = International Air Transport Association
IBC = Intermediate Bulk Container
IMDG = International Maritime Dangerous Goods
LogPow = logarithm of the octanol/water partition coefficient
MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)
NOHSC = National Occupational Health and Safety Commission
REACH = Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation [Regulation (EC) No. 1907/2006]
STEL = Short term exposure limit
SUSMP = Standard Uniform Schedule of Medicine and Poisons
UN = United Nations
TWA = Time weighted average
VOC = Volatile Organic Compound

Section 16. Any other relevant information

SADT = Self-Accelerating Decomposition Temperature
Varies = may contain one or more of the following 64741-88-4, 64741-89-5, 64741-95-3, 64741-96-4, 64742-01-4, 64742-44-5, 64742-45-6, 64742-52-5, 64742-53-6, 64742-54-7, 64742-55-8, 64742-56-9, 64742-57-0, 64742-58-1, 64742-62-7, 64742-63-8, 64742-65-0, 64742-70-7, 72623-85-9, 72623-86-0, 72623-87-1

Procedure used to derive the classification

Classification	Justification
FLAMMABLE LIQUIDS - Category 2	On basis of test data
ACUTE TOXICITY (oral) - Category 3	Expert judgment
ACUTE TOXICITY (dermal) - Category 3	Expert judgment
ACUTE TOXICITY (inhalation) - Category 3	On basis of test data
SKIN CORROSION/IRRITATION - Category 2	Calculation method
CARCINOGENICITY - Category 1	Calculation method
REPRODUCTIVE TOXICITY - Category 1A	Expert judgment
SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE (Narcotic effects) - Category 3	Calculation method
SPECIFIC TARGET ORGAN TOXICITY - REPEATED EXPOSURE - Category 2	Expert judgment
ASPIRATION HAZARD - Category 1	Calculation method

Indicates information that has changed from previously issued version.

Notice to reader

All reasonably practicable steps have been taken to ensure this data sheet and the health, safety and environmental information contained in it is accurate as of the date specified below. No warranty or representation, express or implied is made as to the accuracy or completeness of the data and information in this data sheet.

The data and advice given apply when the product is sold for the stated application or applications. You should not use the product other than for the stated application or applications without seeking advice from BP Group.

It is the user's obligation to evaluate and use this product safely and to comply with all applicable laws and regulations. The BP Group shall not be responsible for any damage or injury resulting from use, other than the stated product use of the material, from any failure to adhere to recommendations, or from any hazards inherent in the nature of the material. Purchasers of the product for supply to a third party for use at work, have a duty to take all necessary steps to ensure that any person handling or using the product is provided with the information in this sheet. Employers have a duty to tell employees and others who may be affected of any hazards described in this sheet and of any precautions that should be taken. You can contact the BP Group to ensure that this document is the most current available. Alteration of this document is strictly prohibited.