

Material Safety Data Sheet

Infosafe No. CAS5C Issue Date: January 2005 ISSUED by BPAUST
Product Name: OPAL

Classified as hazardous according to criteria of NOHSC

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND COMPANY

Product Name

OPAL

Product Use

Fuel supplied for cars. Should NOT be used as a solvent or cleaning agent.
Not for Aviation Use.

Company Name

BP Australia Pty Ltd (ABN 53 004 085 616)

Address

Melbourne Central, 360 Elizabeth Street, Melbourne,
Victoria 3000 Australia

Emergency Tel.

24hr 1800 638 556

Telephone Number/Fax

Tel: 61 3 9268 4111 Fax: (03) 9268-3321

Other Information

BP Technical Helpline: 1300 139 700 (local call)

MSDS website www.bp.com.au/msds

This data sheet and the health, safety and environmental information it contains is considered to be accurate as of the date specified above. We have reviewed any information contained herein which we received from sources outside the BP Group of Companies. However, no warranty or representation, expressed or implied is made as to the accuracy or completeness of the data and information contained in this data sheet.

Health and safety precautions and environmental advice noted in this data sheet may not be accurate for all individuals and/or situations. It is the user's obligation to evaluate and use this product safely and to comply with all applicable laws and regulations. No statement made in this data sheet shall be construed as a permission, recommendation or authorisation given or implied to practise any patented invention without a valid licence. The BP Group of Companies shall not be responsible for any damage or injury resulting from abnormal use of the material, from any failure to adhere to recommendations, or from any hazards inherent in the nature of the material.

2. COMPOSITION/INFORMATION ON INGREDIENTS

Product Name : OPAL

**Information on
Composition**

A complex combination of volatile hydrocarbons containing paraffins. CAS No.68425-29-6.

Hazardous Components

The following components, considered by various legislative authorities to be hazardous, may also be present:

Benzene	CAS No. 71-43-2	less than 1%
---------	-----------------	--------------

3. HAZARDS IDENTIFICATION

Inhalation of petrol can cause serious harm, damage the nervous system and may result in death. Highly flammable liquid. Explosive air/vapour mixtures may form at ambient temperature. Vapour is heavier than air and may travel to remote sources of ignition (eg. along drainage systems, in basements etc.).

4. FIRST AID MEASURES

Inhalation

If exposure to vapour, mists, or fumes causes drowsiness, headache, blurred vision or irritation of the eyes, nose or throat, remove the source of contamination or move the victim to fresh air. Ensure airways are clear and have qualified person give oxygen through a face mask if breathing is difficult. Apply artificial respiration if not breathing. Seek medical attention.

Unconscious patients must be placed in the recovery position.

Monitor breathing and pulse rate and if breathing has failed, or is deemed inadequate, respiration must be assisted, preferably by the mouth-to-mouth method (expired air resuscitation).

Administer external cardiac massage if necessary. Seek medical attention immediately.

Ingestion

If swallowed, do not induce vomiting, give a glass of water and contact a doctor or Poisons Information Centre immediately.

Except as a deliberate act, the ingestion of large amounts of product is unlikely. If it should occur, do NOT induce vomiting; obtain medical advice.

Skin

Wash skin thoroughly with soap and water as soon as reasonably practicable. Remove heavily contaminated clothing and wash underlying skin.

In extreme situations of saturation with this product, drench with water, remove clothing as soon as possible and wash skin with soap and water.

Seek medical advice if skin becomes red, swollen or painful.

Eye

Wash eye thoroughly with copious quantities of water, ensuring eyelids are held

open. Obtain medical advice if any pain or redness develops or persists.

First Aid Facilities

Eye wash and normal washroom facilities.

Advice to Doctor

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.

5. FIRE FIGHTING MEASURES

For major fires, call the Fire Brigade immediately. Ensure an escape path is always available from any fire. There is a risk of flashback if sparks or hot surfaces ignite vapour.

In case of fire, use foam, dry chemical, carbon dioxide, vaporising liquid or water delivered as a fine spray. DO NOT USE water jets.

Fires in confined spaces should be dealt with by trained personnel wearing approved breathing apparatus.

Water may be used to cool nearby heat exposed areas/objects/packages.

Any spillage should be regarded as a potential fire risk.

Hazardous

Combustion Products

Toxic fumes may be evolved on burning or exposure to heat.

See Stability and Reactivity, Section 10 of this MATERIAL SAFETY DATA Sheet.

6. ACCIDENTAL RELEASE MEASURES

As the product has a very low flash point, any spillage or leak is a severe fire and/or explosion hazard.

Isolate the spillage from all ignition sources including road traffic.

Ensure good ventilation.

Evacuate all non-essential personnel from the immediate area.

Wear protective equipment. (See Exposure Controls/Personal Protection, Section 8 of this MATERIAL SAFETY DATA SHEET for details)

Contain and recover liquid using sand or other suitable inert absorbent material.

It is advised that stocks of suitable absorbent material should be held in quantities sufficient to deal with any spillage which may be reasonably anticipated.

Clean up spilled material immediately.

Protect drains from potential spills to minimise contamination.

Do not wash product into drainage system.

Recovery of large spillages should be effected by specialist personnel.

Vapour is heavier than air and may travel to remote sources of ignition (eg.

along drainage systems, in basements, etc.).

If spillage has occurred in a confined space, ensure adequate ventilation and check that a safe, breathable atmosphere is present before entry.

In the case of spillage on water, prevent the spread of product by the use of suitable barrier equipment. Recover product from the surface.

Protect environmentally sensitive areas and water supplies.

In the event of spillages, contact the appropriate authorities. Regular surveillance on the location of the spillage should be maintained.

7. HANDLING AND STORAGE

Handling

Ensure good ventilation and avoid, as far as reasonably practicable, the inhalation and contact with vapours, mists or fumes which may be generated during use. If such vapour, mists or fumes are generated, their concentration in the workplace air should be controlled to the lowest reasonably practicable level.

Avoid contact with eyes. If splashing is likely to occur wear a full face visor or chemical goggles as appropriate.

Avoid skin contact. Good working practices, high standards of personal hygiene and plant cleanliness must be maintained at all times.

Do not siphon product by mouth.

Keep out of the reach of children.

Whilst using, do not eat, drink or smoke. Wash hands thoroughly after contact. Take all necessary precautions against accidental spillage into soil or water.

Storage

Store and dispense only in well ventilated areas away from heat and sources of ignition.

Store and use only in equipment/containers designed for use with the product. Containers must be properly labelled and kept closed when not in use.

Do not remove warning labels from containers. Empty packages may retain residual product; retain hazard warning labels on empty packages as a guide to their safe handling, storage and disposal.

Do not enter storage tanks without breathing apparatus unless the tank has been well ventilated and the tank atmosphere has been shown to contain hydrocarbon vapour concentrations of less than 1% of the lower flammability limit and an oxygen concentration of at least 20% volume.

Always have sufficient people standing by outside the tank with appropriate breathing apparatus and equipment to effect a quick rescue.

Other Information

Fire Prevention

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.

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, ullaging and sampling from storage tanks.

Hoses should be electrically continuous and ensure equipment used is properly

earthed or bonded to the tank structure.

Explosive air/vapour mixtures may form at ambient temperature.

If fuel 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 soaked rags, paper or material used to absorb spillages, represent a fire hazard and should not be allowed to accumulate. Dispose of safely after use.

Empty containers represent a fire hazard as they may contain remaining flammable residue and vapour. Heating may cause an explosion.

Do not weld, heat or drill this container. Do not introduce an ignition source.

8. EXPOSURE CONTROLS, PERSONAL PROTECTION

Exposure Limits

Ensure good ventilation. Avoid, as far as reasonably practicable, inhalation of vapour, mists or fumes generated during use.

If vapour, mists or fumes are generated, their concentration in the workplace air should be controlled to the lowest reasonably practicable level.

The National Occupational Health And Safety Commission (NOHSC) recommend an Exposure Standard for an 8-hour time-weighted average exposure (TWA) of 5 ppm (16 mg/m³) benzene.

Respiratory Protection

If operations are such that exposure to vapour, mist or fume may be anticipated, then suitable approved respiratory equipment should be worn. The use of respiratory equipment must be strictly in accordance with the manufacturers' instructions and any statutory requirements governing its selection and use.

Body Protection

Wear face visor or goggles in circumstances where eye contact can accidentally occur.

If skin contact is likely, wear impervious protective clothing and/or gloves. Change heavily contaminated clothing as soon as reasonably practicable and launder before re-use. Thoroughly wet down before removing clothing due to the risk of static discharge igniting vapour. Wash any contaminated underlying skin with soap and water.

Eng. Controls

Provide sufficient ventilation to keep airborne levels below the exposure limit. Where vapours or mists are generated, particularly in enclosed areas, and natural ventilation is inadequate, a flameproof exhaust ventilation system is required. Refer to AS 1940 - The storage and handling of flammable and combustible liquids and AS 2430 - Explosive gas atmospheres for further information concerning ventilation requirements.

9. PHYSICAL AND CHEMICAL PROPERTIES

Odour

Strong

Boiling Point

40 to 170°C Test Method: ASTM D 86

Solubility in Water

Insoluble

Vapour Pressure

38 to 49 kPa @ 20°C Test Method: ASTM D 323

Physical State

Mobile Liquid

Colour

Yellow

Density

0.70 kg/L @ 15°C Test Method: ASTM D 1298

Flash Point

-40°C (Penskey-Martens Closed Cup) Test Method: ASTM D 93

Flammable Limits LEL

1.4%

Flammable Limits UEL

7.6%

Other Information

Grades: OPAL

10. STABILITY AND REACTIVITY

Hazardous**Polymerization**

Hazardous polymerisation reactions will not occur.

Materials to Avoid

Avoid contact with strong oxidizing agents.

Hazardous**Decomposition****Products**

Thermal decomposition can produce a variety of compounds, the precise nature of which will depend on the decomposition conditions.

Incomplete combustion/thermal decomposition will generate smoke, carbon dioxide and hazardous gases, which will include carbon monoxide.

Conditions to Avoid

Products of this type are stable and unlikely to react in a hazardous manner under normal conditions of use.

This material is highly flammable.

11. TOXICOLOGICAL INFORMATION

Toxicology Information

No toxicity data is available for this product.

Inhalation

Likely to be irritating to the respiratory tract if high concentrations of mist or vapour are inhaled.

May cause nausea, dizziness, headaches and drowsiness if high concentrations of vapour are inhaled.

Ingestion

Harmful: may cause lung damage if swallowed. Ingestion of this product will irritate the gastric tract causing nausea and vomiting. Aspiration into the lungs may result in chemical pneumonitis.

Skin

Irritating to skin resulting in redness and itching.

Eye

Unlikely to cause more than transient stinging or redness if accidental eye contact occurs.

Chronic Effects

It is important to recognise that this product is classified as a Category 1 Carcinogen according to National Occupational Health And Safety Commission (NOHSC). That is, there is sufficient evidence to establish a causal association between human exposure and the development of cancer on the basis of epidemiological data.

The chemical benzene is present in low levels, usually below 2 %. Benzene is classified as a human carcinogen, and blood disorders have been reported for workers exposed to high concentrations of benzene over prolonged periods. Exposures must be kept below the national exposure standard.

12. ECOLOGICAL INFORMATION

Mobility

Spillages may penetrate the soil causing ground water contamination.

Persistence / Degradability

This product is inherently biodegradable.

Bioaccumulation

There is no evidence to suggest bioaccumulation will occur.

Acute Toxicity – Other Organisms

May be harmful to aquatic organisms.

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

13. DISPOSAL CONSIDERATIONS

Dispose of via an authorised person/licensed waste disposal contractor in accordance with local regulations, or if approved, allowed to degrade in situ. Dispose of product and container carefully and responsibly. Do not dispose of near ponds, ditches, down drains or onto soil.

Empty packages may contain some remaining product. Hazard warning labels are a guide to the safe handling of empty packages and should not be removed.

Empty packages represent a fire explosion hazard as they may contain flammable product residues and vapour. Do not weld, heat or drill the container. Heating may cause an explosion.

Do not introduce an ignition source.

Materials contaminated with product should be treated as highly flammable.

Disposal should be in accordance with local regulations.

Small quantities of spilled liquid may be allowed to evaporate, but the vapour must be dispersed by efficient ventilation.

14. TRANSPORT INFORMATION

ADG - MOTOR SPIRIT, UN 1203, Class 3 - Flammable Liquid , Packaging Group II, 3(Y)E.

IMDG - MOTOR SPIRIT , UN 1203, Class 3.1 - Flammable Liquid, Packaging Group II, UN 1203.

IATA/ICAO - PETROL , UN 1203, Class 3 - Flammable Liquid, Packaging Group II.

U.N. Number

1203

Proper Shipping Name

MOTOR SPIRIT

DG Class

3

Hazchem Code

3[Y]E

Packaging Method

5.9.3RT1

Packing Group

II

EPG Number

3.1.001

IERG Number

14

15. REGULATORY INFORMATION

Product Name : OPAL

Classified as a Toxic hazardous substance using the Worksafe Australia criteria.

Fuels are exempt from the Standard Uniform Schedule for Drugs and Poisons, except when packed in containers having a capacity of 20 litres or less.

Risk Phrase

R11 Highly flammable.

R38 Irritating to skin.

R45(1) May cause cancer.

R65 Harmful: may cause lung damage if swallowed.

Safety Phrase

S16 Keep away from sources of ignition - No smoking.

S2 Keep out of reach of children.

S23 Do not breathe gas/fumes/vapour/spray

S24 Avoid contact with skin.

S29 Do not empty into drains.

S33 Take precautionary measures against static discharges.

S43 In case of fire, use foam, dry chemical, CO₂, vapourising liquid or water delivered as a fine spray

S45 In case of accident or if you feel unwell seek medical advice immediately

S51 Use only in well ventilated areas.

S53 Avoid exposure - obtain special instructions before use.

S62 If swallowed, do not induce vomiting; seek medical advice immediately and show this container or label.

Hazard Category

Toxic, Irritant, Highly Flammable

16. OTHER INFORMATION

Compiled by:

Health, Safety, Environment and Security Division,

...End Of MSDS...