



1. Identification of the material and supplier

Product name	BP Biodiesel Blend
SDS no.	0000002821
Product use	Fuel for compression ignition diesel engines.
Synonyms	Diesel B20 TME
Supplier	BP Australia Pty Ltd (ABN 53 004 085 616) Melbourne Central, 360 Elizabeth Street, Melbourne, Victoria 3000, Australia Tel: +61 (03) 9268 4111 Fax: +61 (03) 9268 3321
EMERGENCY TELEPHONE NUMBER	1800 638 556
Product code	0000002821

2. Hazards identification

Statement of hazardous/dangerous nature	HAZARDOUS SUBSTANCE. NON-DANGEROUS GOODS.
Risk phrases	R40- Limited evidence of a carcinogenic effect. R65- Harmful: may cause lung damage if swallowed. R66- Repeated exposure may cause skin dryness or cracking. R51/53- Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
Safety phrases	S2- Keep out of the reach of children. S24- Avoid contact with skin. S29- Do not empty into drains. S36/37- Wear suitable protective clothing and gloves. S43- In case of fire, use water, dry chemical powder or carbon dioxide. Do not use water jet. S61- Avoid release to the environment. Refer to special instructions/safety data sheet. S62- If swallowed, do not induce vomiting: seek medical advice immediately and show this container or label.

3. Composition/information on ingredients

Contains Fatty Acid Methyl Esters (FAME). May also contain small quantities of proprietary performance additives.

Ingredient name	CAS no.	%
Fuels, diesel	68334-30-5	80 - 95

Contains small quantities of polycyclic aromatic hydrocarbons (PAHs).

Other ingredients, determined not to be hazardous according to NOHSC criteria, and not dangerous according to the ADG Code, make up the product concentration to 100%.

4. First-aid measures

Eye contact	In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention if irritation occurs.
Skin contact	Wash with soap and water. Get medical attention if irritation develops.
Inhalation	If inhaled, remove to fresh air. Get medical attention if symptoms appear.
Ingestion	If swallowed, do not induce vomiting. Never give anything by mouth to an unconscious person. Aspiration hazard if swallowed. Can enter lungs and cause damage. Get medical attention.
Advice to doctor	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. Note: High Pressure Applications Injections through the skin resulting from contact with the product at high pressure constitute a major

medical emergency. Injuries may not appear serious at first but within a few hours tissue becomes swollen, discoloured and extremely painful with extensive subcutaneous necrosis. Surgical exploration should be undertaken without delay. Thorough and extensive debridement of the wound and underlying tissue is necessary to minimise tissue loss and prevent or limit permanent damage. Note that high pressure may force the product considerable distances along tissue planes.

5. Fire-fighting measures

Extinguishing media

Suitable

Use foam or all-purpose dry chemical to extinguish. This material is toxic to aquatic organisms. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.

Not suitable

Do not use water jet.

Hazardous decomposition products

Decomposition products may include the following materials:
carbon dioxide
carbon monoxide
other hazardous substances.

Unusual fire/explosion hazards

Combustible liquid and vapour. Vapour may cause flash fire. Vapours may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back. Runoff to sewer may create fire or explosion hazard.

Special fire-fighting procedures

Do not fight fire when it reaches the material. Withdraw from fire and let it burn. Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. First move people out of line-of-sight of the scene and away from windows.

Protection of fire-fighters

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

6. Accidental release measures

Personal precautions

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. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapour or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment (see section 8).

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.

Large spill

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. Wash spillages into an effluent treatment plant or proceed as follows. 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 (see section 13). Use spark-proof tools and explosion-proof equipment. Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilt product. Note: see section 1 for emergency contact information and section 13 for waste disposal.

Small spill

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.

7. Handling and storage

Handling

Aspiration hazard if swallowed. Can enter lungs and cause damage. Do not ingest. If ingested, do not induce vomiting. Never siphon by mouth. Avoid breathing vapours, spray or mists. Use only with adequate ventilation. Keep away from heat, sparks and flame. To avoid fire or explosion, dissipate static electricity during transfer by earthing and bonding containers and equipment before transferring material. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Avoid contact of spilt material and runoff with soil and surface waterways. Wash thoroughly after handling. When using do not eat, drink or smoke.

Storage

Keep container tightly closed. Keep container in a cool, well-ventilated area. Store and use only in equipment/containers designed for use with this product. Empty packages may contain some remaining product. Hazard warning labels are a guide to the safe handling of empty packaging and should not be removed. 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.

Combustibility Classification

Combustible liquid Class C1 (AS 1940).

Additional information-Storage

This product must be in compliance with Australian Standard: The storage and handling of flammable and combustible liquids [Standard 1940-2004 as amended and adapted].

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.

Will present a flammability hazard if heated above flash point but bulk liquids at normal storage temperatures will present virtually no fire hazard. If fuel contacts hot surfaces, or leaks from high pressure fuel pipes, the vapour and/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.

Empty containers represent a fire hazard as they may contain flammable product residues and vapour. Never weld, solder or braze empty containers.

To avoid fire, eliminate ignition sources.

8. Exposure controls/personal protection

Ingredient name

Fuels, diesel

Occupational exposure limits

ACGIH TLV (United States). Absorbed through skin.

TWA: 100 mg/m³, (measured as total hydrocarbons) 8 hour(s). Issued/Revised: 1/2002 Form: Total hydrocarbons

For information and guidance, the ACGIH values are included. For further information on these please consult your supplier.

Biological Limit Values

No biological limit allocated.

Exposure controls

Occupational exposure controls

Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapours below their respective occupational exposure limits. In accordance with good industrial hygiene and safety work practices, airborne exposures should be controlled to the lowest extent practicable.

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.

Personal protective equipment

Respiratory protection

Use only with adequate ventilation. Do not breathe vapour or mist.

Skin and body

Avoid contact with skin. Wear suitable protective clothing.

Hand protection

Wear protective gloves if prolonged or repeated contact is likely.

The correct choice of protective gloves depends upon the chemicals being handled, the conditions of work and use, and the condition of the gloves (even the best chemically resistant glove will break down after repeated chemical exposures). Most gloves provide only a short time of protection before they must be discarded and replaced. Because specific work environments and material handling practices vary, safety procedures should be developed for each intended application. Gloves should therefore be chosen in consultation with the supplier/manufacturer and with a full assessment of the working conditions.

Eye protection

Safety glasses with side shields.

9. Physical and chemical properties

Physical state

Liquid.

Colour

Colourless. to Light brown. / Amber.

Odour

Mild

Flash point

>61.5 °C (Closed cup)

Auto-ignition temperature

>220°C (>428°F)

Explosive properties

Combustible liquid and vapour. Vapour may cause flash fire. Vapours may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back. Runoff to sewer may create fire or explosion hazard.

Vapour pressure

Not available.

Vapour density

Not available.

Viscosity

Kinematic: 2.1 to 4.5 mm²/s (2.1 to 4.5 cSt) at 40°C

pH

Not available.

Boiling point / range

Not available.

Melting point / range

Not available.

Relative density/Specific gravity

Not available.

Density

820 to 850 kg/m³ (0.82 to 0.85 g/cm³)

Solubility

Not available.

10 . Stability and reactivity

Stability	The product is stable.
Conditions to avoid	Avoid all possible sources of ignition (spark or flame).
Incompatibility with various substances/Hazardous Reactions	Reactive or incompatible with the following materials: oxidizing materials.
Hazardous decomposition products	Decomposition products may include the following materials: carbon dioxide carbon monoxide other hazardous substances.

11 . Toxicological information

Effects and symptoms

Eyes	Unlikely to cause more than transient stinging or redness if accidental eye contact occurs. Vapour, mist or fume may cause eye irritation. Exposure to vapour, mist or fume may cause stinging, redness and watering of the eyes.
Skin	Prolonged or repeated contact can defat the skin and lead to irritation and/or dermatitis.
Inhalation	May cause irritation of respiratory tract, coughing, shortness of breath.
Ingestion	Aspiration hazard if swallowed -- harmful or fatal if liquid is aspirated into lungs. Ingestion may cause gastrointestinal irritation and diarrhoea.

Chronic toxicity

Carcinogenic effects	POSSIBLE CANCER HAZARD - CONTAINS MATERIAL WHICH MAY CAUSE CANCER, BASED ON ANIMAL DATA. -- Carcinogenic Category 3 Risk of cancer depends on duration and level of exposure.
Mutagenic effects	No known significant effects or critical hazards.

12 . Ecological information


Ecotoxicity	Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
Biodegradability	
Persistence/degradability	This product is inherently biodegradable.
Mobility	Spillages may penetrate the soil causing ground water contamination. This material may accumulate in sediments.
Bioaccumulative potential	This product is not expected to bioaccumulate through food chains in the environment.
Other ecological information	Spills may form a film on water surfaces causing physical damage to organisms. Oxygen transfer could also be impaired.



13 . Disposal considerations

Disposal considerations / Waste information	The generation of waste should be avoided or minimised wherever possible. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe way. 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. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.
Special Precautions for Landfill or Incineration	Empty packages may contain some remaining product. Hazard warning labels are a guide to the safe handling of empty packaging and should not be removed.

14 . Transport information

International transport regulations

Regulatory information	UN number	Proper shipping name	Class	PG*	Label	Additional information
ADG Classification	Not regulated.	-	-	-	-----	Remarks Combustible liquid Class C1 (AS 1940).
IMDG Classification	UN 1202	DIESEL FUEL. Marine pollutant	3	III		Marine pollutant

Regulatory information	UN number	Proper shipping name	Class	PG*	Label	Additional information
IATA/ICAO Classification	UN 1202	DIESEL FUEL	3	III	 	Remarks Environmentally hazardous substance mark.

PG* : Packing group

Special precautions for user No known special precautions required. See Section: "Handling and storage" for additional information.

15 . Regulatory information

Standard for the Uniform Scheduling of Drugs and Poisons

5

Control of Scheduled Carcinogenic Substances

Ingredient name

No Listed Substance

Schedule

Australia Regulations

Labelling requirements for SUSDP 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.

Other regulations

Europe inventory

Not determined.

United States inventory (TSCA 8b)

Not determined.

Australia inventory (AICS)

All components are listed or exempted.

Canada inventory

Not determined.

China inventory (IECSC)

Not determined.

Japan inventory (ENCS)

Not determined.

Korea inventory (KECI)

Not determined.

Philippines inventory (PICCS)

At least one component is not listed.

16 . Other information

Key to abbreviations

AMP = Acceptable Maximum Peak
ACGIH = American Conference of Governmental Industrial Hygienists, an agency that promulgates exposure standards.
ADG = Australian Code for the Transport of Dangerous Goods by Road and Rail
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CAS Number = Chemical Abstracts Service Registry Number
HAZCHEM Code = Emergency action code of numbers and letters which gives information to emergency services. Its use is required by the ADG Code for Dangerous Goods in bulk.
ICAO = International Civil Aviation Organization.
IATA = International Air Transport Association, the organization promulgating rules governing shipment of goods by air.
IMDG = International Maritime Organization Rules, rules governing shipment of goods by water.
IP 346 = A chemical screening assay for dermal toxicity. The European Commission has recommended that Method IP 346 be used as the basis for labelling certain lubricant oil base stocks for carcinogenicity. The EU Commission has stipulated that the classification as a carcinogen need not apply if it can be shown that the substance contains less than 3% DMSO extract as measured by IP 346. (See Note L, European Commission Directive 67/548/EEC as amended and adapted.) DMSO is a solvent.
NOHSC = National Occupational Health & Safety Commission, Australia
TWA = Time weighted average
STEL = Short term exposure limit
UN Number = United Nations Number, a four digit number assigned by the United Nations Committee of Experts on the Transport of Dangerous Goods.

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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 us.

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