



MATERIAL SAFETY DATA SHEET

Powerplus 102 Fuel

SECTION 1: IDENTIFICATION OF MATERIAL AND SUPPLIER

Product Name:	Powerplus 102 Fuel
Other Names:	-
Product Codes/Trade Names:	N/A
Recommended Use:	Racing fuel
Applicable In:	Australia
Supplier:	ACB Group (ABN 79 724 186 134) Powerplus Fuel
Address:	118 Swann Drive, Derrimut Victoria-3030
Telephone:	+61 3 93690220
Email Address:	info@acbgroup.com.au
Facsimile:	+61 3 93690883
Emergency Phone Number:	000 Fire Brigade and Police (available in Australia only).
Poisons Information Centre:	13 11 26 (available in Australia only).

This Material Safety Data Sheet (MSDS) is issued by the Supplier in accordance with National standards and guidelines from the Australian Safety and Compensation Council (ASCC, formerly National Occupational Health and Safety Commission - NOHSC). The information in it must not be altered, deleted or added to. The Supplier will not accept any responsibility for any changes made to its MSDS by any other person or organization. The Supplier will issue a new MSDS when there is a change in product specifications and/or ASCC standards, codes, guidelines, or Regulations.

SECTION 2: HAZARD IDENTIFICATION

GHS INFORMATION

Classification:

- Flammable Liquids, Category 2
- Skin Corrosion/Irritation- Category 2
- Germ Cell Mutagenicity, Category 1B
- Carcinogenicity, Category 1B
- Specific Target Organ Toxicity (Single Exposure), Category 3
- Aspiration Hazard, Category 1
- Chronic Hazard to Aquatic Environment- Category 2

Label Elements

Hazard Pictogram(s):



Signal Word: **Danger**

Hazard

Statements:

Highly flammable liquid and vapour.

Causes Skin irritation

May cause genetic defects

May cause cancer.

May cause respiratory irritation.

May cause drowsiness or dizziness.

May be fatal if swallowed and enters airways.

Toxic to aquatic life with long lasting effects

Precautionary Statements

Prevention: Obtain special instructions before use.

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

Keep away from all sources of ignition. No smoking.

Keep container tightly closed.

Ground/bond container and receiving equipment.

Use explosion-proof electrical, ventilating, and lighting equipment. Use only non-sparking tools.

Take precautionary measures against static discharge.

Avoid breathing dust, fume, gas, mist, vapours or spray

Wash hands, face and all exposed skin thoroughly after handling

Use only outdoors or in a well-ventilated area.

Wear protective clothing, gloves, eye/face protection and suitable respirator

Response: If swallowed: Immediately call a poison center or doctor.

If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

If skin irritation occurs: Get medical advice/ attention.

If inhaled: Remove person to fresh air and keep comfortable for breathing.

Take off contaminated clothing and wash before use.

Wear eye protection if necessary. Remove and discard if necessary.

Use eye protection if necessary. Continue

rinsing. Call a poison center or doctor if you

feel unwell.

Do NOT induce vomiting.

In case of fire: Use dry chemical, CO₂, water spray or alcohol-resistant foam to extinguish.

Storage: Store in a well-ventilated place. Keep container tightly closed.

Keep cool.

Store locked up.

Disposal: Dispose of contents/container in accordance with applicable regional, national and local laws and regulations.

DANGEROUS GOODS CLASSIFICATION

Powerplus Fuel 102 is classified as Dangerous Goods according to the Australian Code for the Transport of Dangerous Goods by Road and Rail.

Class 3 Flammable liquid

SECTION 3: COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Name:	Synonyms	Proportion:	CAS Number:
Gasoline	-----	70-90%	8006-61-9
Ethanol	-----	<30%	64-17-5
Toluene	-----	<30%	108-88-3

SECTION 4: FIRST AID MEASURES

If poisoning occurs, contact a doctor or Poisons Information Centre.

Swallowed:

If swallowed: Do NOT induce vomiting. Immediately call a poison center or doctor. If vomiting occurs naturally, have victim lean forward to reduce the risk of aspiration. Never give anything by mouth to an unconscious person. If breathing or the heart stops, trained personnel should immediately begin artificial respiration (AR) or cardiopulmonary resuscitation (CPR) respectively. Get medical attention immediately.

Acute and delayed symptoms and effects: May be fatal if swallowed and enters airways. May cause gastrointestinal irritation. Signs/symptoms may include abdominal pain, stomach upset, nausea, vomiting and diarrhea.

Eyes:

If in eyes: Rinse cautiously with water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

Acute and delayed symptoms and effects: Causes serious eye irritation. Signs/symptoms may include redness, swelling, pain, tearing, and blurred or hazy vision. Ethanol may cause painful sensitization to light, chemical conjunctivitis and corneal damage.

Skin:

If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. Call a poison center or doctor if you feel unwell.

Acute and delayed symptoms and effects: May cause skin irritation. Signs/symptoms may include localized redness, swelling, and itching.

Inhaled:

If inhaled: Remove person to fresh air and keep comfortable for breathing. Call a poison center or doctor if you feel unwell. If breathing or the heart stops, trained personnel should immediately begin artificial respiration (AR) or cardiopulmonary resuscitation (CPR) respectively. Get medical attention immediately.

Acute and delayed symptoms and effects: May cause drowsiness or dizziness. May cause respiratory irritation. Signs/symptoms may include cough, sneezing, nasal discharge, headache, hoarseness, and nose and throat pain. Excessive inhalation may cause headache, dizziness, confusion, loss of appetite and/or loss of consciousness.

First Aid Facilities: First aid kits, safety showers, eye wash stations

Advice to Doctor: Treat symptomatically. Effects may be delayed.

SECTION 5: FIRE FIGHTING MEASURES

Flammability: Flammable liquid. May form flammable vapour mixtures with air. Flameproof equipment necessary in area where this chemical is being used. Nearby equipment must be earthed. Electrical requirements for work area should be assessed according to AS 3000. Vapour may travel a considerable distance to source of ignition and flash back. Avoid all ignition sources. All potential sources of ignition must be eliminated both in and near the work area. DO NOT SMOKE.

Suitable extinguishing media: Small Fire: Dry agent, CO2, alcohol resistant foam

Hazards from combustion products: Combustion products include oxides of carbon.

Special protective precautions and equipment for fire fighters: Inhalation or contact with material may irritate or burn skin and eyes. Fire may produce irritating, corrosive and/or toxic gases. Vapors may cause dizziness or suffocation. Runoff from fire control may cause pollution. Wear positive pressure self-contained breathing apparatus (SCBA). Structural firefighters' protective clothing will only provide limited protection.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Emergency Procedure: As an immediate precautionary measure, isolate spill or leak area for at least 50 meters (150 feet) in all directions. Keep unauthorized personnel away. Stay upwind. Keep out of low areas. Ventilate closed spaces before entering. ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). All equipment used when handling the product must be grounded.

Personal Precautions: Do not touch or walk through spilled material. Use personal protection recommended in Section 8.

Environmental Precautions: Prevent entry into waterways, sewers, basements or confined areas.

Methods for Containment: Stop leak if you can do it without risk. A vapor suppressing foam may be used to reduce vapors.

Methods for Clean-Up: Absorb or cover with dry earth, sand or other non-combustible material and transfer to containers. Use clean non-sparking tools to collect absorbed material.

Other Information: See Section 13 for disposal considerations.

SECTION 7: HANDLING AND STORAGE

Handling: Do not swallow. Avoid breathing mist, vapours, or spray. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Keep away from heat, sparks, open flames, and hot surfaces. – No smoking. Keep container tightly closed.

Storage: Ground/bond container and receiving equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Wash thoroughly after handling. Use only outdoors or in a well-ventilated area. See Section 8 for information on Personal Protective Equipment.

SECTION 8: EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Standards: National Occupational Exposure Standard (NES) Australian Safety & Compensation Council, ASCC (formerly NOHSC)
Powerplus 102 Fuel

Ethanol [CAS No. 64-17-5]

ACGIH: 1000 ppm (TWA); A3 (2008)

OSHA: 1000 ppm

(TWA), 1900 mg/m³ (TWA);

Gasoline [CAS No. 8006-61-9]

ACGIH: 900 ppm (TWA);

Toluene [CAS No. 108-88-3]

ACGIH: 50 ppm (TWA);

Notes: All occupational exposures to atmospheric contaminants should be kept to as low a level as is workable (practicable) and in all cases to below the National Standard.
These Exposure Standards are guides to be used in the control of occupational health hazards.
These 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.
TWA (Time Weighted Average): the time-weighted average airborne concentration over an eight-hour working day, for a five-day working week over an entire working life.
According to current knowledge this concentration should neither impair the health of, nor cause undue discomfort to, nearly all workers.
STEL (Short Term Exposure Limit): the average airborne concentration over a 15 minute period that should not be exceeded at any time during a normal eight-hour work day.

Biological Limit Values:
ENGINEERING CONTROLS

Ventilation:

Use ventilation adequate to keep exposures (airborne levels of dust, fume, vapour, gas, etc.) below recommended exposure limits. Use explosion-proof electrical, ventilating, and lighting equipment.

- Special Consideration for Repair &/or Maintenance of Contaminated Equipment:** Empty containers retain residue (liquid and/or vapour) and are dangerous. Do not pressure cut, weld, braze, solder, drill, grind or expose such containers to heat, flame, sparks, static electricity, or other sources of ignition. Vapour is heavier than air – prevent concentration in hollows or sumps. Do not enter confined spaces where vapour may have collected. Keep containers closed when not in use.

PERSONAL PROTECTIVE EQUIPMENT (PPE)



- Personal Hygiene**
- Skin Protection:**
 - Body Protection**
 Minimise all forms of skin contact. In the event of risk from splashing wear e.g. Nitrile, PVC, or neoprene rubber apron. Wear safety shoes or boots which are chemical and petroleum distillate resistant.
 - Hand Protection:**
 Select hand gloves tested to a relevant standard (e.g. Europe EN374, US F739). When prolonged or frequent repeated contact occurs, Nitrile gloves may be suitable. (Breakthrough time of > 240 minutes). For incidental contact/splash protection Neoprene or PVC gloves may be suitable. Breakthrough times for gloves varies depending on, e.g. chemical resistance, material thickness, frequency and duration of contact. Selection should also take into account other usage requirements, e.g. dexterity, heat resistance, other chemical substances handled. Always seek advice from glove suppliers. Contaminated gloves should be replaced. Personal hygiene is a key element of effective hand care. Gloves must only be worn on clean hands. After using gloves, hands should be washed and dried thoroughly. Application of a non-perfumed moisturizer is recommended.
- Eye Protection:**
 - Eye Protection**
 Wear safety glasses or full face shield if splashes are likely to occur.
- Respiratory Protection:**
 - Care should be taken to keep exposures below applicable occupational exposure limits. If this cannot be achieved, use of a respirator fitted with an organic vapour cartridge combined with a particulate pre-filter should be considered. Where air-filtering respirators are unsuitable (e.g. where airborne concentrations are high, there is a confined space or a risk of oxygen deficiency) use appropriate positive pressure breathing apparatus.
- Thermal Protection:**
 - None should be needed under normal circumstances.
- Smoking & Other Dusts**
 - Smoking must be prohibited in all areas where this product is used - see safety information on flammability.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Mobile clear yellow liquid, free of any foreign matter
Odour:	Characteristic
pH, at stated concentration:	N/A
Vapour pressure:	No data
Vapour Density:	No data available
Boiling Point (°C):	30-205°C
Freezing/Melting Point (°C):	No data available.
Solubility:	Insoluble
Specific Gravity (H₂O = 1):	0.75-0.78 at 15°C.
FLAMMABLE MATERIALS	
<input type="checkbox"/> Flash Point:	<4°C
<input type="checkbox"/> Flash Point Method:	No data available
<input type="checkbox"/> Flammable (Explosive) Limit - Upper:	7.6% maximum.

- Flammable (Explosive) Limit – Lower:** 1.4%) minimum.
- Auto ignition Temperature:** No data available
- ADDITIONAL PROPERTIES**
- Evaporation Rate** No data available.
- Volatile Organic Compounds Content (VOC)** (as specified by the Green Building Council of Australia) Not Applicable
- % Volatiles** No data available.

SECTION 10: STABILITY AND REACTIVITY

- Reactivity:** No reactivity hazards are known for the material.
- Chemical Stability:** This material is thermally stable when stored and used as directed.
- Possibility of Hazardous Reactions:** None known.
- Conditions to Avoid:** Elevated temperatures and sources of ignition.
- Incompatible Materials:** Oxidizing agents
- Hazardous Decomposition Products:** Oxides of carbon and nitrogen. smoke and other toxic fumes.

SECTION 11: TOXICOLOGICAL INFORMATION

Health effects information is based on reported effects in use from overseas and Australian reports.

Toxicological Data:

Component Toxicity

Component	CAS No.	LD50 oral	LD50 dermal	LC50
Ethanol	64-17-5	7060 mg/kg (rat)	20000 mg/kg (rabbit)	20000 ppm (rat); 10H
Gasoline	8006-61-9	Not available.	Not available.	300000 mg/m ³ (rat); 5M
Toluene	108-88-3	>2000mg/kg	>5000mg/kg	

Effects: Acute

- Inhaled:** Material may be an irritant to mucous membranes and respiratory tract. Inhalation of vapour can result in headaches, dizziness and possible nausea. Inhalation of high concentrations can produce central nervous system depression, which can lead to loss of co-ordination, impaired judgement and if exposure is prolonged, unconsciousness.
- Eyes:** May be an eye irritant.
- Skin:** Contact with skin will result in irritation.
- Swallowed:** Swallowing can result in nausea, vomiting and irritation of the gastrointestinal tract. May cause lung damage if swallowed. Small amounts of liquid aspirated into the respiratory system during ingestion or vomiting may cause bronchopneumonia or pulmonary oedema.

Acute Toxicity : This material has been classified as non-hazardous (inhalation, skin contact & ingestion)
Acute toxicity estimate >2000mg/kg

Corrosion/Irritancy: Skin: this material has been classified as Category 2 Hazard (irritant to skin).

Aspiration hazard: This material has been classified as Category 1 Hazard.

Specific target organ toxicity (single exposure): This material has been classified as a Category 3 Hazard. Exposure via inhalation may result in depression of the central nervous system.

Chronic toxicity

Mutagenicity & Carcinogenicity: This material has been classified as Category 1B hazard.

Reproductive toxicity: This material has been classified as non-hazardous.

Specific target organ toxicity (repeat exposure): This material has been classified as non-hazardous.

SECTION 12: ECOLOGICAL INFORMATION

Long-term aquatic hazard: This material has been classified as Category chronic 2 hazard. Acute toxicity estimate based on ingredients : 1-10mg/L

Persistence / Degradability: Not available.

Bioaccumulation / Accumulation: Not available.

Mobility in Environment: Not available.

Other Adverse Effects: Not available.

SECTION 13: DIPOSAL CONSIDERATIONS

Disposal should be in accordance with applicable regional, national and local laws and regulations. Local regulations may be more stringent than regional or national requirements.

SECTION 14: TRANSPORT INFORMATION

Proper Shipping Name:	PETROL
UN number:	1203
DG Class:	3
Subsidiary Risk 1:	None Allocated
Packaging Group:	II
HAZCHEM code:	3YE
Marine Pollutant:	No
Special Precautions for User:	Refer to incompatibilities in section 7 and stability and reactivity information in section 10.
ADDITIONAL TRANSPORT REQUIREMENTS:	Nil

SECTION 15: REGULATORY INFORMATION

Poisons Schedule: -

SECTION 16: OTHER INFORMATION

For further information on this product, please contact:

ACB Group (ABN 79 724 186 134)

118 Swann Drive, Derrimut Victoria-3030, Australia.

Phone: +61 3 93690220

Fax: +61 3 93690883

ADDITIONAL INFORMATION

Australian Standards References:

AS 1020	The Control of undesirable static electricity.
AS 1076	Code of Practice for selection, installation and maintenance of electrical apparatus and associated equipment for use in explosive atmospheres (other than mining applications) – Parts 1 to 13.
AS/NZS 1336	Recommended Practices for Occupational Eye Protection
AS/NZS 1715	Selection, Use and Maintenance of Respiratory Protective Devices
AS/NZS 1716	Respiratory Protective Devices
AS 1940	The Storage and Handling of Flammable and Combustible Liquids.
AS 2161	Industrial Safety Gloves and Mittens (excluding electrical and medical gloves)
AS 2380	Electrical equipment for explosive atmospheres – Explosion Protection Techniques (Parts 1 to 9).
AS 3000	Electrical installations (known as the Australian/New Zealand Wiring Rules).

Other References:

NOHSC:2011(2003)	National Code of Practice for the Preparation of Material Safety Data Sheets 2nd Edition, April 2003, National Occupational Health and Safety Commission.
NOHSC; 2012 (1994)	National Code of Practice for the Labeling of Workplace Substances, March 1994, Australian Government Publishing Service, Canberra.
NES	National Occupational Exposure Standards for workplace Atmospheric Contaminants (NES) Australian Safety and Compensation Council, ASCC (Formerly NOHSC) 1995 as amended.
ADG Code 6 th Edition	Australian Dangerous Goods Code 6 th Edition

AUTHORISATION

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