

SHELL RACING FUEL 100 PLUS

Material Safety Data Sheet

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Date of Issue: 18 June 1997

Reviewed: 22 Sept 2006

Amended 22 Sept 2006

STATEMENT OF HAZARDOUS NATURE

Shell Racing Fuel 100 Plus is classified as a hazardous substance according to HSNO Regulations 2001. Classified as a dangerous good under NZS5433

Flammable liquid.

COMPANY

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24 HR TELEPHONE

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IDENTIFICATION

Product Name	Shell Brand Name and Grade	Code
	SHELL RACING FUEL 100 PLUS	32101
Other Names	Motor spirit or gasoline or petrol	
Uses	High-octane fuel for motor racing and jet boats.	
U.N. Number	1203	
Dangerous Goods Class	3	
Hazchem Code	3[Y]E	
Packaging Group	II	
Shipping Name	GASOLINE	

PHYSICAL DESCRIPTION / PROPERTIES

CHARACTERISTIC	UOM	
Appearance and Odour		Green liquid with motor spirit odour.
Chemical Reactivity		Stable.
Specific Gravity	kg/L @ 15°C	0.70
Boiling Point	°C	IBP approx 30; FBP approx 170
Vapour Pressure	kPa @ 37.8°C	38-48.5
Vapour Density	Air = 1	>3
Solubility [water]		Negligible
Flash Point	°C	<-40
Autoignition	°C	Approx 400.
Flammability Limits	% v/v in air	LEL approx 1% v/v UEL approx 6% v/v

INGREDIENTS

Complex mixture of paraffins, cycloparaffins, aromatics and olefinic hydrocarbons with carbon numbers predominantly in the C4 to C12 range.

Contains lead alkyl antiknock additives. Maximum lead content 0.85 g/L. May also contain several additives at <0.1% v/v each. Total aromatic hydrocarbons present in the fuel usually in the range 10%-20%v/v. Product is dyed green for identification.

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NAME	Cas No	Proportion;
Gasoline, low boiling point naphtha	86290-81-5	90-100 %
Benzene	71-43-2	0.1-5.0%
Tetraethyl lead	78-00-2	0-0.189%

HEALTH HAZARD INFORMATION

HEALTH EFFECTS

SWALLOWED: Moderately toxic. Product tends to break up into foam if the patient vomits. Upon aspiration into the lungs, chemical pneumonitis may develop.

SKIN: Mildly irritating to skin. May cause dermatitis due to defatting effect, if in contact with skin. Where long and regular physical contact with these oils is to occur, expert* medical advice should be sought as to the need for periodic skin examination and employees are instructed to seek medical advice in the case of any skin abnormality. (* Refer to note (i) in 'Special Notes'.)

EYE: Mildly irritating to eyes.

INHALED: Toxic by inhalation. Irritating to respiratory system. Prolonged exposure may cause somnolence and narcosis.

FIRST AID

SWALLOWED:

If swallowed, do NOT induce vomiting. Give milk or water to drink.

The main hazard following accidental ingestion is aspiration of the liquid into the lungs, to which children are more susceptible than adults.

SEND TO HOSPITAL IMMEDIATELY.

EYE:

Flood with water for at least 15 minutes, blinking as often as possible. Do not force the eyelid open. If irritation persists, obtain medical attention.

SKIN:

For gross contamination: Drench contaminated area with water and remove contaminated clothing.

Wash with soap and water.

Obtain medical attention for any persistent skin irritation or abnormality.

Launder contaminated clothing before reuse.

INHALED

Move victim to fresh air.

Keep the patient warm and at rest.

If unconscious, place in recovery position. If not breathing, apply artificial respiration.

Give cardiac massage if necessary

SEND TO HOSPITAL.

ADVICE TO DOCTOR

Maintain airway & vital functions.

ORAL: Gastrointestinal irritation, nausea, vomiting and cramping. CNS depression, ranging from mild headache to anaesthesia and coma. Pulmonary irritation secondary to exhalation of solvent.

Administration of medicinal liquid paraffin may reduce absorption through the digestive tract.

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Lavage with cuffed tube if large quantity ingested. Aspiration into the lungs may cause chemical pneumonitis. Observe for 24 hours for chemical pneumonitis. Prophylactic antibiotics useful. Corticosteroid therapy may also be indicated. Avoid sympathomimetic amines. Longer-term medical surveillance may be necessary.

INHALATION: CNS depression characterised by headache and dizziness.

The benzene content is regarded as too low to contribute to the acute toxicity of gasoline.

PRECAUTIONS FOR USE

EXPOSURE STANDARDS

Workplace Exposure Standard 2001 (WES 2002).

Tetraethyl lead - 0.1 mg/m³

Benzene – 5 ppm, 16 mg/m³.

ENGINEERING CONTROLS

Petrol has a sufficiently high vapour pressure to allow the hazardous build up of vapour in poorly ventilated areas.

Maintain adequate ventilation. Maintain air levels below TLV.

In enclosed areas local exhaust ventilation usually required. Provide explosion proof ventilation system. Performance of ventilation system should be regularly monitored. If air contaminant levels exceed TLV, respiratory protection required. See also Personal Protection.

PERSONAL PROTECTION

Since we cannot anticipate or control the many different conditions under which this information and our products may be used, each user should review these recommendations in the specific context of the intended application and follow where appropriate.

For normal use:

DO NOT SMOKE OR STRIKE MATCHES WHEN HANDLING THIS PRODUCT.

Avoid contact with the skin and eyes and avoid breathing vapours, fumes or spray mists. If skin contact occurs, wash thoroughly.

Where liquid is liable or likely to come into contact with the person irrespective of spray mists or vapour levels in the area, the following equipment should be included in the previous precautions:

- (1) Goggles or face shield.
- (2) PVC gloves.
- (3) Cotton overalls or PVC apron and sleeves, or full PVC covering.
- (4) PVC boots.

Where high contaminant spray mist or vapour levels exist i.e.: approaching the TLV, or are expected to arise the following additional equipment is recommended: -

- (1) For short elevated exposures, e.g. spillages:- Appropriate organic cartridge respirator complying with NZS/A51716 "Respiratory Protective Devices". Ensure working life of cartridge is not exceeded. NB. If vapour levels exceed the TLV by more than ten times, air-supplied apparatus should be used.
- (2) For prolonged exposures and confined spaces: - Full-face air supplied or self-contained breathing apparatus. Refer to NZS/A51715 and 1716 for selection and use of correct type. NOTE: NZS/AS 1715-1991 (Selection, Use and Maintenance of Respiratory Protective Devices) and NZS/AS 1716-1991 (Respiratory Protective Devices) should be read in conjunction with each other.

Observe good personal hygiene - 'wash hands thoroughly with soap or hand cleanser before eating,

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drinking or smoking and before using the toilet. No significant skin contact including that from clothing contamination should be allowed. If contamination occurs, change clothing. Clothing wet with product should be soaked with water before removing to prevent the possibility of ignition by static electricity discharges.

Clothing soaked with product is ideally removed under a running shower. Eye wash fountains and safety showers should be available for emergency use. Launder contaminated clothing before reuse. Clothing should be air dried in a well-ventilated area before laundering. Gloves or footwear internally contaminated should be laundered or discarded.

FLAMMABILITY

Highly flammable. Isolate from sources of heat, naked flames or sparks. Take precautions against static electricity discharges. Earth and bond all process equipment including tanks and drums. Explosive air-vapour mixture may form; ensure adequate ventilation. Keep away from strongly oxidizing materials. Ensure equipment and fittings are flame proofed. See Safe Handling Information - Fire/Explosion Hazard.

SAFE HANDLING INFORMATION

STORAGE AND TRANSPORT

Store in a cool place. Store container in well ventilated place. Store away from heat, naked flames or sparks. Store away from strong oxidizing agents. Keep containers closed at all times. Keep away from food, foodstuffs, drink or clothing. Take precautions against static electricity discharges.

Apply correct labels if material to be transported.

On site storage facilities must meet the relevant regulations.

This product has a Dangerous Goods Classification 3 according to NZS5433 standard for road transport of hazardous goods. Apply correct labels for transport purposes.

UN No.:	1203
Proper shipping name:	GASOLINE
DG Class:	3
Hazchem code:	3[Y]E
Packing Group:	II

Marine Transport:

Classified as Dangerous Goods by the criteria of the International Maritime Dangerous Goods Code (IMDG Code) for transport by Sea

UN No.:	1203
Class:	3
Packing Group:	II
Proper shipping Name:	GASOLINE

Air Transport:

Classified as Dangerous Goods by the Criteria of the International Air Transport Association (IATA) Dangerous Goods Regulations for transport by air.

UN No.:	1203
Class:	3
Packing Group:	II
Proper shipping Name:	GASOLINE

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SPILLS AND DISPOSAL

GENERAL: Extinguish or remove all sources of ignition. Clear area of all unprotected personnel. Wear appropriate protection equipment. Shut off source of leak if safe to do so. Dike and contain spill with sand or earth. Allow evaporating if conditions permit.

MINOR: Absorb the liquid with sand, earth or other absorbent.

MAJOR: Pump up excess liquid and absorb residue with sand, earth or other absorbent.

On large storage sites fitted with interceptors the product may be washed into the interceptor with a fine water spray. Clean contaminated area with water and detergent.

WASTE MATERIAL DISPOSAL: Dispose of used absorbent in an approved landfill or municipal tip in accordance with local regulations. Keep away from heat, naked flame or sparks. Do not flush to drains or sewers. Do not contaminate streams, rivers or watercourses. Inform local authority if liquid enters drains, sewers, streams, etc.

FIRE / EXPLOSION HAZARD

Combustible liquid. Explosive air-vapour mixture may form. Explosive when mixed with oxidising substances. Earth and bond all transfer equipment including tanks and drums. Keep away from heat, naked flames or sparks. Keep away from oxidizing agents. Have adequate fire equipment available. Evacuate personnel and remove fire sources to distances beyond those at which the gas detector indicates a gas concentration less than 5% of the lower explosion limit (LEL). Advise Fire Brigade of nature of hazard. In this case: petrol, which has a HAZCHEM rating of 3[Y]E.

Keep pipelines, containers, etc. cool with water spray. Foam, Carbon Dioxide or Dry Chemical extinguishers required. For large fires use foam. Avoid applying water directly onto product unless using an approved fog nozzle. Do not use more water than is necessary. Contain runoff.

In smoke or fumes wear self-contained breathing apparatus. Carbon Monoxide and unidentifiable organic compounds may be formed during combustion.

REGULATORY INFORMATION

This product is classified as a 3.1A– Flammable liquid; Very high hazard, according to the Hazardous Substances (Classification) Regulation 2001.

This product is classified as a 6.1E – Substance that is mild acutely toxic, according to the Hazardous Substances (Classification) Regulation 2001.

This product is classified as a 6.3B– Substance that is mildly irritating to the skin, according to the Hazardous Substances (Classification) Regulation 2001.

This product is classified as a 6.7B– Substance that is suspected human carcinogen, according to the Hazardous Substances (Classification) Regulation 2001.

This product is classified as a 6.8A– Substance that is a known or presumed human reproductive or development toxicant, according to the Hazardous Substances (Classification) Regulation 2001.

This product is classified as a 9.1B– Substance that is ecotoxic in the aquatic environment, according to the Hazardous Substances (Classification) Regulation 2001.

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OTHER INFORMATION

SPECIAL NOTES

- (i) Refer to the Vocational Register of Dermatologists; published by the Medical Council of New Zealand. Telephone 04-384 7635
- (ii) In dry-cleaning oil contaminated clothing it is important that the machine is not overloaded and that freshly distilled solvent is used for each batch, also that clothing is given a final rinse in clean solvent. If filtered, rather than distilled solvent is used or the rinse is omitted, oil will be left in the clothing.

CONTACT POINT

Shell New Zealand Customer Service Centre
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