

# SAFETY DATA SHEET



98 Octane Petrol (Ultimate)

## Section 1. Identification

<b>Product name</b>	98 Octane Petrol (Ultimate)
<b>Product code</b>	0000003087
<b>SDS no.</b>	0000003087
<b>Historic SDS no.</b>	YSUY3
<b>Use of the substance/mixture</b>	Use only as a motor fuel for spark ignition engines. NOT for aviation use. Should NOT be used as a solvent nor cleaning agent.
<b>Product type</b>	Liquid.
<b>Supplier</b>	bp Oil New Zealand Limited Level 2 Stantec Building 105 Carlton Gore Road Newmarket Auckland New Zealand 1023  Phone 0800 800 027 (Monday to Friday, 9am to 5pm) Email: <a href="mailto:Customerenquiries@se1.bp.com">Customerenquiries@se1.bp.com</a>
<b>Emergency telephone number</b>	Tel: 0800 805 111
<b>New Zealand National Poisons Centre</b>	0800 764 766

## Section 2. Hazards identification

<b>HSNO Classification</b>	<input checked="" type="checkbox"/> FLAMMABLE LIQUIDS - Category 1 <input type="checkbox"/> GERM CELL MUTAGENICITY - Category 1 <input type="checkbox"/> CARCINOGENICITY - Category 2 <input type="checkbox"/> REPRODUCTIVE TOXICITY - Category 1 <input type="checkbox"/> ASPIRATION HAZARD - Category 1 <input type="checkbox"/> LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 2
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This material is classified as hazardous according to criteria in the Hazardous Substances (Hazard Classification) Notice 2020.

This material is classified as DANGEROUS GOODS according to criteria in New Zealand Standard 5433:2012 Transport of Dangerous Goods on Land.

**Routes of entry** Dermal contact. Eye contact. Inhalation. Ingestion.

### GHS label elements

**Signal word** Danger

**Hazard statements**  Extremely flammable liquid and vapour.  
May be fatal if swallowed and enters airways.  
May cause genetic defects.  
Suspected of causing cancer.  
May damage fertility or the unborn child.  
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. Wear protective gloves, protective clothing, eye protection, face protection, or hearing protection. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Avoid release to the environment.

**Response**  Collect spillage. IF exposed or concerned: Get medical attention. IF SWALLOWED: Immediately call a POISON CENTER or physician. Do NOT induce vomiting. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water.

**Product name** 98 Octane Petrol (Ultimate)

**Product code** 0000003087

**Page:** 1/13

**Version** 3

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**Format** New Zealand

**Language** ENGLISH

( ENGLISH )

## Section 2. Hazards identification

### Storage

Store locked up. Store in a well-ventilated place. Keep cool.

### Disposal

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

### Symbol



### 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/information on ingredients

### Substance/mixture

Mixture

Methyl tert-butyl ether: <0.2%

Ingredient name	% (w/w)	CAS number
Petrol	≥90	86290-81-5
Benzene	<1	71-43-2
diisopropyl ether	<1	108-20-3
2-methylpropan-2-ol	<1	75-65-0

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 or the environment and hence require reporting in this section.

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

## Section 4. First aid measures

### Description of necessary first aid measures

#### Inhalation

If inhaled, remove to fresh air. 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.

#### 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.

#### 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.

### 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.

#### 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

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

#### Not suitable

Do not use water jet.

### Specific hazards arising from the chemical

Extremely flammable liquid and vapour. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain. 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. This material is toxic to aquatic life with long lasting effects. 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 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 combustion products

Combustion products may include the following:  
carbon oxides (CO, CO<sub>2</sub>) (carbon monoxide, carbon dioxide)

### Hazchem code

3YE

### Special precautions 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.

## Section 6. Accidental release measures

### Personal precautions, protective equipment and emergency procedures

#### For non-emergency personnel

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".

#### 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. Collect spillage. 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

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 swallow. Aspiration hazard if swallowed. Can enter lungs and cause damage. Never siphon by mouth. Avoid breathing vapour or mist. 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.

### 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 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/personal protection

### Control parameters

#### Occupational exposure limits

Ingredient name	Exposure limits
Petrol	<p><b>ACGIH TLV (United States).</b>            TWA: 300 ppm 8 hours. Issued/Revised: 5/1996            TWA: 890 mg/m<sup>3</sup> 8 hours. Issued/Revised: 5/1996            STEL: 500 ppm 15 minutes. Issued/Revised: 5/1996            STEL: 1480 mg/m<sup>3</sup> 15 minutes. Issued/Revised: 5/1996</p>
Benzene	<p><b>NZ HSWA 2015 - GRWM 2016 (New Zealand). Absorbed through skin.</b>            WES-TWA: 0.05 ppm 8 hours. Issued/Revised: 11/2020            WES-TWA: 0.16 mg/m<sup>3</sup> 8 hours. Issued/Revised: 11/2020</p>
diisopropyl ether	<p><b>NZ HSWA 2015 - GRWM 2016 (New Zealand).</b>            WES-STEL: 1300 mg/m<sup>3</sup> 15 minutes. Issued/Revised: 1/1994            WES-STEL: 310 ppm 15 minutes. Issued/Revised: 1/1994            WES-TWA: 1040 mg/m<sup>3</sup> 8 hours. Issued/Revised: 1/1994            WES-TWA: 250 ppm 8 hours. Issued/Revised: 1/1994</p>
2-methylpropan-2-ol	<p><b>NZ HSWA 2015 - GRWM 2016 (New Zealand).</b>            WES-STEL: 455 mg/m<sup>3</sup> 15 minutes. Issued/Revised: 9/2010            WES-STEL: 150 ppm 15 minutes. Issued/Revised: 9/2010            WES-TWA: 303 mg/m<sup>3</sup> 8 hours. Issued/Revised: 9/2010            WES-TWA: 100 ppm 8 hours. Issued/Revised: 9/2010</p>

#### Biological exposure indices

Benzene	<p><b>NZ HSWA 2015 - HSWR 2016 (New Zealand, 11/2020)</b>            BEI: 2 µg/g creatinine, S-phenylmercapturic acid [in urine]. Sampling time: end of shift.</p>
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#### Recommended monitoring procedures

Reference should be made to appropriate monitoring standards. Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

#### 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.

## Section 8. Exposure controls/personal protection

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

#### 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 protection

Chemical splash goggles.

#### 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.

#### 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

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.

## 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

Pale colour. Yellow. [Light]

#### Odour

Petrol [Strong]

#### Odour threshold

0.025 ppm (Based on Petrol)

#### pH

Not applicable. Based on Solubility in Water (insoluble in water.)

#### Melting point/freezing point

<-60°C (<-76°F) (Based on Petrol)

#### Boiling point, initial boiling point, and boiling range

30 to 210°C (86 to 410°F)

#### Drop Point

Not available.

#### Flash point

Closed cup: <-40°C (<-40°F)

#### Auto-ignition temperature

>350°C (>662°F)

#### Flammability

Not applicable. Based on physical state.

#### Lower and upper explosion limit/flammability limit

Lower: 1.4%  
Upper: 7.6%

#### Vapour pressure

27.1 to 45.1 kPa (203.04 to 338.4 mm Hg) [20°C (68°F)]

#### Relative vapour density

>1 [Air = 1]

#### Density

750 kg/m<sup>3</sup> (0.75 g/cm<sup>3</sup>)

#### Solubility(ies)

Media	Result
<input checked="" type="checkbox"/> Cold water	Not soluble
water	Not soluble

## Section 9. Physical and chemical properties

<b>Partition coefficient: n-octanol/water</b>	2 to 7 (Based on Gasoline)
<b>Decomposition temperature</b>	Not observed to decompose by final boiling point: >210°C (>410°F)
<b>Viscosity</b>	Kinematic: 0.4 to 0.55 mm <sup>2</sup> /s (0.4 to 0.55 cSt) at 40°C
<b>Explosive properties</b>	<input checked="" type="checkbox"/> Based on Low boiling point naphtha - Not considered explosive based on structural and oxygen balance considerations. Vapours may form explosive mixtures with air.
<b>Oxidising properties</b>	Based on Low boiling point naphtha - Not considered oxidizing based on structural considerations.
<b>Particle characteristics</b>	
<b>Median particle size</b>	<input checked="" type="checkbox"/> Not applicable.

## Section 10. Stability and reactivity

<b>Chemical stability</b>	The product is stable.
<b>Possibility of hazardous reactions</b>	Under normal conditions of storage and use, hazardous reactions will not occur. Under normal conditions of storage and use, hazardous polymerisation will not occur.
<b>Conditions to avoid</b>	Avoid all possible sources of ignition (spark or flame). Avoid excessive heat.
<b>Incompatible materials</b>	Reactive or incompatible with the following materials: oxidising materials
<b>Hazardous decomposition products</b>	Under normal conditions of storage and use, hazardous decomposition products should not be produced.

## Section 11. Toxicological information

### Information on likely routes of exposure

<b>Inhalation</b>	<input checked="" type="checkbox"/> Vapour inhalation under ambient conditions is not normally a problem due to low vapour pressure.
<b>Ingestion</b>	<input checked="" type="checkbox"/> Aspiration hazard if swallowed -- harmful or fatal if liquid is aspirated into lungs.
<b>Skin contact</b>	<input checked="" type="checkbox"/> No known significant effects or critical hazards.
<b>Eye contact</b>	No known significant effects or critical hazards.

### Symptoms related to the physical, chemical and toxicological characteristics

<b>Inhalation</b>	<input checked="" type="checkbox"/> No specific data.
<b>Ingestion</b>	<input checked="" type="checkbox"/> Adverse symptoms may include the following: nausea or vomiting reduced foetal weight increase in foetal deaths skeletal malformations
<b>Skin contact</b>	<input checked="" type="checkbox"/> No specific data.
<b>Eye contact</b>	<input checked="" type="checkbox"/> No specific data.
<b>Acute toxicity</b>	

Product/ingredient name	Test	Species	Result	Exposure	Remarks
<input checked="" type="checkbox"/> Petrol	LC50 Inhalation Vapour	Rat	>7630 mg/m <sup>3</sup> Nominal	4 hours	Based on Gasoline
	LC50 Inhalation Vapour	Rat	>5610 mg/m <sup>3</sup> analytical	4 hours	Based on Gasoline
	LD50 Dermal	Rabbit	>2000 mg/kg	-	Based on Gasoline
	LD50 Oral	Rat	>5000 mg/kg	-	Based on Gasoline
diisopropyl ether	LC50 Inhalation Vapour	Rat	40.5 mg/m <sup>3</sup>	1 hours	-

## Section 11. Toxicological information

	LD50 Dermal	Rabbit	2000 mg/kg	-	-
	LD50 Oral	Rat	8470 mg/kg	-	-
2-methylpropan-2-ol	LC50 Inhalation Vapour	Rat	>10000 ppm	4 hours	-
	LD50 Oral	Rabbit	3559 mg/kg	-	-
	LD50 Oral	Rat	2743 mg/kg	-	-

**Conclusion/Summary** Not available.

### Irritation/Corrosion

Product/ingredient name	Species	Result	Score	Exposure	Observation	Conc.	Remarks
Petrol	Rabbit	Eyes - Non-irritating to the eyes.	-	-	-	-	Based on Gasoline
	Rabbit	Skin - Irritant	-	-	-	-	Based on Gasoline

### Sensitisation

Product/ingredient name	Route of exposure	Species	Result	Remarks
Petrol	skin	Guinea pig	Not sensitising	Based on Gasoline

### Potential chronic health effects

<b>General</b>	Solvent "sniffing" (abuse) or intentional overexposure to vapours can produce serious central nervous system effects, including unconsciousness, and possibly death.
<b>Inhalation</b>	May be harmful by inhalation after often repeated exposure. Vapour, mist or fume may irritate the nose, mouth and respiratory tract.
<b>Ingestion</b>	Ingestion of large quantities may cause nausea and diarrhoea. If swallowed, may irritate the mouth, throat and digestive system. If swallowed, may cause abdominal pain, stomach cramps, nausea, vomiting, diarrhoea, dizziness and drowsiness.
<b>Skin contact</b>	Prolonged or repeated contact can defat the skin and lead to irritation, cracking and/or dermatitis.
<b>Eye contact</b>	Vapour, mist or fume may cause eye irritation. Exposure to vapour, mist or fume may cause stinging, redness and watering of the eyes.
<b>Carcinogenicity</b>	Suspected of causing cancer. Risk of cancer depends on duration and level of exposure.
<b>Mutagenicity</b>	May cause genetic defects.
<b>Teratogenicity</b>	May damage the unborn child.
<b>Developmental effects</b>	No known significant effects or critical hazards.
<b>Fertility effects</b>	May damage fertility.

### Carcinogenicity

Product/ingredient name	Test	Species	Result	Exposure
Petrol	Mouse	Dermal	102 weeks Negative - Dermal - Unspecified	- Based on Gasoline
	Rat	Inhalation	113 weeks Negative - Inhalation - Unspecified	- Based on Gasoline

**Conclusion/Summary** Benzene: May cause cancer

### Mutagenicity



## Section 11. Toxicological information

Product/ingredient name	Test	Experiment	Result	Remarks
Petrol	Equivalent to OECD 476	Experiment: In vitro Subject: Mammal - species unspecified	Negative	Based on Gasoline
	Equivalent to OECD 471	Experiment: In vitro Subject: Non-mammalian species	Negative	Based on Gasoline
	EPA OPPTS 870.5395	Experiment: In vivo Subject: Unspecified Cell: Germ	Negative	Based on Gasoline vapour condensate
	Equivalent to OECD 475	Experiment: In vivo Subject: Unspecified Cell: Germ	Negative	Based on Gasoline

**Conclusion/Summary** Benzene: May cause genetic defects.

### Reproductive toxicity

Product/ingredient name	Maternal toxicity	Fertility	Developmental toxin	Species	Result	Exposure
Petrol	-	-	Negative	Rat	Inhalation	14 days
	-	Negative	-	Rat	Inhalation	2 generation

**Conclusion/Summary** Development: Not classified. Based on available data, the classification criteria are not met.  
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.

### Aspiration hazard

Name
98 Octane Petrol (Ultimate) Petrol

### Other adverse symptoms

Excess exposure to vapors may produce headaches, dizziness, nausea, drowsiness, irritation of eyes, nose and throat and central nervous system depression. Aspiration of this material into the lungs can cause chemical pneumonia and can be fatal. Aspiration into the lungs can occur while vomiting after ingestion of this product. Inhalation of unleaded gasoline vapors did not produce birth defects in laboratory animals. Ingestion of this material can cause gastrointestinal irritation and diarrhea.

In a long-term inhalation study of whole unleaded gasoline vapors, exposure-related kidney damage and kidney tumors were observed in male rats. Similar kidney effects were not seen in female rats or in mice. At the highest exposure level (2056 ppm), female mice had an increased incidence of liver tumors. Results from subsequent scientific studies have shown that a broad variety of chemicals cause these kidney effects only in the male rat. Further studies have discovered the means by which the physiology of the male rat uniquely predispose it to these effects. Consequently, the Risk Assessment Forum of the Environmental Protection Agency has recognized that these responses are not predictive of a human health hazard. The liver tumors that were increased in the high-dose female mice are likewise of questionable significance because of their high spontaneous occurrence even without chemical exposure and because the rate of their occurrence is accelerated by a broad spectrum of chemicals not commonly considered to be carcinogens (e.g., phenobarbital).

## Section 11. Toxicological information

Thus, the significance of the mouse liver tumor response in terms of human health is questionable.

Gasoline is a complex mixture of hydrocarbons and contains benzene (typically no more than 2 volume%), toluene, and xylene. Chronic exposure to high levels of benzene has been shown to cause cancer (leukemia) in humans and other adverse blood effects (anemia). Benzene is considered a human carcinogen by IARC, NTP and OSHA. Over exposure to xylene and toluene can cause irritation to the upper respiratory tract, headache and narcosis. Some liver damage and lung inflammation were seen in chronic studies on xylene in guinea pigs but not in rats.

Solvent "sniffing" (abuse) or intentional overexposure to vapors can produce serious central nervous system effects, including unconsciousness, and possibly death.

Gasoline as a mixture is classified as a 2B (possible human) carcinogen by IARC.

Gasoline engine exhaust is classified as possibly carcinogenic to humans by IARC (2B). This classification is based primarily on animal and in vitro studies of gasoline engine exhaust condensates/extracts. Studies of the gaseous exhaust stream in animals did not provided sufficient evidence for classification as a carcinogen.

## Section 12. Ecological information

### Ecotoxicity

Water polluting material. May be harmful to the environment if released in large quantities. This material is toxic to aquatic life with long lasting effects.

### Aquatic and terrestrial toxicity

Product/ingredient name	Species	Result/Test	Exposure	Effects	Remarks
Petrol	Micro-organism	Acute EC50 15.41 mg/l Nominal Fresh water	40 hours	growth inhibition	-
	Algae	Acute EL50 3.1 mg/l Nominal Fresh water	72 hours	(growth rate)	Based on Gasoline
	Algae	Acute EL50 3.7 mg/l Nominal Fresh water	96 hours	(growth rate)	Based on Gasoline
	Daphnia	Acute EL50 4.5 mg/l Nominal Fresh water	48 hours	Mobility	Based on straight-run light gasoline
	Fish	Acute LL50 10 mg/l Nominal Fresh water	96 hours	Mortality	Based on Naphtha (petroleum), isomerisation
	Fish	Acute LL50 8.2 mg/l Nominal Fresh water	96 hours	Mortality	Based on Naphtha (petroleum), light alkylate
	Algae	Acute NOELR 0.5 mg/l Nominal Fresh water	72 hours	(growth rate)	Based on Gasoline
	Daphnia	Acute NOELR 0.5 mg/l Nominal Fresh water	48 hours	Mobility	Based on Straight run gas oil

## Section 12. Ecological information

Daphnia	Chronic EL50 10 mg/l Nominal Fresh water	21 days	Reproduction	Based on Naphtha (petroleum), light alkylate
Daphnia	Chronic EL50 >40 mg/l Nominal Fresh water	21 days	Mobility	Based on Naphtha (petroleum), light alkylate
Fish	Chronic EL50 10 mg/l Nominal Fresh water	21 days	Reproduction	Based on: Naphtha (petroleum), light alkylate; read across between species
Fish	Chronic LL50 5.2 mg/l Nominal Fresh water	14 days	Mortality	Based on Naphtha (petroleum), light catalytic reformed
Daphnia	Chronic NOELR 2.6 mg/l Nominal Fresh water	21 days	Reproduction	Based on Naphtha (petroleum), light alkylate
Daphnia	Chronic NOELR 16 mg/l Nominal Fresh water	21 days	Mobility	Based on Naphtha (petroleum), light alkylate
Fish	Chronic NOELR 2.6 mg/l Nominal Fresh water	14 days	Mortality	Based on Naphtha (petroleum), light catalytic reformed
Fish	Chronic NOELR 2.6 mg/l Nominal Fresh water	21 days	Reproduction	Based on: Naphtha (petroleum), light alkylate; read across between species
soil, plants	Chronic PNEC >0.4 mg/kg	-	-	-

### Persistence and degradability

Expected to be biodegradable.

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
Petrol	-	-	Inherent

### Bioaccumulative potential

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

Product/ingredient name	LogP <sub>ow</sub>	BCF	Potential
Petrol	2 to 7	-	high
Benzene	2.13	11	low
diisopropyl ether	2.4	-	low
2-methylpropan-2-ol	0.317	-	low

### Mobility in soil

#### Mobility

Spillages may penetrate the soil causing ground water contamination.

Product name 98 Octane Petrol (Ultimate) Product code 0000003087 Page: 11/13

Version 3 Date of issue 15 February 2024

Format New Zealand

Language ENGLISH

( ENGLISH )







## Section 12. Ecological information

Soil/water partition coefficient (K <sub>oc</sub> )	Not available.
Other adverse effects	No known significant effects or critical hazards.
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	<p>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 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.</p>
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## Section 14. Transport information

Regulatory information	UN number	Proper shipping name	Classes	PG*	Label	Additional information
New Zealand Class	UN1203	MOTOR SPIRIT or GASOLINE or PETROL. Marine pollutant	3	II	 	The marine pollutant mark is not required when transported by road or rail. <b>Hazchem code</b> 3YE
ADG Class	UN1203	MOTOR SPIRIT or GASOLINE or PETROL	3	II		<b>Hazchem code</b> 3YE <b>Initial emergency response guide</b> 14
IATA Class	UN1203	MOTOR SPIRIT or GASOLINE or PETROL	3	II		The environmentally hazardous substance mark may appear if required by other transportation regulations.
IMDG Class	UN1203	MOTOR SPIRIT or GASOLINE or PETROL. Marine pollutant	3	II	 	The marine pollutant mark is not required when transported in sizes of ≤5 L or ≤5 kg. <b>Emergency schedules</b> F-E, S-E

PG\* : Packing group

## Section 15. Regulatory information

### New Zealand Regulatory Information

<b>HSNO Approval Number</b>	HRC000003
<b>HSNO Group Standard</b>	Petrol (unleaded)
<b>HSNO Classification</b>	<input checked="" type="checkbox"/> FLAMMABLE LIQUIDS - Category 1 GERM CELL MUTAGENICITY - Category 1 CARCINOGENICITY - Category 2 REPRODUCTIVE TOXICITY - Category 1 ASPIRATION HAZARD - Category 1 LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 2

### Regulation according to other foreign laws

<b>REACH Status</b>	For the REACH status of this product please consult your company contact, as identified in Section 1.
<b>United States inventory (TSCA 8b)</b>	Not determined.
<b>Australia inventory (AIC)</b>	Contact local supplier or distributor.
<b>Canada inventory status</b>	<input checked="" type="checkbox"/> Not determined.
<b>China inventory (IECSC)</b>	<input checked="" type="checkbox"/> Not determined.
<b>Japan inventory (CSCL)</b>	<input checked="" type="checkbox"/> At least one component is not listed.
<b>Korea inventory (KECI)</b>	At least one component is not listed.
<b>Philippines inventory (PICCS)</b>	<input checked="" type="checkbox"/> Not determined.
<b>Taiwan Chemical Substances Inventory (TCSI)</b>	Not determined.

## Section 16. Other information

### History

<b>Date of issue/Date of revision</b>	15 February 2024
<b>Date of previous issue</b>	15 May 2020.
<b>Version</b>	3
<b>Prepared by</b>	Not available.
<b>Key to abbreviations</b>	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

### Notice to reader

**Indicates information that has changed from previously issued version.**

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