Material Safety Data Sheet

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND COMPANY/UNDERTAKING

Material Name	:	**Shell Unleaded Extra 95**
Uses	:	Fuel for spark ignition engines designed to run on unleaded fuel.
Product Code	:	002D1583
Manufacturer/Supplier	:	**Shell South Africa Marketing (Pty) Ltd** The Campus Twickenham 57 Sloane Street Bryanston 2021 South Africa
Telephone	:	(+27) 08604674355
Fax	:	(+27) 0214211308
Email Contact for MSDS	:	enquiries-ZA@shell.com
Emergency Telephone Number	:	011 608 3300 (including poison information). Netcare (for life-threatening emergencies) - 082 911.

2. HAZARDS IDENTIFICATION

EC Classification	:	Extremely flammable. Carcinogenic, category 2. Mutagenic, category 2. Toxic to Reproduction, category 3. Irritant. Harmful. Dangerous for the environment.
Health Hazards	:	Vapours may cause drowsiness and dizziness. Slightly irritating to respiratory system. Irritating to skin. Moderately irritating to eyes. Harmful: may cause lung damage if swallowed. Possibility of organ or organ system damage from prolonged exposure; see Chapter 11 for details. Target organ(s): Blood-forming organs. Peripheral nervous system. May cause heritable genetic damage. Possible risk of harm to the unborn child. A component or components of this material may cause cancer. This product contains benzene which may cause leukaemia (AML acute myelogenous leukaemia). May cause MDS (Myelodysplastic Syndrome).
Signs and Symptoms	:	Skin irritation signs and symptoms may include a burning sensation, redness, swelling, and/or blisters. Eye irritation signs and symptoms may include a burning sensation and a temporary redness of the eye. If material enters lungs, signs

and symptoms may include coughing, choking, wheezing, difficulty in breathing, chest congestion, shortness of breath, and/or fever. The onset of respiratory symptoms may be delayed for several hours after exposure. Breathing of high vapour concentrations may cause central nervous system (CNS) depression resulting in dizziness, light-headedness, headache, nausea and loss of coordination. Continued inhalation may result in unconsciousness and death. Damage to blood-forming organs may be evidenced by: a) fatigue and anemia (RBC), b) decreased resistance to infection, and/or excessive bruising and bleeding (platelet effect). Peripheral nerve damage may be evidenced by impairment of motor function (incoordination, unsteady walk, or muscle weakness in the extremities, and/or loss of sensation in the arms and legs). Auditory system effects may include temporary hearing loss and/or ringing in the ears.

Safety Hazards : Extremely flammable. Electrostatic charges may be generated during handling. Electrostatic discharge may cause fire. Liquid evaporates quickly and can ignite leading to a flash fire, or an explosion in a confined space.

Environmental Hazards : Toxic to aquatic organisms; may cause long-term adverse effects in the aquatic environment. Ether oxygenates are significantly more water soluble and less biodegradable than benzene, toluene, ethyl benzene and xylenes (BTEX). Consequently ether oxygenates have the potential to migrate relatively longer distances than BTEX in groundwater.

Additional Information : This product is intended for use in closed systems only.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Preparation Description : Complex mixture of hydrocarbons consisting of paraffins, cycloparaffins, aromatic and olefinic hydrocarbons (including benzene at 5% v/v maximum), with carbon numbers predominantly in the C4 to C12 range. Contains oxygenated hydrocarbons which may include methyl tertiary butyl ether (MTBE) and other ethers. Contains oxygenated hydrocarbons, including ethanol or other alcohols. May also contain several additives at <0.1% v/v each.

Hazardous Components

Chemical Identity	CAS	EINECS	Symbol(s)	R-phrase(s)	Conc.
Gasoline, low boiling point naphtha	86290-81-5	289-220-8	F+, Xi, T, Xn, N	R12; R38; R45; R46; R63; R65; R67; R51/53	75,00 - 100,00 %
Ethyl tertiary butyl ether	637-92-3	211-309-7	F, Xi	R11; R38	0,00 - 15,00 %
Tertiary amyl methyl ether	994-05-8	213-611-4	F, Xi	R11; R38	0,00 - 15,00 %
Diisopropyl ether	108-20-3	203-560-6	F	R11; R19;	0,00 - 0,50 %

Methyl tertiary butyl ether	1634-04-4	216-653-1	F, Xi	R66; R67 R11; R38	0,00 - 15,00 %
Ethanol	64-17-5	200-578-6	F	R11	0,00 - 10,00 %

Additional Information : Contains Benzene, CAS # 71-43-2. Contains Toluene, CAS # 108-88-3. Contains Ethylbenzene, CAS # 100-41-4. Contains n-Hexane, CAS # 110-54-3. Contains Xylene (Mixed Isomers), CAS # 1330-20-7. Contains Cyclohexane, CAS# 110-82-7. Contains Naphthalene, CAS # 91-20-3.

4. FIRST AID MEASURES

Inhalation : Remove to fresh air. If rapid recovery does not occur, transport to nearest medical facility for additional treatment.

Skin Contact : Remove contaminated clothing. Immediately flush skin with large amounts of water for at least 15 minutes, and follow by washing with soap and water if available. If redness, swelling, pain and/or blisters occur, transport to the nearest medical facility for additional treatment. When using high pressure equipment, injection of product under the skin can occur. If high pressure injuries occur, the casualty should be sent immediately to a hospital. Do not wait for symptoms to develop.

Eye Contact : Flush eyes with water while holding eyelids open. Rest eyes for 30 minutes. If redness, burning, blurred vision, or swelling persist transport to the nearest medical facility for additional treatment.

Ingestion : If swallowed, do not induce vomiting: transport to nearest medical facility for additional treatment. If vomiting occurs spontaneously, keep head below hips to prevent aspiration. If any of the following delayed signs and symptoms appear within the next 6 hours, transport to the nearest medical facility: fever greater than 101° F (38.3°C), shortness of breath, chest congestion or continued coughing or wheezing.

Advice to Physician : Treat symptomatically.

5. FIRE FIGHTING MEASURES

Clear fire area of all non-emergency personnel.

Specific Hazards : Hazardous combustion products may include: A complex mixture of airborne solid and liquid particulates and gases (smoke). Carbon monoxide. Unidentified organic and inorganic compounds. The vapour is heavier than air, spreads along the ground and distant ignition is possible. Will float and can be reignited on surface water.

Suitable Extinguishing Media : Foam, water spray or fog. Dry chemical powder, carbon dioxide, sand or earth may be used for small fires only.

Unsuitable Extinguishing Media : Do not use direct water jets on the burning product as they could cause a steam explosion and spread of the fire. Simultaneous use of foam and water on the same surface is to

be avoided as water destroys the foam.

Protective Equipment for Firefighters	:	Proper protective equipment including breathing apparatus must be worn when approaching a fire in a confined space.
Additional Advice	:	Keep adjacent containers cool by spraying with water. If possible remove containers from the danger zone. If the fire cannot be extinguished the only course of action is to evacuate immediately. Contain residual material at affected sites to prevent material from entering drains (sewers), ditches, and waterways.

6. ACCIDENTAL RELEASE MEASURES

Avoid contact with skin, eyes and clothing. Evacuate the area of all non-essential personnel. Ventilate contaminated area thoroughly. If contamination of sites occurs remediation may require specialist advice. Avoid contact with spilled or released material. Immediately remove all contaminated clothing. For guidance on selection of personal protective equipment see Chapter 8 of this Material Safety Data Sheet. For guidance on disposal of spilled material see Chapter 13 of this Material Safety Data Sheet. Ensure electrical continuity by bonding and grounding (earthing) all equipment. Observe the relevant local and international regulations. Take precautionary measures against static discharges.

Protective measures	:	Vapour can travel for considerable distances both above and below the ground surface. Underground services (drains, pipelines, cable ducts) can provide preferential flow paths. Do not breathe fumes, vapour. Take measures to minimise the effects on groundwater. Contain residual material at affected sites to prevent material from entering drains (sewers), ditches, and waterways. Shut off leaks, if possible without personal risks. Remove all possible sources of ignition in the surrounding area. Use appropriate containment (of product and fire fighting water) to avoid environmental contamination. Prevent from spreading or entering drains, ditches or rivers by using sand, earth, or other appropriate barriers. Attempt to disperse the vapour or to direct its flow to a safe location for example by using fog sprays. Take precautionary measures against static discharge. Ensure electrical continuity by bonding and grounding (earthing) all equipment.
Clean Up Methods	:	For large liquid spills (> 1 drum), transfer by mechanical means such as vacuum truck to a salvage tank for recovery or safe disposal. Do not flush away residues with water. Retain as contaminated waste. Allow residues to evaporate or soak up with an appropriate absorbent material and dispose of safely. Remove contaminated soil and dispose of safely. For small liquid spills (< 1 drum), transfer by mechanical means to a labelled, sealable container for product recovery or safe disposal. Allow residues to evaporate or soak up with an appropriate absorbent material and dispose of safely. Remove contaminated soil and dispose of safely.
Additional Advice	:	Notify authorities if any exposure to the general public or the environment occurs or is likely to occur. Local authorities should be advised if significant spillages cannot be contained.

Maritime spillages should be dealt with using a Shipboard Oil Pollution Emergency Plan (SOPEP), as required by MARPOL Annex 1 Regulation 26. To the extent that this product, including its chemical components (e.g. methyl tertiary butyl ether) may impact surface or groundwater, appropriate assessment and remediation (if necessary) should be implemented.

7. HANDLING AND STORAGE

General Precautions : Avoid breathing vapours or contact with material. Only use in well ventilated areas. Wash thoroughly after handling. For guidance on selection of personal protective equipment see Chapter 8 of this Material Safety Data Sheet. Use the information in this data sheet as input to a risk assessment of local circumstances to help determine appropriate controls for safe handling, storage and disposal of this material. Air-dry contaminated clothing in a well-ventilated area before laundering. Properly dispose of any contaminated rags or cleaning materials in order to prevent fires. Prevent spillages. Turn off all battery operated portable electronic devices (examples include: cellular phones, pagers and CD players) before operating gasoline pump. Contaminated leather articles including shoes cannot be decontaminated and should be destroyed to prevent reuse. For comprehensive advice on handling, product transfer, storage and tank cleaning refer to the product supplier. Do not use as a cleaning solvent or other non-motor fuel uses.
Vehicle fueling and vehicle workshop areas - Avoid inhalation of vapours and contact with skin, when filling or emptying a vehicle.

Handling : When using do not eat or drink. Extinguish any naked flames. Do not smoke. Remove ignition sources. Avoid sparks. Never siphon by mouth. The vapour is heavier than air, spreads along the ground and distant ignition is possible. Avoid exposure. Obtain special instructions before use.

Storage : Drum and small container storage: Keep containers closed when not in use. Drums should be stacked to a maximum of 3 high. Use properly labelled and closeable containers. Packaged product must be kept tightly closed and stored in a diked (bunded) well-ventilated area, away from, ignition sources and other sources of heat. Take suitable precautions when opening sealed containers, as pressure can build up during storage. Tank storage: Tanks must be specifically designed for use with this product. Bulk storage tanks should be diked (bunded). Locate tanks away from heat and other sources of ignition. Cleaning, inspection and maintenance of storage tanks is a specialist operation, which requires the implementation of strict procedures and precautions.

Product Transfer : Electrostatic charges may be generated during pumping. Electrostatic discharge may cause fire. Ensure electrical continuity by bonding and grounding (earthing) all equipment.

		Restrict line velocity during pumping in order to avoid generation of electrostatic discharge (<= 1 m/sec until fill pipe submerged to twice its diameter, then <= 7 m/sec). Avoid splash filling. Do NOT use compressed air for filling, discharging, or handling operations. Wait 2 minutes after tank filling (for tanks such as those on road tanker vehicles) before opening hatches or manholes. Wait 30 minutes after tank filling (for large storage tanks) before opening hatches or manholes.
Recommended Materials	:	For containers, or container linings use mild steel, stainless steel. Aluminium may also be used for applications where it does not present an unnecessary fire hazard. Examples of suitable materials are: high density polyethylene (HDPE), polypropylene (PP), and Viton (FKM), which have been specifically tested for compatibility with this product. For container linings, use amine-adduct cured epoxy paint. For seals and gaskets use: graphite, PTFE, Viton A, Viton B.
Unsuitable Materials	:	Some synthetic materials may be unsuitable for containers or container linings depending on the material specification and intended use. Examples of materials to avoid are: natural rubber (NR), nitrile rubber (NBR), ethylene propylene rubber (EPDM), polymethyl methacrylate (PMMA), polystyrene, polyvinyl chloride (PVC), polyisobutylene. However, some may be suitable for glove materials.
Container Advice	:	Containers, even those that have been emptied, can contain explosive vapours. Do not cut, drill, grind, weld or perform similar operations on or near containers. Gasoline containers must not be used for storage of other products.
Additional Information	:	Ensure that all local regulations regarding handling and storage facilities are followed.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

If the American Conference of Governmental Industrial Hygienists (ACGIH) value is provided on this document, it is provided for information only.

Occupational Exposure Limits

Material	Source	Type	ppm	mg/m3	Notation
Naphthalene	ACGIH	TWA	10 ppm		
	ACGIH	STEL	15 ppm		
	ACGIH	SKIN_DES			Can be absorbed through the skin.
	ZA REL	TWA	10 ppm	50 mg/m3	
	ZA REL	STEL	15 ppm	75 mg/m3	
Cyclohexane	ACGIH	TWA	100 ppm		
Toluene	ACGIH	TWA	20 ppm		
Benzene	ACGIH	TWA	0,5 ppm		
	ACGIH	STEL	2,5 ppm		

	ACGIH	SKIN_DES			Can be absorbed through the skin.
	SHELL IS	TWA	0,5 ppm	1,6 mg/m3	
	SHELL IS	STEL	2,5 ppm	8 mg/m3	
n-hexane	ACGIH	TWA	50 ppm		
	ACGIH	SKIN_DES			Can be absorbed through the skin.
	ZA REL	TWA	20 ppm	70 mg/m3	
Xylene	ACGIH	TWA	100 ppm		
	ACGIH	STEL	150 ppm		
Ethylbenzene	ACGIH	TWA	20 ppm		
	ZA REL	TWA	100 ppm	435 mg/m3	
	ZA REL	STEL	125 ppm	545 mg/m3	
Trimethylbenzene, all isomers	ACGIH	TWA	25 ppm		
Methyl tertiary butyl ether	ACGIH	TWA	50 ppm		
Ethyl tertiary butyl ether	ACGIH	TWA	5 ppm		
Tertiary amyl methyl ether	ACGIH	TWA	20 ppm		
Gasoline, low boiling point naphtha	ACGIH	TWA	300 ppm		
	ACGIH	STEL	500 ppm		
Ethanol	ACGIH	STEL	1.000 ppm		

Additional Information : Skin notation means that significant exposure can also occur by absorption of liquid through the skin and of vapour through the eyes or mucous membranes.
SHELL IS is the Shell Internal Standard.

Biological Exposure Index (BEI) - See reference for full details

Material	Determinant	Sampling Time	BEI	Reference
Benzene	S-Phenylmercapturic acid in Creatinine in urine	Sampling time: End of shift.	25 µg/g	ACGIH BEL (01 2010)
	t,t-Muconic acid in Creatinine in urine	Sampling time: End of shift.	500 µg/g	ACGIH BEL (01 2010)

n-hexane	2,5-Hexanedion, without hydrolysis in Urine	Sampling time: End of shift at end of work week.	0,4 mg/l	ACGIH BEL (01 2010)
Toluene	toluene in Urine	Sampling time: End of shift.	0,03 mg/l	ACGIH BEL (01 2010)
	toluene in Blood	Sampling time: Prior to last shift of work week.	0,02 mg/l	ACGIH BEL (01 2010)
	o-Cresol, with hydrolysis in Creatinine in urine	Sampling time: End of shift.	0,3 mg/g	ACGIH BEL (01 2010)
Ethylbenzene	Sum of mandelic acid and phenylglyoxylic acid in Creatinine in urine	Sampling time: End of shift at end of work week.	0,7 g/g	ACGIH BEL (01 2010)
	Ethyl benzene in End-exhaled air	Sampling time: Not critical.		ACGIH BEL (01 2010)
Xylene	Methylhippuric acids in Creatinine in urine	Sampling time: End of shift.	1,5 g/g	ACGIH BEL (01 2010)
Naphthalene	1-Hydroxypyrene, with hydrolysis (1-HP) in Urine	Sampling time: End of shift at end of work week.		ACGIH BEL (2008)

Material	**Source**	**Hazard Designation**
Naphthalene	ACGIH	Not classifiable as a human carcinogen.
Toluene	ACGIH	Not classifiable as a human carcinogen.
Benzene	ACGIH	Confirmed human carcinogen.
Xylene	ACGIH	Not classifiable as a human carcinogen.
Gasoline, low boiling point naphtha	ACGIH	Confirmed animal carcinogen with unknown relevance to humans.
Ethanol	ACGIH	Not classifiable as a human carcinogen.

Exposure Controls : The level of protection and types of controls necessary will vary depending upon potential exposure conditions. Select controls

based on a risk assessment of local circumstances. Appropriate measures include: Use sealed systems as far as possible. Adequate explosion-proof ventilation to control airborne concentrations below the exposure guidelines/limits. Local exhaust ventilation is recommended. Eye washes and showers for emergency use.

Personal Protective Equipment : Personal protective equipment (PPE) should meet recommended national standards. Check with PPE suppliers.

Respiratory Protection : If engineering controls do not maintain airborne concentrations to a level which is adequate to protect worker health, select respiratory protection equipment suitable for the specific conditions of use and meeting relevant legislation. Check with respiratory protective equipment suppliers. Where air-filtering respirators are suitable, select an appropriate combination of mask and filter. Where air-filtering respirators are unsuitable (e.g. airborne concentrations are high, risk of oxygen deficiency, confined space) use appropriate positive pressure breathing apparatus. All respiratory protection equipment and use must be in accordance with local regulations.

Hand Protection : 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. Suitability and durability of a glove is dependent on usage, e.g. frequency and duration of contact, chemical resistance of glove material, glove thickness, dexterity. Always seek advice from glove suppliers. Contaminated gloves should be replaced.
Select 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, PVC gloves may be suitable.

Eye Protection : Chemical splash goggles (chemical monogoggles).

Protective Clothing : Chemical resistant gloves/gauntlets, boots, and apron (where risk of splashing).

Monitoring Methods : Monitoring of the concentration of substances in the breathing zone of workers or in the general workplace may be required to confirm compliance with an OEL and adequacy of exposure controls. For some substances biological monitoring may also be appropriate.

Environmental Exposure Controls : Local guidelines on emission limits for volatile substances must be observed for the discharge of exhaust air containing vapour.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	:	Green. Clear, bright liquid.
Odour	:	Hydrocarbon.
Initial Boiling Point and Boiling Range	:	25 - 210 °C / 77 - 410 °F
Flash point	:	< -40 °C / -40 °F (ASTM D-93 / PMCC)
Upper / lower Flammability or Explosion limits	:	1,0 - 8,0 %(V)

Auto-ignition temperature	:	> 250 °C / 482 °F
Vapour pressure	:	450 - 750 hPa at 20 °C / 68 °F (Reid vapour pressure)
Density	:	0,710 - 0,785 g/cm3 at 20 °C / 68 °F (ASTM D-1298)
n-octanol/water partition coefficient (log Pow)	:	2 - 7
Kinematic viscosity	:	0,5 - 0,75 mm2/s at 40 °C / 104 °F

10. STABILITY AND REACTIVITY

Stability	:	Stable under normal conditions of use.
Conditions to Avoid	:	Avoid heat, sparks, open flames and other ignition sources.
Materials to Avoid	:	Strong oxidising agents.
Hazardous Decomposition Products	:	Hazardous decomposition products are not expected to form during normal storage. Thermal decomposition is highly dependent on conditions. A complex mixture of airborne solids, liquids and gases, including carbon monoxide, carbon dioxide and other organic compounds will be evolved when this material undergoes combustion or thermal or oxidative degradation.

11. TOXICOLOGICAL INFORMATION

Basis for Assessment	:	Information given is based on product data, a knowledge of the components and the toxicology of similar products.
Acute Oral Toxicity	:	Low toxicity: LD50 >2000 mg/kg , Rat Aspiration into the lungs when swallowed or vomited may cause chemical pneumonitis which can be fatal.
Acute Dermal Toxicity	:	Low toxicity: LD50 >2000 mg/kg , Rabbit
Acute Inhalation Toxicity	:	Low toxicity: LC50 >5 mg/l / 4 h, Rat High concentrations may cause central nervous system depression resulting in headaches, dizziness and nausea; continued inhalation may result in unconsciousness and/or death.
Skin Irritation	:	Irritating to skin.
Eye Irritation	:	Expected to be slightly irritating.
Respiratory Irritation	:	Based on human experience, breathing of vapours or mists may cause a temporary burning sensation to nose, throat and lungs.
Sensitisation	:	Not expected to be a sensitiser.
Repeated Dose Toxicity	:	Kidney: caused kidney effects in male rats which are not considered relevant to humans Blood-forming organs: repeated exposure affects the bone marrow. (Benzene) Peripheral nervous system: repeated exposure causes peripheral neuropathy in animals. (n-hexane)
Mutagenicity	:	May cause heritable genetic damage. (Benzene) Mutagenicity studies on gasoline and gasoline blending streams have shown predominantly negative results.
Carcinogenicity	:	Known human carcinogen. (Benzene) May cause leukaemia (AML - acute myelogenous leukemia). (Benzene) Inhalation exposure to mice causes liver tumours, which are

not considered relevant to humans.

Reproductive and Developmental Toxicity	:	May impair fertility at doses which produce other toxic effects. (n-hexane) Many case studies involving abuse during pregnancy indicate that toluene can cause birth defects, growth retardation and learning difficulties. (Toluene)
Additional Information	:	Exposure to very high concentrations of similar materials has been associated with irregular heart rhythms and cardiac arrest. Prolonged and repeated exposures to high concentrations have resulted in hearing loss in rats. Solvent abuse and noise interaction in the work environment may cause hearing loss. (Toluene) Abuse of vapours has been associated with organ damage and death. (Toluene) May cause MDS (Myelodysplastic Syndrome). (Benzene) Exposure may occur via inhalation, ingestion, skin absorption, skin or eye contact, and accidental ingestion.

12. ECOLOGICAL INFORMATION

Incomplete ecotoxicological data are available for this product. The information given below is based partly on a knowledge of the components and the ecotoxicology of similar products.

Acute Toxicity	:	Toxic: LL/EL/IL50 1-10 mg/l (to aquatic organisms) (LL/EL50 expressed as the nominal amount of product required to prepare aqueous test extract).
Fish	:	Expected to be toxic: LL/EL/IL50 1-10 mg/l
Aquatic Invertebrates	:	Expected to be toxic: LL/EL/IL50 1-10 mg/l
Algae	:	Expected to be toxic: LL/EL/IL50 1-10 mg/l
Microorganisms	:	Expected to be harmful: LL/EL/IL50 10-100 mg/l
Chronic Toxicity		
Fish	:	NOEC/NOEL expected to be > 1.0 - <= 10 mg/l (based on test data)
Aquatic Invertebrates	:	NOEC/NOEL > 1.0 - <=10 mg/l (based on test data)
Mobility	:	Floats on water. If product enters soil, one or more constituents will be highly mobile and may contaminate groundwater. Methyl tertiary butyl ether degradation may result in the formation of tert-butyl alcohol (TBA).
Persistence/degradability	:	Oxidises rapidly by photo-chemical reactions in air. Expected to be not inherently biodegradable.
Bioaccumulation	:	Contains constituents with the potential to bioaccumulate.
Other Adverse Effects	:	Films formed on water may affect oxygen transfer and damage organisms.

13. DISPOSAL CONSIDERATIONS

Material Disposal	:	Recover or recycle if possible. It is the responsibility of the waste generator to determine the toxicity and physical properties of the material generated to determine the proper waste classification and disposal methods in compliance with

		applicable regulations. Waste arising from a spillage or tank cleaning should be disposed of in accordance with prevailing regulations, preferably to a recognised collector or contractor. The competence of the collector or contractor should be established beforehand. Do not dispose into the environment, in drains or in water courses. Do not dispose of tank water bottoms by allowing them to drain into the ground. This will result in soil and groundwater contamination.
Container Disposal	:	Drain container thoroughly. After draining, vent in a safe place away from sparks and fire. Residues may cause an explosion hazard. Do not, puncture, cut, or weld uncleaned drums. Send to drum recoverer or metal reclaimer. Do not pollute the soil, water or environment with the waste container.
Local Legislation	:	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 and must be complied with.

14. TRANSPORT INFORMATION

IMDG

Identification number	UN 1203
Proper shipping name	PETROL
Class / Division	3
Packing group	II
Marine pollutant:	Yes

IATA (Country variations may apply)

UN No.	:	1203
Proper shipping name	:	Gasoline
Class / Division	:	3
Packing group	:	II
Environmental Hazard	:	Environmentally Hazardous

Additional Information **:** MARPOL Annex 1 rules apply for bulk shipments by sea.

15. REGULATORY INFORMATION

The regulatory information is not intended to be comprehensive. Other regulations may apply to this material.

EC Classification	:	Extremely flammable. Carcinogenic, category 2. Mutagenic, category 2. Toxic to Reproduction, category 3. Irritant. Harmful. Dangerous for the environment.
EC Symbols	:	F+ Extremely flammable. T Toxic. N Dangerous for the environment.

EC Risk Phrases	:	R45 May cause cancer. R46 May cause heritable genetic damage. R63 Possible risk of harm to the unborn child. R65 Harmful: may cause lung damage if swallowed. R12 Extremely flammable. R67 Vapours may cause drowsiness and dizziness. R38 Irritating to skin. R51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
EC Safety Phrases	:	P102 Keep out of reach of children. S29 Do not empty into drains. S45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible). S53 Avoid exposure. Obtain special instructions before use. S61 Avoid release to the environment. Refer to special instructions/Safety data sheets. S62 If swallowed, do not induce vomiting: seek medical advice immediately and show this container or label.
Classification triggering components	:	Contains gasoline, low boiling point naphtha, unspecified.

16. OTHER INFORMATION

Additional Information : This document contains important information to ensure the safe storage, handling and use of this product. The information in this document should be brought to the attention of the person in your organisation responsible for advising on safety matters.

R-phrase(s)

R11	Highly flammable.
R12	Extremely flammable.
R19	May form explosive peroxides.
R38	Irritating to skin.
R45	May cause cancer.
R46	May cause heritable genetic damage.
R51/53	Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R63	Possible risk of harm to the unborn child.
R65	Harmful: may cause lung damage if swallowed.
R66	Repeated exposure may cause skin dryness or cracking.
R67	Vapours may cause drowsiness and dizziness.

MSDS Version Number : 3.0

MSDS Effective Date : 09.06.2011

MSDS Revisions : A vertical bar (|) in the left margin indicates an amendment from the previous version.

MSDS Regulation : The content and format of this safety data sheet is in accordance with Commission Directive 2001/58/EC of 27 July

		2001, amending for the second time Commission Directive 91/155/EEC.
Uses and Restrictions	:	This product must not be used in applications other than those recommended in Section 1, without first seeking the advice of the supplier. This product is not to be used as a solvent or cleaning agent; for lighting or brightening fires; as a skin cleanser. This product is designed only to suit automotive applications and no provision is made for the requirements of aviation applications.
MSDS Distribution	:	The information in this document should be made available to all who may handle the product.
Disclaimer	:	This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.