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

Commercial Product Name : AVGAS
 Specific use(s) : Fuel
 Company : Topaz Energy
 Topaz House Beech Hill Clonskeagh
 -Dublin 4, Ireland
 Tel.:+353 1 202 8888
 Fax:+353 1 203 9888
 E-mail:safetydatasheets@topazenergy.ie

Emergency telephone number : +353 1 808 8232

2. HAZARDS IDENTIFICATION

Classification : The product is classified as dangerous in accordance with Directive 67/548/EEC.



T : Toxic



N : Dangerous for the environment



F+ : Extremely flammable

Most important hazards : R12 - Extremely flammable.
 R20/21/22 - Harmful by inhalation, in contact with skin and if swallowed.
 R38 - Irritating to skin.
 R46 - May cause heritable genetic damage.
 R63 - Possible risk of harm to the unborn child.
 R65 - Harmful: may cause lung damage if swallowed.
 R45 - May cause cancer.
 R51/53 - Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

CLP-Classification : The product is classified as hazardous in accordance with Directive 1272/2008/EEC.



Signal word : Danger

CLP Hazard statements : H224 - Extremely flammable liquid and vapour.
 H302 - Harmful if swallowed.
 H304 - May be fatal if swallowed and enters airways.
 H315 - Causes skin irritation.
 H312 - Harmful in contact with skin.
 H332 - Harmful if inhaled.
 H340 - May cause genetic defects
 H350 - May cause cancer
 H361d - Suspected of damaging the unborn child.
 H411 - Toxic to aquatic life with long lasting effects.

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Main symptoms	
Inhalation	: May cause irritation of respiratory tract. Vapours may cause drowsiness and dizziness. Inhalation of high vapour concentrations can cause CNS-depression and narcosis. Inhalation of high vapour concentrations may cause symptoms like headache, dizziness, tiredness, nausea and vomiting.
Skin contact	: Irritating to skin.
Eye contact	: May cause eye irritation. Repeated or prolonged exposure: Redness Inflammation Ulceration
Ingestion	: Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhoea. Harmful: may cause lung damage if swallowed. Smallest quantities reaching the lungs through swallowing or subsequent vomiting may result in lung oedema or pneumonia. Repeated and prolonged exposure to solvents may cause brain and nervous system damage.
Environmental properties	: Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance name	Values (%)	CAS no	EC No	EC Index	Symbol(s):	R-phrases(s)
Gasoline	99 - 100	86290-81-5	289-220-8	649-378-00-4	T, N, F+	R12, R38, R45, R46, R51/53, R62, R63, R65, R67
tetraethyllead	0 - 0,125	78-00-2	201-075-4	082-002-00-1	T+, N	R26/27/28, R61, R62, R33, R50/53

Full text of R-phrases: See section 16.

Substance name	Values (%)	CAS no	EC No	EC Index	CLP pictograms	CLP Hazard statements
Gasoline	99 - 100	86290-81-5	289-220-8	649-378-00-4	GHS02,GHS08,GHS09	H224,H304, H315,H336, H340,H350, H411,H361fd
tetraethyllead	0 - 0,125	78-00-2	201-075-4	082-002-00-1	GHS06,GHS09,GHS08	H301,H311, H331,H373, H361fd,H410

Full text of the H-statements: See section 16.

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4. FIRST AID MEASURES

First aid measures

- Inhalation** : *May cause irritation of respiratory tract.- Vapours may cause drowsiness and dizziness.- Inhalation of high vapour concentrations can cause CNS-depression and narcosis.- Inhalation of high vapour concentrations may cause symptoms like headache, dizziness, tiredness, nausea and vomiting.*
Move to fresh air.
Keep at rest.
In case of shortness of breath, give oxygen.
Obtain medical attention.
- Skin contact** : *Irritating to skin.*
Take off contaminated clothing and shoes immediately.
After contact with skin, wash immediately with plenty of soap and water.
If skin irritation persists, call a physician.
- Eye contact** : *May cause eye irritation.- Repeated or prolonged exposure: - Redness- Inflammation- Ulceration*
Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.
If pain persists, call a physician.
- Ingestion** : *Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhoea.- Harmful: may cause lung damage if swallowed.- Smallest quantities reaching the lungs through swallowing or subsequent vomiting may result in lung oedema or pneumonia.- Repeated and prolonged exposure to solvents may cause brain and nervous system damage.*
Call a physician immediately.
Do NOT induce vomiting.
Rinse mouth.
Drink plenty of water.
- Additional advice** : Show this safety data sheet to the doctor in attendance.
Treat symptomatically.
Never give anything by mouth to an unconscious person.

5. FIRE-FIGHTING MEASURES

- Fire Hazard** : Extremely flammable
- Suitable extinguishing media** : Dry chemical
Carbon dioxide (CO₂)
Water spray
Foam
- Extinguishing media which shall not be used for safety reasons** : High volume water jet
- Specific hazards** : The pressure in sealed containers can increase under the influence of heat.
Fire or intense heat may cause violent rupture of packages.
In the event of fire, cool tanks with water spray.
Vapours may form explosive mixtures with air.
Vapours are heavier than air and may spread along floors.
Flash back possible over considerable distance.
Burning produces noxious and toxic fumes.
In case of fire hazardous decomposition products may be produced such as:
Carbon oxides
Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

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Special protective equipment for fire-fighters : In the event of fire, wear self-contained breathing apparatus.
Wear personal protective equipment.

6. ACCIDENTAL RELEASE MEASURES

- Personal precautions : Evacuate personnel to safe areas.
Keep people away from and upwind of spill/leak.
Avoid contact with skin and eyes.
Do not breathe vapours or spray mist.
Wear personal protective equipment.
See also section 8.
- Environmental precautions : Prevent product from entering drains.
- Methods for cleaning up : Ensure adequate ventilation, especially in confined areas.
Remove all sources of ignition.
Do not use sparking tools.
Do not smoke.
Dam up.
Prevent further leakage or spillage if safe to do so.
Hose down gases, fumes and/or dust with water.
Soak up with inert absorbent material.
Sweep up and shovel into suitable containers for disposal.
Dispose of in accordance with local regulations.
Collect and dispose of waste product at an authorised disposal facility.
After cleaning, flush away traces with water.
Local authorities should be advised if significant spillages cannot be contained.

7. HANDLING AND STORAGE

- Storage : Keep containers tightly closed in a dry, cool and well-ventilated place.
Store in original container.
Keep in a banded area.
Keep away from open flames, hot surfaces and sources of ignition.
Keep away from food, drink and animal feedingstuffs.
Do not store near or with any of the incompatible materials listed in section 10.
Regularly check for damage to packaging
- Handling : Take necessary action to avoid static electricity discharge (which might cause ignition of organic vapours).
Ensure all equipment is electrically grounded before beginning transfer operations.
Do not use pressure to empty drums.
Do not smoke.
Avoid contact with skin, eyes and clothing.
Do not breathe vapours or spray mist.
Wear personal protective equipment.
See also section 8.
Ensure adequate ventilation.
When using do not eat or drink.
Do not pierce or burn, even after use. Do not spray on a naked flame or any incandescent material.
Do not burn, or use a cutting torch on, the empty drum.
- Packaging material : glass,metal containers,Plastic jerrican
- Specific use(s) : Fuel

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8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Personal protective equipment		
Respiratory protection	:	In the case of vapour formation use a respirator with filter model A. Type A2, EN 141/136/140/137
Hand protection	:	PVC disposable gloves EN374 The selection of specific gloves for a specific application and time of use in a working area, should also take into account other factors on the working space, such as (but not limited to): other chemicals that are possibly used, physical requirements (protection against cutting/drilling, skill, thermal protection), and the instructions/specification of the supplier of gloves.
Eye protection	:	Safety glasses with side-shields conforming to EN166 Goggles
Skin and body protection	:	chemical-resistant overalls Chemical resistant apron
Hygiene measures	:	Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and immediately after handling the product. Remove and wash contaminated clothing before re-use. Eye wash bottle with pure water
Engineering measures	:	Provide sufficient air exchange and/or exhaust in work rooms.
Environmental exposure controls	:	Do not flush into surface water or sanitary sewer system.
Exposure limit(s)		
Component	:	Gasoline (86290-81-5)
TLV-TWA (ppm)	:	300 (PT, ES)
TLV-TWA (mg/m ³)	:	mist: 5 (BE, GB, NL, FR, ES, FI, DK, NO); 1 (SE); 250 (UT4, Kraftstoff, DE); 400 (CZ)
TLV-STEL (ppm)	:	500 (PT)
TLV-STEL (mg/m ³)	:	mist: 10 (BE, GB); 3 (SE); 1000 (CZ)

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	:	clear, liquid
Colour	:	blue
Odour	:	hydrocarbon-like
pH	:	no data available
Boiling point/boiling range	:	25 - 170 °C / 77 - 338 °F
Melting point/range	:	not applicable
Flash point	:	< -40 °C / -40 °F
Freezing point	:	< -47 °C / - 53 °F
Autoignition temperature	:	>250 °C / >482 °F
Explosive properties	:	L.E.L 1 vol % / U.E.L 8 vol %
Oxidizing properties	:	no data available
Evaporation rate	:	no data available
Vapour pressure	:	380 - 490 hPa (38 °C / 100 °F)
Vapour density	:	>3

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Water solubility : negligible
Viscosity : 0.5 - 0,75 mm²/s at 40 °C / 104 °F
Density : 0.69 - 0,76 g/cm³ at 15 °C / 59 °F
Partition coefficient: n-octanol/water : 2 - 7

10. STABILITY AND REACTIVITY

Stability : Stable under normal conditions.
Hazardous decomposition products : Burning produces noxious and toxic fumes.
In case of fire hazardous decomposition products may be produced such as:
Carbon oxides
Incompatible materials : Oxidizing agents
Conditions to avoid : Heat, flames and sparks.

11. TOXICOLOGICAL INFORMATION

General Information

Acute toxicity

Component : **Gasoline (86290-81-5)**
LD50/oral/rat : > 5000 mg/kg
LD50/dermal/rabbit : > 2000 mg/kg
LC50/inhalation/4h/rat : 5,2 mg/l/4h

Inhalation : May cause irritation of respiratory tract.
Vapours may cause drowsiness and dizziness.
Inhalation of high vapour concentrations can cause CNS-depression and narcosis.
Inhalation of high vapour concentrations may cause symptoms like headache, dizziness, tiredness, nausea and vomiting.

Skin contact : Irritating to skin.

Eye contact : May cause eye irritation.
Repeated or prolonged exposure:
Redness
Inflammation
Ulceration

Ingestion : Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhoea.
Harmful: may cause lung damage if swallowed.
Smallest quantities reaching the lungs through swallowing or subsequent vomiting may result in lung oedema or pneumonia.
Repeated and prolonged exposure to solvents may cause brain and nervous system damage.

Chronic toxicity

Chronic toxicity : Harmful: danger of serious damage to health by prolonged exposure through inhalation, in contact with skin and if swallowed.
Chronic exposure may cause headache, confusion, tremors, memory loss, slurred speech and anorexia.
Ingestion causes damage of central nervous system, liver, kidneys, blood and bone marrow.
Repeated exposure may cause skin dryness or cracking.
Haemopathic effects caused by benzene and all products in which it is

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contained.
Changes in the blood count
Leukaemia

Sensitisation : No sensitization responses were observed.
carcinogenic effects : May cause cancer.
Mutagenicity : May cause heritable genetic damage.
Reproductive toxicity : May cause harm to the unborn child.

12. ECOLOGICAL INFORMATION

Ecotoxicity effects : Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Component : **Gasoline (86290-81-5)**

LC50/96h/fish : 82 mg/l (Cyprinodon variegatus)

IC50/72h/algae : 3,3 mg/l

Mobility : negligible

Persistence and degradability : Not inherently biodegradable.

Bioaccumulation : Bioaccumulative potential

Partition coefficient: n-octanol/water : 2 - 7

Further information : Do not flush into surface water or sanitary sewer system.
Dispose of as hazardous waste in compliance with local and national regulations.


13. DISPOSAL CONSIDERATIONS

Waste from residues / unused products : Where possible recycling is preferred to disposal or incineration.
Do not burn, or use a cutting torch on, the empty drum.
Dispose of in accordance with local regulations.
Empty containers should be transported/delivered using a registered waste carrier to local recyclers for disposal.

Additional ecological information : Do not flush into surface water or sanitary sewer system.

Codes of waste (2001/573/EC, 75/442/EEC, 91/689/EEC) : The following Waste Codes are only suggestions:
15 01 10* - packaging containing residues of or contaminated by dangerous substances
13 07 03* - other fuels (including mixtures)
Waste codes should be assigned by the user based on the application for which the product was used.

14. TRANSPORT INFORMATION

ADR danger labels : 

ADR/RID

Proper shipping name : Gasoline(leaded)

UN-No : 1203

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Class : 3
Packing group : II

ADNR

IMDG

Proper shipping name : Gasoline(leadetd)
UN-No : 1203
Class : 3
Packing group : II
EmS : F-E, S-E
IMDG Limited Quantities : 1 L

ICAO/IATA

Proper shipping name : Gasoline(leadetd)
UN-No : 1203
Class : 3
UN packing group : II

Other information (transport) : Tunnel restriction code D/E

15. REGULATORY INFORMATION

Classification : The product is classified as dangerous in accordance with Directive 67/548/EEC.
Commercial Product Name : AVGAS
EC No : 265-185-4
CAS no : 64742-82-1
Contains : Gasoline
Contains : tetraethyllead

Symbol(s): : 
T N F+


T - Toxic
N - Dangerous for the environment
F+ - Extremely flammable

R-phrases : R12 - Extremely flammable.
R20/21/22 - Harmful by inhalation, in contact with skin and if swallowed.
R38 - Irritating to skin.
R46 - May cause heritable genetic damage.
R63 - Possible risk of harm to the unborn child.
R65 - Harmful: may cause lung damage if swallowed.
R45 - May cause cancer.
R51/53 - Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

S-phrases : S23 - Do not breathe gas/fumes/vapour/spray.

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S36/37 - Wear suitable protective clothing and gloves
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.

- Extra phrases : Reserved for industrial and professional use.
- CLP-Classification : The product is classified as hazardous in accordance with Directive 1272/2008/EEC.
- CLP pictograms :
- 
- Signal word : Danger
- CLP Hazard statements :
H224 - Extremely flammable liquid and vapour.
H302 - Harmful if swallowed.
H304 - May be fatal if swallowed and enters airways.
H315 - Causes skin irritation.
H312 - Harmful in contact with skin.
H332 - Harmful if inhaled.
H340 - May cause genetic defects
H350 - May cause cancer
H361d - Suspected of damaging the unborn child.
H411 - Toxic to aquatic life with long lasting effects.
- CLP Precautionary statements :
P201 - Obtain special instructions before use
P202 - Do not handle until all safety precautions have been read and understood
P210 - Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
P241 - Use explosion-proof electrical/ventilating/lighting/... equipment.
P273 - Avoid release to the environment
P281 - Use personal protective equipment as required
- Extra phrases : Reserved for industrial and professional use.

16. OTHER INFORMATION

- Text of R phrases mentioned in Section 3 :
- R12 -Extremely flammable.
 - R26/27/28 -Very toxic by inhalation, in contact with skin and if swallowed.
 - R33 -Danger of cumulative effects.
 - R38 -Irritating to skin.
 - R45 -May cause cancer.
 - R46 -May cause heritable genetic damage.
 - R50/53 -Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
 - R51/53 -Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
 - R61 -May cause harm to the unborn child.
 - R62 -Possible risk of impaired fertility.
 - R63 -Possible risk of harm to the unborn child.

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R65 -Harmful: may cause lung damage if swallowed.

R67 -Vapours may cause drowsiness and dizziness.

H-statements components

- : H224 -Extremely flammable liquid and vapour.
H301 -Toxic if swallowed.
H304 -May be fatal if swallowed and enters airways.
H311 -Toxic in contact with skin.
H315 -Causes skin irritation.
H331 -Toxic if inhaled.
H336 -May cause drowsiness or dizziness.
H340 -May cause genetic defects
H350 -May cause cancer
H361fd -Suspected of damaging fertility. Suspected of damaging the unborn child.
H373 -May cause damage to organs through prolonged or repeated exposure
H410 -Very toxic to aquatic life with long lasting effects.
H411 -Toxic to aquatic life with long lasting effects.

Sources of key data used to compile the datasheet

- : <http://ecb.jrc.it>
CONCAWE 07-05

The contents and format of this SDS are in accordance with EEC Commission Directive 1999/45/EC, 67/548/EC, 1272/2008/EC and EEC Commission Regulation 1907/2006/EC (REACH) Annex II.

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