

Safety Data Sheet

1.0 IDENTIFICATION OF THE SUBSTANCE / MIXTURE

1.1 Product Identification

Substance	Gasoline, Unleaded
Commercial Product Name	Unleaded Gasoline; E10 Unleaded Gasoline
Synonyms	Regular Unleaded, E10, Premium Unleaded, EPUL, Super Premium Unleaded
Specific Use(s)	Fuel for use in petrol engine vehicles designed to run on unleaded petrol
CAS	86290-81-5

1.2 Details of the supplier of the SDS

Company	Greenergy Fuels Canada 14 King Street, Suite 250 Saint John New Brunswick E2L 1G2 CANADA
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Telephone No.	888 834 1980
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Email	msds-info@greenergy.com
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1.3 Emergency telephone number

Emergency telephone number (CANUTEC)	888 CAN UTEC (226 8832), or 613-996-6666 From Cellular phone only *666
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Availability	24hrs
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2.0 HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

Classification according to GHS

Flam. Liq. 1	H224
Skin Irrit. 2	H315
Carc. 1B	H350
Mutagenic 1B	H340
Asp.Tox. 1	H304
STOT SE 3	H336
Aquatic Chronic 2	H411
Reproductive 2	H361fd

For the full text of classification codes and/or H-phrases in this section, see 2.2 below.

2.2 Label elements

Labelling according to GHS

Pictograms:



GHS02



GHS08



GHS07



GHS09

Signal word: Danger

Hazard statements:

- H224 - Extremely flammable liquid and vapour.
- H315 - Causes skin irritation.
- H350 - May cause cancer.
- H340 - May cause genetic defects.
- H304 - May be fatal if swallowed and enters airways.
- H336 - May cause drowsiness or dizziness.
- H411 - Toxic to aquatic life with long lasting effects.
- H361 - Suspected of damaging fertility or the unborn child.

Precautionary statements:

- P202 - Do not handle until all safety precautions have been read & understood.
- P210 - Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
- P273 - Avoid release to the environment.
- P281 - Use personal protective equipment as required.
- P308 + P313 - If exposed or concerned get medical advice / attention.
- P362 – Take off contaminated clothing and wash before reuse.

Other Hazards

Not relevant

3.0 COMPOSITION / INFORMATION ON INGREDIENTS

3.1 Substances

Substance name	Product Identifier	%	Classification according to GHS
Gasoline	CAS no: 86290-81-5	90 - 100	H224 - Flam. Liq. 1 H315 - Skin Irrit. 2 H350 – Carc. 1B H340 - Muta. 1B H304 - Asp.Tox. 1 H336 - STOT SE 3 H411 - Aquatic Chronic 2 H361 - Repr. 2
Ethanol	CAS no: 64-17-5	0 - 10	H225 – Flam. Liq. 2 H319 - Eye Irrit. 2

For the full text of classification codes and/or H-phrases in this section, see section 2.2.

4.0 FIRST AID MEASURES

4.1 Description of first aid measures

Inhalation:	Keep at rest. Move to fresh air. Oxygen or artificial respiration if needed. Consult a physician immediately.
Skin contact:	After contact with skin, wash immediately with plenty of soap and water. Take off contaminated clothing and shoes immediately. Wash contaminated clothing before reuse. If skin irritation persists, call a physician.
Eye contact:	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. If eye irritation persists, consult a specialist.
Ingestion:	Do NOT induce vomiting. Rinse mouth. Drink plenty of water. Never give anything by mouth to an unconscious person. Obtain medical attention.
Additional advice:	First aider needs to protect him/her self. See also section 8. Show this safety data sheet to the physician in attendance.

4.2 Most important symptoms and effects, both acute and delayed

Inhalation:	May cause irritation of respiratory tract. Inhalation of high vapour concentrations may cause symptoms like headache, dizziness, tiredness, nausea and vomiting.
Skin contact:	Irritating to skin.
Eye contact:	Contact with eyes may cause irritation.
Ingestion:	Harmful: may cause lung damage if swallowed. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhoea.

4.3 Indication of immediate medical attention and special treatment needed

No data available

5.0 FIREFIGHTING MEASURES

5.1 Extinguishing media

Suitable extinguishing media: Use dry chemical, CO₂, water spray or alcohol resistant foam.

Extinguishing media which shall not be used for safety reasons: High volume water jet.

5.2 Special hazards arising from the substance or mixture

Fire Hazard: Extremely flammable

Specific hazards: Vapours may form explosive mixture with air. Vapours are heavier than air and may spread along floors. Flash back possible over considerable distance. The pressure in sealed containers can increase under the influence of heat. Cool containers / tanks with water spray. Burning produces noxious and toxic fumes. Possible decomposition products are: CO_x, H₂S, Sox. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

5.3 Advice for firefighters

Special protective equipment for firefighters: Wear personal protective equipment. Wear self-contained breathing apparatus for firefighting if necessary.

6.0 ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions: Wear personal protective equipment. See also section 8. Evacuate personnel to safe areas. Avoid contact with skin, eyes and clothing. Do not breathe vapours or spray mist. Do not smoke.

6.2 Environmental precautions

Environmental precautions: Do not flush into surface water or sanitary sewer system.

6.3 Methods and materials for containment and cleaning up

Methods for cleaning up: Remove all sources of ignition. Do not use tools which may produce sparks. Prevent further leakage or spillage if safe to do so. Soak up with inert absorbent material (e.g., sand, silica gel, acid binder, universal binder, sawdust). Dam up. Sweep up and shovel into suitable containers for disposal. After cleaning, flush away traces with water. Dispose of in accordance with local regulations.

7.0 HANDLING AND STORAGE

7.1 Precautions for safe handling

Handling: Wear personal protective equipment. See also section 8. Avoid contact with skin, eyes and clothing. Do not breathe vapours or spray mist. Use only in well-ventilated areas. Ensure all equipment is electrically grounded before beginning transfer operations. Keep away from open flames, hot surfaces and sources of ignition. Do not smoke. Always replace cap after use. Take care to avoid waste and spillage when weighing, loading and mixing the product. Do not empty into drains.

7.2 Conditions for safe storage, including any incompatibilities

Storage: Do not store near or with any of the incompatible materials listed in section 10. Store in original container. Keep tightly closed in a dry, cool and well-ventilated place. Keep away from open flames, hot surfaces and sources of ignition.

Hygiene measures: Handle in accordance with good industrial hygiene and safety practice. Wash hands and face before breaks and immediately after handling the product. Do not eat, drink or smoke. Keep away from food, drink and animal feeding stuffs. Use only in area provided with appropriate exhaust ventilation.

Packaging material: Do not burn, or use a cutting torch on, the empty drum. Do not puncture or incinerate.

8.0 EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

Component: Gasoline (86290-81-5)
 TLV-TWA: 300 ppm (ACGIH)
 TLV-STEL: 500 ppm (ACGIH)

Component: Ethanol (64-17-5)
 TLV-TWA: 300 ppm (CA AB OEL)
 TLV-STEL: 500 ppm (ACGIH)

Component: Benzene (71-43-2)
 TLV-TWA: 0.5 ppm (ACGIH)
 TLV-STEL: 2.5 ppm (ACGIH)

8.2 Biological occupational exposure limits

Component: Toluene (108-88-3)
 Conc. in blood (mg/l): 0.02 (ACGIH, BEI)
 (prior to last shift)
 Conc. in urine (mg/l): 0.03 (ACGIH, BEI)
 (End of shift, as soon as possible after exposure ceases)

8.3 Exposure controls

Respiratory protection:	Ensure adequate ventilation. Not required under normal use. In case of insufficient ventilation wear suitable respiratory equipment. (Respiratory equipment selection should be informed by relevant industry standards such as CSA Z94.4 Selection, Use, and Care of Respirators)
Hand protection:	Wear chemically resistant gloves approved for use with gasoline. The selection of gloves for a specific application and duration of use in a working area, should also consider other factors, 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 (CSA Z94.3 Eye and Face Protectors)

9.0 PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance:	liquid
Colour:	pale yellow
Odour:	characteristic petroleum hydrocarbon odour
pH:	not applicable
Boiling point/boiling range:	25 - 200°C
Melting point/range:	< -60°C
Flash point:	< -40°C
Auto-ignition temp:	257°C
UEL:	7.6% (v/v)
LEL:	1.3% (v/v)
Evaporation rate:	no data available
Vapour pressure:	~ 350 - 900 hPa @ 37.8°C
Vapour density:	>>1.0
Solubility in water:	slightly soluble (30 - 100mg/l, 20°C)
Viscosity:	no data available
Density:	720 – 775 kg/m ³ @ 15°C
Partition coefficient:	2.1 - 6 (n-octanol/water)

9.2 Other information

No data available

10.0 STABILITY AND REACTIVITY

10.1 Reactivity

Reactivity: Flammable liquid

See also section 10.5.

10.2 Chemical stability

Stability: Stable under normal conditions.

10.3 Possibility of hazardous reactions

No data available

10.4 Conditions to avoid

Conditions to avoid: Heat, flames and sparks. See also section 7.

10.5 Incompatible materials

Incompatible materials: Incompatible with strong acids, oxidizing agents, and bases.

10.6 Hazardous decomposition products

Hazardous decomposition products: Burning produces noxious and toxic fumes. Possible decomposition products are: COx.

11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

General Information

Acute toxicity

Component:	Gasoline (86290-81-5)
LD50/oral/rat:	> 5000 mg/kg
LD50/dermal/rat:	> 2000 mg/kg
LD50/inhalation/4hr/rat:	> 5.2 mg/l/4hr
Inhalation:	May cause drowsiness or dizziness.
Skin contact:	Repeated exposure may cause irritation, skin dryness or cracking.
Eye contact:	Contact with eyes may cause irritation.
Ingestion:	Harmful: may cause lung damage if swallowed. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhoea.
Acute toxicity:	May be fatal if swallowed and enters airways.
Chronic toxicity:	May cause cancer. May cause genetic defects.

Further information

No data available

12. ECOLOGICAL INFORMATION

12.1 Toxicity

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
EC50/48hr/daphnia:	7.6 mg/l

12.2 Persistence and degradability

Persistence and degradability: Inherently biodegradable

12.3 Bioaccumulative potential

Bioaccumulation: Does not bioaccumulate
 Partition coefficient: 2.1 - 6 (n-octanol/water)

12.4 Mobility in soil

Mobility: no data available

12.5 Results of PBT and vPvB assessment

No data available

12.6 Other adverse effects

No data available

13.0 DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Waste from residues / unused products: Where possible, recycling via a competent waste oil recovery contractor is preferred to energy recovery, incineration or landfill. Dispose of in accordance with local and national regulations

Contaminated packaging: Do not burn, or use a cutting torch on, the empty drum. Do not puncture or incinerate. Where possible, re-use or recycle.

Sewage disposal: DO NOT dispose of into sewage systems or surface water drainage systems.

14. TRANSPORT INFORMATION

14.1 UN Number

UN number : 1203

14.2 UN proper shipping name

Proper shipping name : MOTOR SPIRIT / GASOLINE / PETROL

14.3 Transport hazard class(es)

14.3.1 Overland transport

Class: 3 - Flammable liquids
 Danger labels:



ERG code: 3 - Flammable liquid
 128

14.3.2 Transport by sea

Class: 3 - Flammable liquid
 Danger labels: 3 - Flammable liquid
 EmS: F-E, S-E

14.3.3 Air transport

Class: 3 - Flammable liquid
Danger labels: 3 - Flammable liquid
Packing Instruction (cargo aircraft): 366

14.4 Packing group

Packing group: II

14.5 Environmental hazards

Marine pollutant: P



Other information (transport) : No supplementary information available.

14.6 Special precautions for users

No data available

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

No data available

15.0 REGULATORY INFORMATION

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

This product has been classified according to the hazard criteria of the Hazardous Products Regulations (HPR) and the SDS contains all of the information required by the HPR.

15.2 Chemical Safety Assessment

Chemical Safety assessment: A Chemical Safety Assessment has been carried out for this substance.

16.0 OTHER INFORMATION

Sources of key data used to compile the datasheet: Registrations for EU and UK REACH, ECHA hazardous chemicals portal and ACGIH

Revision: 5.0
 Date: March 2024
 Updated sections: Revised section 1 to identify as Unleaded and E10 gasoline as distinct from E15 gasoline

List of Abbreviations:

SDS	Safety Data Sheet
ECHA	European Chemicals Agency
ACGIH	American Conference of Governmental Industrial Hygienists
GHS	Globally Harmonised System [of classification]
HVO	Hydrogenated Vegetable Oil
REACH	Registration, Evaluation and Authorisation of Chemicals
ADR	Agreement for the transportation of dangerous goods by road
ADN	International Carriage of Dangerous Goods by Inland Waterways
RID	International Carriage of Dangerous Goods by Rail
PBT	Persistent, Bio-accumulative and Toxic
vPvB	Very Persistent and very Bio-accumulative
PCA	Passenger Carrying Aircraft
CAO	Cargo Aircraft Only

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