

# SAFETY DATA SHEET

Greenergy B20 (Diesel and Gasoil)

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

### Identification of the substance or preparation

**Product name** : Greenergy B20 (Diesel and Gasoil)**Product type** : Liquid.**Date of issue/Date of revision** : 08/10/2008.**Use of the substance/preparation** : Fuel for compression ignition diesel engines used to power vehicles on the public highway Low Emission Automotive Diesel Fuel, DERV, Diesel Fuel including up to 20% FAME (Fatty acid methyl ester). Transport Fuel to meet the following specifications for diesel (BS EN590) and biodiesel (BS EN14214).

### Company/undertaking identification

**Distributor** : Greenergy Fuels Limited  
198 High Holborn  
London WC1V 7BD**e-mail address of person responsible for this SDS** : msds-info@greenergy.com**Emergency telephone number (with hours of operation)** : 020 7404 7700 (24 hrs)

## 2. HAZARDS IDENTIFICATION

The product is classified as dangerous according to Directive 1999/45/EC and its amendments.

**Classification** : Carc. Cat. 3; R40  
Xn; R65  
R66  
N; R51/53**Human health hazards** : Limited evidence of a carcinogenic effect. Harmful: may cause lung damage if swallowed. Repeated exposure may cause skin dryness or cracking.**Environmental hazards** : Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.**See section 11 for more detailed information on health effects and symptoms.**

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

**Substance/preparation** : Preparation  
Transport Fuel to meet the following specifications for diesel (BS EN590) and biodiesel (BS EN14214).

Ingredient name	CAS number	%	Number	Classification
fuels, diesel	68334-30-5	75 - 100	269-822-7	Carc. Cat. 3; [1] R40 Xn; R65 R66 N; R51/53
<b>See section 16 for the full text of the R-phrases declared above</b>				

**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.**

[1] Substance classified with a health or environmental hazard

[2] Substance with a workplace exposure limit

[3] PBT-substance

[4] vPvB-substance

**Occupational exposure limits, if available, are listed in section 8.****Date of issue/Date of revision** : 08/10/2008.

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## 4. FIRST AID MEASURES

### First-aid measures

- Inhalation** : Move exposed person to fresh air. Keep person warm and at rest. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
- Ingestion** : Wash out mouth with water. Remove dentures if any. Move exposed person to fresh air. Keep person warm and at rest. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Aspiration hazard if swallowed. Can enter lungs and cause damage. Do not induce vomiting. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
- Skin contact** : Wash skin thoroughly with soap and water or use recognised skin cleanser. Remove contaminated clothing and shoes. Continue to rinse for at least 10 minutes. Obtain medical attention if symptoms occur. Wash clothing before reuse. Clean shoes thoroughly before reuse.
- Eye contact** : Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention.
- Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.
- Notes to physician** : No specific treatment. Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

See section 11 for more detailed information on health effects and symptoms.

## 5. FIRE-FIGHTING MEASURES

### Extinguishing media

- Suitable** : Use dry chemical, CO<sub>2</sub>, water spray (fog) or foam.
- Not suitable** : Do not use water jet.
- Special exposure hazards** : Combustible liquid. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion.  
Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool. This material is toxic to aquatic organisms. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.
- Hazardous thermal decomposition products** : No specific data.
- Special protective equipment for fire-fighters** : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

## 6. ACCIDENTAL RELEASE MEASURES

- Personal precautions** : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapour or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment (see section 8).
- 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.

### Methods for cleaning up

## 6. ACCIDENTAL RELEASE MEASURES

- Small spill** : Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble or absorb with an inert dry 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.
- Large spill** : 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. Wash spillages into an effluent treatment plant or proceed as follows. 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 (see section 13). Use spark-proof tools and explosion-proof equipment. Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilt product. Note: see section 1 for emergency contact information and section 13 for waste disposal.

## 7. HANDLING AND STORAGE

- Handling** : Put on appropriate personal protective equipment (see section 8). Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Do not get in eyes or on skin or clothing. Do not ingest. Avoid breathing vapour or mist. Avoid release to the environment. Refer to special instructions/safety data sheet. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. 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 non-sparking tools. Take precautionary measures against electrostatic discharges. To avoid fire or explosion, dissipate static electricity during transfer by earthing and bonding containers and equipment before transferring material. Empty containers retain product residue and can be hazardous. Do not reuse container.
- Storage** : 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. Eliminate all ignition sources. Separate from oxidizing materials. Keep container tightly closed and sealed until ready for use. 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.

### Packaging materials

- Recommended** : Use original container.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Exposure limit values

<u>Ingredient name</u>	<u>Occupational exposure limits</u>
No exposure limit value known.	

- Recommended monitoring procedures** : If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to European Standard EN 689 for methods for the assessment of exposure by inhalation to chemical agents and national guidance documents for methods for the determination of hazardous substances.

### Exposure controls

- Occupational exposure controls** : Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapour or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

- 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.
- Respiratory protection** : Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.
- Hand protection** : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.
- Eye protection** : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists or dusts.
- Skin protection** : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
- 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.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### General information

#### Appearance

- Physical state** : Liquid.
- Colour** : White.
- Odour** : Bland.

### Important health, safety and environmental information

- Boiling point** : 180 to 370°C (356 to 698°F) ASTM D 86
- Flash point** : Closed cup: >72°C (>161.6°F) [ASTM D 93 / EN 22719]
- Density** : 0.825 to 0.85 g/cm<sup>3</sup> [15°C (59°F)]ASTM D 1298
- Solubility** : Insoluble in the following materials: cold water.
- Viscosity** : Kinematic (40°C (104°F)): 0.02 to 0.05 cm<sup>2</sup>/s (2 to 5 cSt) [ISO 3104/3105]

### Other information

- Auto-ignition temperature** : 386°C (726.8°F)

## 10. STABILITY AND REACTIVITY

- Chemical stability** : The product is stable.
- Possibility of hazardous reactions** : Under normal conditions of storage and use, hazardous reactions will not occur.
- Conditions to avoid** : Avoid all possible sources of ignition (spark or flame). Do not pressurise, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition. Avoid release to the environment. Refer to special instructions/safety data sheet. Do not swallow.
- Materials to avoid** : Reactive or incompatible with the following materials:  
oxidizing materials
- Hazardous decomposition products** : Under normal conditions of storage and use, hazardous decomposition products should not be produced.

## 11. TOXICOLOGICAL INFORMATION

### Toxicokinetics

- Absorption** : Not available.  
**Distribution** : Not available.  
**Metabolism** : Not available.  
**Elimination** : Not available.

### Potential acute health effects

- Inhalation** : No known significant effects or critical hazards.  
**Ingestion** : Aspiration hazard if swallowed. Can enter lungs and cause damage.  
**Skin contact** : Defatting to the skin. May cause skin dryness and irritation.  
**Eye contact** : May cause eye irritation.

### Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
fuels, diesel	LD Dermal	Rabbit	>5 mL/kg	-
	LD50 Oral	Rat	7.5 gm/kg	-
	LD50 Oral	Rat	7500 mg/kg	-

- Conclusion/Summary** : Not available.

### Potential chronic health effects

#### Chronic toxicity

- Conclusion/Summary** : Not available.

#### Irritation/Corrosion

- Conclusion/Summary** : Not available.

#### Sensitiser

- Conclusion/Summary** : Not available.

#### Carcinogenicity

- Conclusion/Summary** : Not available.

#### Mutagenicity

- Conclusion/Summary** : Not available.

#### Teratogenicity

- Conclusion/Summary** : Not available.

#### Reproductive toxicity

- Conclusion/Summary** : Not available.

Product name	Carcinogenic effects	Mutagenic effects	Developmental effects	Fertility effects
fuels, diesel	Carc. Cat. 3; R40	-	-	-

- Chronic effects** : Prolonged or repeated contact can defat the skin and lead to irritation, cracking and/or dermatitis.  
**Carcinogenicity** : May cause cancer, based on animal data. Limited evidence of a carcinogenic effect. Risk of cancer depends on duration and level of exposure.  
**Mutagenicity** : No known significant effects or critical hazards.  
**Teratogenicity** : No known significant effects or critical hazards.  
**Developmental effects** : No known significant effects or critical hazards.  
**Fertility effects** : No known significant effects or critical hazards.

### Over-exposure signs/symptoms

- Inhalation** : No specific data.  
**Ingestion** : Adverse symptoms may include the following:  
nausea or vomiting  
**Skin** : Adverse symptoms may include the following:  
irritation  
dryness  
cracking  
**Eyes** : No specific data.

## 12. ECOLOGICAL INFORMATION





- Environmental effects** : Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
- Aquatic ecotoxicity**
- Conclusion/Summary** : Not available.
- Biodegradability**
- Conclusion/Summary** : Not available.
- Other adverse effects** : No known significant effects or critical hazards.
- PBT** : No.  
P: Not available. B: Not available. T: No.
- vPvB** : Not available.

## 13. DISPOSAL CONSIDERATIONS

- Methods of disposal** : The generation of waste should be avoided or minimised wherever possible. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe way. 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. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.
- Hazardous waste** : The classification of the product may meet the criteria for a hazardous waste.

## 14. TRANSPORT INFORMATION

### International transport regulations

Regulatory information	UN number	Proper shipping name	Classes	PG*	Label	Additional information
<b>ADR/RID Class</b>	UN1202	GAS OIL	3	III		<b>Hazard identification number</b> 30 <b>Limited quantity</b> LQ7 <b>CEFIC Tremcard</b> 30S1202
<b>ADNR Class</b>	UN1202	GAS OIL	3	III		-
<b>IMDG Class</b>	UN1202	GAS OIL	3	III		<b>Emergency schedules (EmS)</b> F-E, S-E
<b>IATA Class</b>	UN1202	Gas oil	3	III		<b>Passenger and Cargo Aircraft</b> Quantity limitation: 60 L Packaging instructions: 309 <b>Cargo Aircraft Only</b> Quantity limitation: 220 L Packaging instructions: 310 <b>Limited Quantities - Passenger Aircraft</b> Quantity limitation: 10 L Packaging instructions: Y309

PG\* : Packing group

**15. REGULATORY INFORMATION**

**Chemical Safety Assessment** : This product contains substances for which Chemical Safety Assessments are still required.

**EU regulations**

Classification and labeling have been determined according to EU Directives 67/548/EEC and 1999/45/EC (including amendments) and take into account the intended product use.

**Hazard symbol or symbols** :



Harmful, Dangerous for the environment

**Risk phrases**

: R40- Limited evidence of a carcinogenic effect.  
R65- Harmful: may cause lung damage if swallowed.  
R66- Repeated exposure may cause skin dryness or cracking.  
R51/53- Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

**Safety phrases**

: S2- Keep out of the reach of children.  
S29- Do not empty into drains.  
S36/37- Wear suitable protective clothing and gloves.  
S46- If swallowed, seek medical advice immediately and show this container or label.  
S61- Avoid release to the environment. Refer to special instructions/safety data sheet.

**Contains**

: fuels, diesel

**Product use**

: Consumer applications.

**Europe inventory**

: Not determined.

**Black List Chemicals**

:

**Priority List Chemicals**

:

**Integrated pollution prevention and control list (IPPC) - Air**

:

**Integrated pollution prevention and control list (IPPC) - Water**

:

**Prior Informed Consent. List of chemicals subject to the international PIC procedure (Part I, II, III)**

:

**Other EU regulations**

**Containers to be fitted with child-resistant fastenings** : Yes, applicable.

**Tactile warning of danger** : Yes, applicable.

**International regulations**

**Chemical Weapons Convention: List Schedule I Chemicals**

**Chemical Weapons Convention: List Schedule II Chemicals**

**Chemical Weapons Convention: List Schedule III Chemicals**

## 16. OTHER INFORMATION

**Full text of R-phrases referred to in sections 2 and 3 - United Kingdom (UK)** : R40- Limited evidence of a carcinogenic effect.  
R65- Harmful: may cause lung damage if swallowed.  
R66- Repeated exposure may cause skin dryness or cracking.  
R51/53- Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

**Full text of classifications referred to in sections 2 and 3 - United Kingdom (UK)** : Carc. Cat. 3 - Carcinogen Category 3  
Xn - Harmful  
N - Dangerous for the environment

### Restrictions on use

#### **Uses**

None identified.

### History

**Date of printing** : 08/10/2008.  
**Date of issue/ Date of revision** : 08/10/2008.  
**Date of previous issue** : No previous validation.  
**Version** : 1  
**Prepared by** : Not available.

✔ Indicates information that has changed from previously issued version.

### Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

## Annex