

CPL INDUSTRIES LIMITED

PRODUCT SAFETY DATA SHEET

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

1.1 **Product identifier**

> Product Name: Solid fuel briquettes. Trade Name(s): Ecoal, Ecoal 50

Chemical Formula: Mixture CAS No. Mixture EC No. Mixture

1.2 Relevant identified uses and uses advised against

> Identified use(s): Fuel for domestic heating. Use(s) advised against: Currently not identified.

1.3 **Details of supplier of Safety Data Sheet**

Company Identification: CPL Industries Ltd.

Westthorpe Fields Road

Killamarsh Sheffield S21 1TZ England

Telephone: +44 (0)1246 277001 E-mail: SDS@cplindustries.co.uk

1.4 **Emergency telephone number** 0800 716 656 (product helpline)

Weekdays, 08:00 - 20:00

Saturday, 09:00 - 12:00

For product information and safety data sheets

2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

2.1.1 **Regulation (EC) No. 1272/2008** Not classified as hazardous for supply/use

CLP:

2.1.2 Directive 67/548/EEC and Not classified as hazardous for supply/use

Directive 1999/45/EC

2.2 Label elements according to Regulation (EC) No. 1272/2008 (CLP)

> Product Name: Solid fuel briquettes.

Hazard Pictogram(s): None. Signal Word(s): None. None. Hazard Statement(s): Precautionary Statement(s): None.



2.3 Other hazards

- a) The product is combustible and releases toxic carbon monoxide and other potentially hazardous gases during combustion. However, burning this product in a domestic heating appliance poses no significant risk to health so long as the appliance is installed correctly, is maintained and used according to the manufacturers' instructions and the chimney is kept clear of blockages and does not leak. Therefore, it is important that users of this product ensure that their heating appliance is maintained and the flueway/chimney swept on a regular basis.
- b) Ensure that the appliance has adequate ventilation.
- c) A fireguard should always be used to help minimise the risks from fires. This applies particularly if children are in the room or if an open fire is left unattended.
- d) Biomass dusts may be liberated on handling.
- e) Dusts may cause irritation to the eyes, skin, respiratory and digestive tracts.
- f) Prolonged and repeated skin contact may cause dermatitis.

3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Mixture

EC Classification No. 1272/2008

Ingredients	% (w/w)	CAS No	EC No.	REACH Registration No.	Hazard Pictogram(s) & Hazard Statement(s)
Anthracite Coal	25 – 35	8029-10-5	Not classified	None	None
Biomass (Olive Stone)	20 – 35	Not classified	Not classified	None	None
Petroleum Coke	15 – 35	64741-79-3	265-080-3	None	None
Bituminous Coal	0 – 10	Not classified	Not classified	None	None
Molasses	15 - 20	68476-78-8	270-698-1	None	None

EC Classification No. 67/548/EEC

Ingredients	% (w/w)	CAS No	EC No.	REACH Registration No.	Classification & Risk Phrases(s)
Anthracite Coal	25 – 35	8029-10-5	Not classified	None	None
Biomass (Olive Stone)	20 – 35	Not classified	Not classified	None	None
Petroleum Coke	15 – 35	64741-79-3	265-080-3	None	None
Bituminous Coal	0 – 10	Not classified	Not classified	None	None
Molasses	15 - 20	68476-78-8	270-698-1	None	None

3.2 Additional Information



- (a) The compositions given above pertain to the feedstock blend used in the manufacture of the products. A stage in the production process involves the thermal treatment (curing) of briquettes at temperatures up to 300°C.
- (b) The polymerisation of molasses during curing is supported by the addition of a low concentration (<1% w/w) of orthophosphoric and/or sulphuric acid. The acid is converted to salts during curing and is heavily diluted in the production process. Consequently, acids are not present in significant concentrations in the final product and, because the acids are added at <1% w/w and are not PBT substances, they are excluded from the compositions provided above (as allowed under REACH Annex 1).
- Refer to Section 16 for the full text of hazard statements and risk phrases (c)

4. FIRST AID MEASURES

4.1 Description of first aid measures

Inhalation (combustion gases): Remove victim to fresh air. Treat symptomatically.

Get medical advice/attention if necessary.

Skin Contact: Wash skin thoroughly with soap and water. If skin

irritation occurs: Get medical advice/attention.

Eye Contact: Contact with eyes may cause irritation. Irrigate

> thoroughly with water. Remove contact lenses, if present and easy to do. If eye irritation persists: Get

medical advice/attention.

Unlikely route of exposure. IF SWALLOWED: Rinse Ingestion:

mouth. Do NOT induce vomiting. Give water to drink.

Get medical advice/attention if necessary.

4.2 Most important symptoms and effects, both acute and delayed

Inhalation of combustion products can result in carbon monoxide poisoning. Symptoms include nausea, dizziness, tiredness, headaches, stomach and chest pains. High levels of exposure can result in unconsciousness and death.

Dust contact with eyes, skin, respiratory and digestive tracts may cause irritation.

4.3 Indication of any immediate medical attention and special treatment needed

No special requirements. Treat symptomatically.

5. FIRE FIGHTING MEASURES

5.1 **Extinguishing media**

Suitable Extinguishing Media Water spray, dry powder, foam or carbon dioxide. Unsuitable Extinguishing Media: Water in confined spaces (risk of combustible and

explosive gases formation).

5.2 Special hazards arising: Carbon dioxide, carbon monoxide and other

potentially hazardous gases may be released on

combustion.

When water is used as the extinguishing media. steam generated may react with the burning fuel to





form combustible and explosive gases (carbon monoxide and hydrogen). Beware in confined

spaces.

Dusts may represent an explosion hazard if in

contact with heat or an ignition source.

5.3 Advice for fire-fighters: Fire-fighters should wear complete protective

clothing/equipment, including self-contained

breathing apparatus.

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures:

Avoid creating dust clouds and do not inhale dusts. Where dust levels cannot be controlled, wear respiratory protective equipment of an approved

standard.

Avoid contact with eyes and skin.

6.2 Environmental precautions: Avoid discharge to drains, surface and

groundwaters.

Avoid creating dust clouds.

6.3 Methods for containment

and cleaning up:

Spilt product may be recovered by mechanical or manual means (e.g. shovelling, vacuuming, or sweeping), wearing suitable protective clothing if

dealing with large quantities.

Avoid creating dust clouds, keep away from ignition

sources and maintain a ventilated area.

Recovered material may be re-used if

uncontaminated but should be disposed of through

licensed routes if contaminated.

6.4 Reference to other sections: See also Sections 8 and 13.

7. HANDLING & STORAGE

7.1 Precautions for safe

handling:

Avoid creating dust clouds. Where dust

concentrations cannot be controlled, wear respiratory protective equipment of an approved standard.

Minimise contact with eyes and skin.

7.2 Conditions for safe storage: Store in a cool and (preferably) dry place away from

ignition sources, heat sources, combustible and

incompatible materials.

Storage temperature:

Storage life:

Incompatible materials:

Ambient. The product is combustible. Stable under normal conditions.

Strong acids and strong oxidising agents.

7.3 Specific end uses: Solid fuel for domestic heating systems.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION



8.1 Control parameters

8.1.1 Occupational Exposure Limits

Substance	CAS No.	LTEL (8 hr TWA mg.m-3) Inhalable	LTEL (8 hr TWA mg.m-₃) Respirable	Note
Anthracite Coal	8029-10-5	10	4	WEL
Petroleum Coke	64741-79-3	10	4	WEL
Bituminous Coal	125612-26-2	10	4	WEL
Molasses	68476-78-8	None assigned	None assigned	-
Biomass (Olive Stone)	Not classified	None assigned	None assigned	-

Substance	CAS No.	LTEL (8hr TWA mg.m⋅₃)	STEL (15 min ref. mg.m-3)	Note
Orthophosphoric Acid*	7664-38-2	1	2	WEL
Sulphuric Acid*	7664-93-9	None	None	WEL
Carbon monoxide**	630-08-0	35	232	WEL

^{* =} Workplace exposure limits (WEL) are provided for Orthophophoric Acid, although significant concentrations of free acid will not be present in the final product

8.1.2 Biological limit values: Not established.

8.1.3 DNELs and PNECs: Not established.

8.2 Exposure controls

8.2.1 Appropriate engineering

controls:

Ensure adequate ventilation.

8.2.2 Personal protective equipment:

Face/eye protection: Not normally required, but eye protection is

advisable if airborne dust is anticipated.

Skin protection: Not normally required.

Wear suitable gloves if prolonged skin contact is

likely.

Respiratory protection: Where excessive dust cannot be controlled, wear

respiratory protective equipment of an approved

standard.

Thermal hazards: Not applicable.

8.2.3 Environmental exposure

controls:

No special requirements.

9. PHYSICAL & CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Form : Solid.

Appearance: Black/brown pillow shaped briquettes.

Odour : Not perceptible. Odour threshold (ppm) : Not established.

^{** =} Carbon Monoxide is a product of incomplete combustion





pH (value) : Not established.

Melting point (°C) : Not applicable.

Boiling point (°C) : Not applicable.

Flash point (°C) : Not available.

Evaporation rate : Not applicable.

Flammability : Not classified as flammable

Explosive limit ranges Not established. Vapour pressure (mm Hg) Not applicable. Vapour density Not applicable. Relative density Not available. Solubility (water) Insoluble. Solubility (other) Not available. Partition coefficient Not applicable. Auto-ignition temperature (°C) Not available. Decomposition temperature (°C): Not available.

Viscosity (mPa.s) : Not applicable. The product is solid.

Explosive properties : Product not explosive although dusts may form

explosive mixtures with air.

Oxidising properties : Not oxidising.

9.2 Other information : None.

10. STABILITY & REACTIVITY

10.1 Reactivity: Stable under normal conditions.
10.2 Chemical stability: Stable under normal conditions.

10.3 Possibility of hazardous May liberate asphyxiating and toxic gases on combustion, including carbon monoxide.

10.4 Conditions to avoid:During handling, transportation and storage keep

away from heat and ignition sources. Avoid creating

dustclouds.

10.5 Incompatible materials: Strong oxidising agents and strong acids.

10.6 Hazardous decomposition Products of combustion include carbon monoxide,

products: carbon dioxide, sulphur dioxide, oxides of nitrogen,

Hydrocarbons and particulate matter.

11. TOXICOLOGICAL INFORMATION

This product is unlikely to represent a significant health hazard under normal conditions of handling and use.

11.1 Information on toxicological effects

11.1.1 Mixture

Acute toxicity

Ingestion:Unlikely to be hazardous if swallowed.Inhalation:Unlikely to represent an acute hazard.Skin contact:Unlikely to cause harmful effects.

Eye contact : Dust and grit may cause mechanical irritation. **Irritation** : Dusts can cause irritation to the eyes, skin,

respiratory and digestive tracts.

Corrosivity : Not classified.

Sensitisation : May cause sensitisation through prolonged skin

contact.

Repeated dose toxicity : No information available.



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Carcinogenicity : Unlikely to present a carcinogenic hazard to man.

Mutagenicity : No information available.

Toxicity for reproduction : No information available.

11.2 Other information : During combustion the product can release toxic and

asphyxiating gases, such as carbon monoxide and

irritant gases such as sulphur dioxide. Low

concentrations of polycyclic aromatic hydrocarbons (PAHs) may also be emitted during the combustion

of the product.

12. ECOLOGICAL INFORMATION

12.1 Toxicity : Leachate may be mildly acidic. Product may

increase biological oxygen demand (BOD) in

aquatic systems.

12.2 Persistence and

Degradability

Partly biodegradable.

12.3 Bioaccumulative potential : No potential for bioaccumulation.

12.4 Mobility in soil : Largely insoluble in water, although leachate may

be mildly acidic.

12.5 Results of PBT and vPvB

assessment:

Not classified as PBT or vPvB.

12.6 Other adverse effects : The product releases carbon dioxide and potentially

other greenhouse gases during combustion.

However, the use of some renewable feedstocks and

the maximisation of heating efficiency serve to

mitigate environmental impact.

13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods : Recover or recycle if possible. Dispose of wastes

through an authorised waste disposal facility. Ensure ashes are cold before disposal.

13.2 Additional information : None.

14. TRANSPORT INFORMATION

Not classified as dangerous for transport.

14.1 UN number : Not applicable.14.2 UN proper shipping name : Not applicable.

14.3 Transport hazard class(es) : Not applicable.

14.4 Packing group : Not applicable.

14.5 Environmental hazards : Not applicable.14.6 Special precautions for user : Not applicable.

to Annex II of MARPOL

Transport in bulk according

73/78 and the IBC Code

14.7

15. REGULATORY INFORMATION

Not applicable.



15.1 Safety, health and environmental regulations/ legislation

15.1.1 EU regulations : None known.

15.1.2 National regulations : Products are authorised for use in smoke control

areas under the UK Clean Air Act 1993.

15.2 Chemical Safety Assessment : Not available.

16. OTHER INFORMATION

Sections 1 to 16 of the Safety Data Sheet were reviewed and revised on the 15 July 2013 to combine Ecoal and Ecoal 50 in the same SDS. Revised fuel composition (3.1), occupational exposure limits (8.1.1) and physical and chemical properties (9.1) are included in this latest revision. The Safety Data Sheet has been prepared in a standardised format compliant with the REACH Regulations.

LEGEN

WEL : Workplace Exposure Limit (UK HSE EH40).

LTEL : Long Term Exposure Limit.

STEL : Short Term Exposure Limit.

TWA : Time Weighted Average.

DNEL : Derived No Effect Level.

PNEC : Predicted No Effect Concentration.
PBT : Persistent Bioaccumulative and Toxic.
vPvB : Very Persistent and Very Bioaccumulative.

Information contained in this Product Safety Data Sheet is believed to be accurate as at the date of issue and is given in good faith, but it is for users of this product to ensure that the product is suitable for their own particular purpose. Product users are responsible for the safe handling, storage, use and disposal of the product. CPL Industries Ltd gives no warranty as to the fitness of the product for any particular purpose and any implied warranty or condition (statutory or otherwise) is excluded except to the extent that such exclusion is prevented by law. CPL Industries Ltd accepts no liability for loss, or damage (other than that arising from death or personal injury) or expense, resulting from reliance on this information.

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