



# MATERIAL SAFETY DATA SHEET

Revised 2<sup>nd</sup> May, 2017

## BARBEQUE LIGHTER FLUID

### SECTION 1: IDENTIFICATION OF SUBSTANCE/PREPARATION & COMPANY

#### 1.1 Product identifier

Product name	<b>BARBEQUE LIGHTER FLUID</b>
REACH Registration Name	Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, <2% aromatics.
REACH Registration Number	01-2119456620-43
Substance/mixture	Substance

#### 1.1 Relevant identified uses of the substance or mixture and uses advised against

Identified uses	Manufacture of substances, distribution of substance, formulation & (re)packing of substances and mixtures, uses in coatings, use in cleaning agents, lubricant, metalworking fluid, rolling oil, use as binders and release agents, use as a fuel, lamp oil, barbecue lighter, functional fluids, road and construction applications, other consumer uses, laboratory activities, explosives manufacture and use, water treatment chemical, polymer processing.
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#### 1.2 Details of the supplier of the safety data sheet

Supplier	R.K.& J. Jones Ltd Southery Road, Feltwell, Thetford, Norfolk IP26 4BJ.
Tel:	01842 828101
Fax:	01842 828171
Emergency telephone number:	01223 968282

### SECTION 2: HAZARDS IDENTIFICATION

#### 2.1 Classification of the substance or mixture

##### REGULATION (EC) no. 1272/2008

For the full text of the H-statements mentioned in this section, see section 2.2.

##### Classification

Aspiration toxicity – Category 1 – H304

#### 2.2 Label elements

Labelled according to REGULATION (EC) No 1272/2008

Contains Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, <2% aromatics  
EC-No 9296-141-6



**Signal word:** DANGER  
**Hazard statements\*\*\*** H304 – May be fatal if swallowed and enters airways

**Precautionary statements** P301+P310-IF SWALLOWED: Immediately call a doctor  
P331 – Do NOT induce vomiting

**Supplemental Hazard Statements** EUH066– Repeated exposure may cause skin dryness or cracking

### 2.3 Other hazards

**Physical-Chemical properties:** Vapours may form explosive mixtures with air. The material can accumulate static charge and can therefore cause electrical ignition.

**Properties affecting health:** Repeated exposure may cause skin dryness or cracking

## SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

### 3.1 Substance

**Chemical nature** A complex and variable combination of paraffinic and cyclic hydrocarbons having a carbon number range predominantly of C11 to C14 and boiling in the range of approximately 180°C to 270°C.

Chemical Name	EC-No	REACH Registration Number	CAS-No	Weight %	GHS Classification
Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, <2% aromatics	926-141-6***	01-2119456620-43	^	100	Asp. Tox. 1 (H304)

**Additional information** The EC substance definition and related classification & labelling has been developed in the framework of the Regulation (EC) No 1907/2006 (REACH) For information about the related CAS number see section 15 of this MSDS. Total aromatic content: <0.5%

For the full text of the H-Statements mentioned in this section, see Section 16.

## SECTION 4: FIRST AID MEASURES

### 4.1 Description of first aid measures

**General advice:** IN CASE OF SERIOUS OR PERSISTENT CONDITIONS, CALL A DOCTOR OR EMERGENCY MEDICAL CARE.

**Inhalation** In case of exposure to intense concentrations of vapours, fumes or spray, transport the person away from the contaminated zone, keep warm and allow to rest.

**Ingestion:** Do not ingest. If swallowed then seek immediate medical assistance. Risk of product entering the lungs on vomiting after ingestion. In this case, the casualty should be sent immediately to hospital.

**Skin Contact:** Remove contaminated clothing and shoes. Wash off with soap and water.

**Eye Contact:** Rinse thoroughly with plenty of water, also under the eyelids. Keep eye wide open while rinsing.

**Protection of first aiders:** Use personal protective equipment.

#### **4.2 Most important symptoms and effects, both acute and delayed**

**Eye contact** Burning feeling and temporary redness

**Skin contact** Prolonged or repeated contact may dry skin and cause irritation

**Inhalation** The inhalation of vapours or aerosols may be irritating for the respiratory tract and for mucous membranes. Vapours inhaled in strong concentration have a narcotic effect on the central nervous system.

**Ingestion** If swallowed accidentally, the product may enter the lungs due to its low viscosity and lead to the rapid development of very serious pulmonary lesions (medical survey during 48 hours). Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhoea. May cause central nervous system depression.

#### **4.3 Indication of immediate medical attention and special treatment needed, if necessary**

**Notes to doctor** Treat symptomatically

### **SECTION 5 : FIRE FIGHTING MEASURES**

#### **5.1 Extinguishing Media:**

**Suitable extinguishing media** Foam. Dry powder. Carbon dioxide (CO<sub>2</sub>)

**Unsuitable extinguishing media** Do not use a solid water stream as it may scatter and spread

#### **5.2 Special hazards arising from the substance or mixture**

**Special hazard** Incomplete combustion and thermolysis may produce gases of varying toxicity such as carbon monoxide, carbon dioxide, various hydrocarbons, aldehydes and soot. These may be highly dangerous if inhaled in confined spaces or at high concentration.

#### **5.3 Precautions for fire fighters**

**Special protective equipment  
For fire-fighters** Wear self-contained breathing apparatus and protective suit. In case of a large fire or in confined or poorly ventilated spaces, wear full fire resistant protecting clothing and self-contained breathing apparatus (SCBA) with full face-piece operated in positive pressure mode.

**Other information** Cool containers/tanks with water spray. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

### **SECTION 6: ACCIDENTAL RELEASE MEASURES**

#### **6.1 Personal precautions, protective equipment and emergency procedures.**

**General information** Use personal protective equipment. Evacuate non-essential

personnel. Ensure adequate ventilation, especially in confined areas. ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area) Do not touch or walk through spilled material.

## **6.2 Environmental precautions**

### **General information**

Prevent further leakage or spillage if safe to do so. Dike to collect large liquid spills. The product should not be allowed to enter drains, water courses or the soil. Local authorities should be advised if significant spillages cannot be contained. See Section 12 for additional Ecological Information.

## **6.3 Methods and material for containment and cleaning up**

### **Methods for cleaning up**

Use non-sparking hand tools and explosion proof electrical Equipment. Contain spillage, and then collect with non combustible absorbent material, (e g. Sand, earth, Diatomaceous earth, vermiculite) and place in container for disposal according to local/national regulations (see Section 13) Following product recovery, flush area with water.

## **6.4 Reference to other sections**

### **Personal protective equipment**

See Section 8 for more detail.

### **Waste treatment**

See Section 13.

### **Other information**

Remove all sources of ignition. Stop all work that requires a naked flame, stop all vehicles, stop all machines and equipment that may cause sparks or flames.

## **SECTION 7: HANDLING AND STORAGE**

## **7.1 Precautions for safe handling**

### **Advice on safe handling**

For personal protection section 8. Use only in well-ventilated areas. do not breathe vapours or spray mist. Avoid contact with skin, eyes and clothing.

### **Technical measures:**

Ensure adequate ventilation. Do not spray at high pressure (>3 bar) unless a full risk assessment has been carried out and suitable protection measures put in place. WHILE MOVING THE PRODUCT: To avoid ignition of vapours by static electricity discharge, all metal parts of the equipment must be grounded. Do not allow splash loading and ensure that the product is poured slowly, particularly at the beginning of the operation.

### **Prevention of fire and explosion**

OPERATE ONLY ON COLD AND DEGASSED TANKS IN VENTILATED PREMISES (TO AVOID RISK OF EXPLOSION) Handle away from any source of ignition (open flame and sparks) and heat (hot manifolds or casings) Do not smoke. Use explosion proof electrical equipment. Take precautionary measures against static discharges. Do not use compressed air for filling, discharging or handling. Design installations (machinery and equipment) to prevent burning product from Spreading (tanks, retention systems, interceptors (traps) in drainage systems)

### **Hygiene measures**

Ensure the application of strict rules of hygiene by the personnel exposed to the risk of contact with the product. When

using, do not eat, drink or smoke. Regular cleaning of equipment, work area and clothing is recommended. Do not Dry hands with rags that have been contaminated with product..Do not use abrasives, solvents or fuels. Wash hands before breaks and at the end of workday.

## 7.2 Conditions for safe storage, including any incompatibilities

### Technical measures/ Storage Conditions.

Design the installations in order to avoid accidental emissions of product (due to seal breakage for example) onto hot casings or electrical contacts. Storage installations should be designed with adequate bunds so as to prevent ground or water pollution in case of leaks or spills. Use explosion proof electrical equipment. Keep in a bunded area. Keep in a dry, cool and well-ventilated place. Keep away from open flames, hot surfaces and sources of ignition. Ground/bond containers, tanks and transfer/receiving equipment. Store at room temperature. Keep containers tightly closed and properly labelled.

### Materials to avoid

Strong acids. Oxidising agents.

### Packaging material

Keep only in the original container or in a suitable container for this kind of product: steel, Stainless steel.

## 7.3 Specific use(s)

### Specific use(s)

See exposure scenarios\*\*\*

## **SECTION 8: EXPOSURE CONTROLS / PERSONAL PROTECTION**

### 8.1 Control parameters

#### Exposure limits

Components with workplace control parameters

#### Legend

See section 16

#### Advisory OEL

CEFIC-HSPA : 1200mg/m<sup>3</sup>

#### Derived No Effect Level (DNEL)

According to our experience and to the information provided to us, the product does not have any harmful effects if it is used and handled as specified.

#### Predicted No Effect Concentration (PNEC)

PNEC is not meaningful for petroleum substances Aquatic PNECs for hydrocarbon blocks are deriving using HC5 method and target lipid model using representative structures.

### 8.2 Exposure controls

#### Occupational Exposure Controls

##### Engineering measures

When working in confined spaces (tanks, containers etc) ensure that there is a supply of air suitable for breathing and wear the recommended equipment. Apply technical measures to comply with the occupational exposure limits.

##### Personal protective equipment General information

Protective engineering solutions should be implemented and in use before personal protective equipment is considered. These recommendations apply to the product as supplied. If the product is used in mixtures, it is recommended that you contact the appropriate protective equipment suppliers.

### Respiratory protection

When workers are facing concentrations above the exposure limit they must use appropriate certified respirators. For rescue and maintenance work in storage tanks use self-contained breathing apparatus. In an emergency or for exceptional short-lasting jobs in an atmosphere polluted by the product, it is necessary to wear protective respiratory equipment. The use of breathing apparatus must comply strictly with the manufacturer's instructions and the regulations governing their choices and uses.

### Eye protection

If splashes are likely to occur, wear: Safety glasses with side shields

### Skin and body protection

Wear suitable protective clothing. Protective shoes or boots.

### Hand protection

Impervious gloves, aliphatic hydrocarbon resistant. If repeated and/or prolonged skin exposure to the substance is likely, then wear suitable gloves tested to EN374 and provide employee skin care programmes.

Repeated or prolonged exposure			
Glove material	Glove thickness	Break through time	Remarks
Nitrile rubber	> 0.45 mm	> 480 min	EN 374
PVA Fluorinated rubber		> 480 min	EN 374

In case of contact through splashing:			
Glove material	Glove thickness	Break through time	Remarks
Chloroprene	> 0.7 mm	> 60 min	EN 374
Nitrile rubber	> 0.3 mm	> 60 min	EN 374

### Environmental exposure controls

#### General information

Do not allow material to contaminate ground water system

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES.

### 9.1 Information on basic physical and chemical properties

Colour colourless to light yellow  
Physical state @20°C Liquid  
Odour hydrocarbon-like  
Odour Threshold No information available

<u>Property</u>	<u>Values</u>	<u>Remarks</u>	<u>Method</u>
pH		Not applicable	
Melting point/range		No information available	
Boiling point/boiling range	190 - 280 °C 374 - 536 °F		ISO 3405 ISO 3405
Flash point	> 75*** °C > 167*** °F		ISO 2719 ISO 2719
Evaporation rate	600	EtEt=1	DIN 53170

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## Flammability Limits in Air

Upper	6 %		
Lower	0.5 %		
Vapour pressure	0.15 hPa	@ 20 °C	calculated
Vapour density	> 1	(Air = 1)	
Relative density		No information available	
Density	815 kg/m <sup>3</sup>	@ 15 °C	ISO 12185
Water solubility		Substance is a UVCB. Standard tests for this endpoint are not appropriate	
Solubility in other solvents		Soluble in many common organic solvents	
logPow		Not applicable	
Autoignition temperature	> 220 °C > 428 °F		ASTM E 659-78 ASTM E 659-78
Decomposition temperature		No information available	
Viscosity, kinematic	< 20.5 mm <sup>2</sup> /s	@ 40 °C	ASTM D 445
Explosive properties	Not considered explosive based on chemical structure and oxygen balance considerations		
Oxidising properties	This product is not considered oxidising based on chemical structure considerations		
Possibility of hazardous reactions	None under normal processing		

## 9.2 Other information

Surface tension	0.0257 N/m	@ 25 °C	EN 14370
Freezing point		No information available	
Pour point	< -50 °C		ISO 3016

## SECTION 10: STABILITY AND REACTIVITY

### 10.1 Reactivity

General information None under normal processing

### 10.2 Chemical stability

Stability Stable under recommended storage conditions.

### 10.3 Possibility of hazardous reactions

Hazardous reactions None under normal processing

### 10.4 Conditions to avoid

Conditions to avoid Heat, flames and sparks. Take precautionary measures against static discharges.

### 10.5 Incompatible materials

Materials to avoid Strong acids. Oxidising agents.

### 10.6 Hazardous Decomposition Products

Hazardous Decomposition Incomplete combustion and thermolysis may produce gases of varying toxicity such as carbon monoxide, carbon dioxide, various hydrocarbons, aldehydes and soot.

## SECTION 11: TOXICOLOGICAL INFORMATION

### 11.1 Information on toxicological effects

#### Acute toxicity Local effects Product Information

<b>Skin contact</b>	This substance does not meet the EU criteria for classification. Prolonged or repeated contact may dry skin and cause irritation.
<b>Eye contact</b>	This substance does not meet the EU criteria for classification. Burning feeling and temporary redness.
<b>Inhalation</b>	This substance does not meet the EU criteria for classification. The inhalation of vapours or aerosols may be irritating for the respiratory tract and mucous membranes. Vapours inhaled in strong concentration have a narcotic effect on the central nervous system.
<b>Ingestion</b>	If swallowed accidentally, the product may enter the lungs due to its low viscosity and lead to the rapid development of very serious pulmonary lesions (medical survey during 48 hours) ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhoea. May cause central nervous system depression.

#### Acute toxicity – Component information

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, <2% aromatics	LD50 > 5000 mg/kg bw (rat - OECD 401)	LD50 (24h) > 5000 mg/kg bw (rabbit - OECD 402)	LC50 (8h) > 5000 mg/m <sup>3</sup> (vapour) (rat - OECD 403)

#### Sensitisation

**Sensitisation** Not classified as a sensitizer

#### Specific effects

**Carcinogenicity** This product is not classified carcinogenic  
**Mutagenicity** The mutagenic potential of the substance has been extensively studied in a range of in-vivo and in-vitro assays.  
**Germ cell mutagenicity** Genetic toxicity: negative  
**Reproductive toxicity** This product does not present any known or suspected reproductive hazards.  
**Developmental toxicity** Results of guideline developmental toxicity studies on the substance and OECD developmental toxicity screening studies showed no evidence of developmental toxicity in rats.

#### Repeated Dose Toxicity

##### Target Organ Effects (STOT)

**Specific target organ systemic Toxicity (single exposure)** This substance does not meet the EU criteria for classification

**Specific target organ toxicity- Repeated exposure** This substance does not meet the EU criteria for classification

**Aspiration toxicity** The fluid can enter the lungs and cause damage (chemical pneumonitis, potentially fatal)

#### Other information

**Other adverse effects** Frequent or prolonged skin contact destroys the lipo-acid cutaneous layer and may cause dermatitis. Repeated exposure may cause skin dryness or cracking.

## SECTION 12: ECOLOGICAL INFORMATION

### 12.1 Toxicity

Not classified

#### Acute aquatic toxicity – Product information

Not applicable

#### Acute aquatic toxicity – Component Information

Chemical Name	Toxicity to algae	Toxicity to daphnia and other aquatic invertebrates.	Toxicity to fish	Toxicity to microorganisms
Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, <2% aromatics ^	ErL50 (72h) > 1000 mg/l (Pseudokirchneriella subcapitata - OECD 201) EbL50 (72h) > 1000 mg/l (Pseudokirchneriella subcapitata - OECD 201)	EL50 (48h) > 1000 mg/l (Daphnia magna - OECD 202)	LL50 (96h) > 1000 mg/l (Oncorhynchus mykiss - OECD 203)	-

#### Chronic aquatic toxicity - Product Information

Not applicable.

#### Chronic aquatic toxicity - Component Information

Chemical Name	Toxicity to algae	Toxicity to daphnia and other aquatic invertebrates.	Toxicity to fish	Toxicity to microorganisms
Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, <2% aromatics ^	NOELR (72h) = 1000 mg/l (Pseudokirchneriella subcapitata - biomass - OECD 201) NOELR (72h) = 1000 mg/l (Pseudokirchneriella subcapitata - growth rate - OECD 201)	NOELR (21d) = 1,22 mg/l (Daphnia magna - QSAR Petrotox)	NOELR (28d) = 0,17 mg/l (Oncorhynchus mykiss - QSAR Petrotox)	

#### Effects on terrestrial organisms

No information available.

### 12.2 Persistence and Degradability

#### General information

Readily biodegradable (69% after 28 days)

Biodegradation							
Type	Method	Sampling time	Specific effects	Values	Unit	Biodegradability	Source
	OECD 301F	28 days		69	%	Readily biodegradable	

### 12.3 Bio-accumulative potential

#### Product information

Measured experimental data on hydrocarbon UVCB Substances are not meaningful, since each of the constituents is likely to behave differently.

#### logPow

Not applicable

#### Component information

Not applicable

### 12.4 Mobility in soil

#### Soil

Given its physical and chemical characteristics, the product generally shows low soil mobility.

#### Air

Volatilisation is dependent on Henry's Constant which is not applicable to UVCB.

#### Water

The product is insoluble and floats on water.

## 12.5 Results of PBT and vPvB assessment

**PBT and vPvB assessment** This substance is considered not to be PBT and vPvB.

## 12.6 Other adverse effects

**General Information** No Information available

## SECTION 13: DISPOSAL CONSIDERATIONS

### 13.1 Waste treatment methods

**Waste from residues/unused Products** Dispose of in accordance with the European Directives on waste.

**Contaminated packaging** Empty containers may contain flammable or explosive vapours  
Empty containers should be taken to an approved waste handling site for recycling or disposal.

**EWC Waste Disposal No** According to the European Waste Catalogue, waste codes are not product specific but application specific. Waste codes should be assigned by the user based on the application for which the product was used..

## SECTION 14: TRANSPORT INFORMATION

<b><u>ADR/RID</u></b>	Not regulated
<b><u>IMDG/IMO</u></b>	Not regulated
<b><u>ICAO/IATA</u></b>	Not regulated
<b><u>ADN</u></b>	
<b>UN/ID No.</b>	UN9003
<b>Proper shipping name</b>	SUBSTANCES WITH A FLASH-POINT ABOVE 60°C AND NOT MORE THAN 100°C
<b>Hazard class</b>	9
<b>Description</b>	UN 9003, SUBSTANCES WITH A FLASH-POINT ABOVE 60°C AND NOT MORE THAN 100°C, 9

## SECTION 15: REGULATORY INFORMATION

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

#### European Union

##### REACH

The EC substance definition is included in the CAS related number description for global inventory Entries.

**Related CAS number** 64742-47-8, INCI CAS No – 8008-20-6

**International Inventories**

The substance is listed or exempted from listing in the following inventories:  
Europe (EINECS/ELINCS/NLP)  
U.S.A. (TSCA)  
Canada (DSL/NDL)  
Australia (AICS)  
Korea (KECL)  
China (IECSC)  
Japan (ENCS)  
Philippines (PICCS)  
New Zealand (NZIoC)  
Taiwan (TCSI)\*\*\*

**Further information**

No information available

**15.2 Chemical Safety Assessment****Chemical Safety Assessment**

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

**15.3 National regulatory information**The United Kingdom

- Avoid exceeding occupational exposure limits (see section 8)

Ireland

- Avoid exceeding occupational exposure limits (see section 8)

**SECTION 16: OTHER HEALTH AND SAFETY INFORMATION****Full text of H-Statements referred to under sections 2 and 3**

H304 - May be fatal if swallowed and enters airways

EUH066 - Repeated exposure may cause skin dryness or cracking

**Abbreviations, acronyms**

ACGIH = American Conference of Governmental Industrial Hygienists

bw = body weight

bw/day = body weight/day

EC x = Effect Concentration associated with x% response

GLP = Good Laboratory Practice

IARC = International Agency for Research of Cancer

LC50 = 50% Lethal concentration - Concentration of a chemical in air or a chemical in water which causes the death of 50% (one half) of a group of test animals

LD50 = 50% Lethal Dose - Chemical amount, given at once, which causes the death of 50% (one half) of a group of test animals

LL = Lethal Loading

NIOSH = National Institute of Occupational Safety and Health

NOAEL = No Observed Adverse Effect Level

NOEC = No Observed Effect Concentration

NOEL = No Observed Effect Level

OECD = Organization for Economic Co-operation and Development

OSHA = Occupational Safety and Health Administration

UVCB = Substance of unknown or Variable composition, Complex reaction products or Biological material

DNEL = Derived No Effect Level

PNEC = Predicted No Effect Concentration

dw = dry weight

fw = fresh water

mw = marine water

or = occasional release

## Legend Section 8

TWA: Time Weight Average

STEL: Short Time Exposure Limit

+ Sensitiser  
\*\* Hazard Designation  
M: Mutagen

\* Skin designation  
C: Carcinogen  
R: Toxic to reproduction

**Revision Date:** 2016-09-30

**Revision Note:** (M)SDS sections updated: 1. 15. 16 Exposure scenario.\*\*\*

**Further information** Other uses than these listed under section 1.2 may have been foreseen for the substance(s) contained in the product. Please contact us if your use is not listed under section 1.2.

This safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006

This safety data sheet serves to complete but not to replace the technical product sheets. The information contained herein is given in good faith and is accurate to the best of knowledge at the date indicated above. It is understood by the user that any use of the product for purposes other than those for which it was designed entails potential risk. The information given herein in no way dispenses the user from knowing and applying all provisions regulating his activity. The user bears sole liability for the precautions required when using this product. The regulatory texts indicated herein are intended to aid the user to fulfil his obligations. This list is not to be considered complete and exhaustive. It is the user's responsibility to ensure that he is subject to no other obligations than those mentioned.

### Disclaimer

This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own use.