

SAFETY DATA SHEET

ACCORDING TO EC-REGULATIONS 1907/2006 (REACH), 1272/2008 (CLP) & 2015/830

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Product identifier

Product Name Fuel Bright Diesel Additive.
CAS No. Not applicable.
EC No. Not applicable.
REACH Registration No. Not known.

1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified Use(s) Industrial use, Professional use – Fuel additives.
Uses Advised Against Not known.

1.3 Details of the supplier of the safety data sheet

Company Identification THOMAS GROUP LTD.
93 Ellingham Industrial Estate
Ashford, Kent
TN23 6LZ England
Telephone +44(0)1233 642816
Fax +44(0)1233 645024
E-mail info@fuelbright.co.uk
Website www.fuelbright.co.uk

1.4 Emergency telephone number

Company +44(0)7521 979021
National Poisons Information Service 111 (England & Wales only) or 112 (EU) or 08454 24 24 24 (Scotland)
(NHS Direct)

SECTION 2: HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

Regulation (EC) No. 1272/2008 (CLP) Acute Tox. 4 :Harmful in contact with skin.
Acute Tox. 4 :Harmful if swallowed.
Acute Tox. 4 :Harmful if inhaled.
Aquatic Chronic 2 :Toxic to aquatic life with long lasting effects.

2.2 Label elements

According to Regulation (EC) No. 1272/2008 (CLP)
Product Name Fuel Bright Diesel Additive.

Hazard Pictogram(s)



GHS07



GHS09

Signal Word(s)

Warning.

Hazard Statement(s)

H302+H312+H332: Harmful if swallowed, in contact with skin or if inhaled.
H411: Toxic to aquatic life with long lasting effects.
EUH044: Risk of explosion if heated under confinement.
EUH066: Repeated exposure may cause skin dryness or cracking.



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Precautionary Statement(s) P261: Avoid breathing vapours.
 P273: Avoid release to the environment.
 P280: Wear protective gloves/protective clothing/eye protection/face protection.
 P301+P312: IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.
 P302+P352: IF ON SKIN: Wash with plenty of water.
 P304+P340: IF INHALED: Remove person to fresh air and keep comfortable for breathing.

2.3 Other hazards

None known.

2.4 Additional Information

For full text of H/P Statements see section 16.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances

Not applicable.

3.2 Mixtures

HAZARDOUS INGREDIENT(S)	CAS No.	EC No. / REACH Registration No.	%W/W	Hazard Statement(s)	Hazard Pictogram(s)
2-ethylhexyl nitrate	27247-96-7	248-363-6 01-2119539586-27-XXXX	50-100	Acute Tox. 4 H302 Acute Tox. 4 H312 Acute Tox. 4 H332 Aquatic Chronic 2 H411 EUH044 EUH066	GHS07 GHS09
2-ethylhexan-1-ol	104-76-7	203-234-3 01-2119487289-20-XXXX	1-5	Skin Irrit. 2 H315 Eye Irrit. 2 H319 Acute Tox. 4 H332 STOT SE 3 H335	GHS07

SECTION 4: FIRST AID MEASURES

4.1 Description of first aid measures

Inhalation Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/doctor if you feel unwell.
 Skin Contact Wash with plenty of water.
 Eye Contact Flush eyes with water for at least 15 minutes while holding eyelids open.
 Ingestion Rinse mouth. Call a POISON CENTER/doctor if you feel unwell.

4.2 Most important symptoms and effects, both acute and delayed

Repeated exposure may cause skin dryness or cracking.

4.3 Indication of any immediate medical attention and special treatment needed

Unlikely to be required but if necessary treat symptomatically.

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7.3 Specific end use(s)

Industrial use, Professional use – Fuel additives.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

8.1.1 Occupational Exposure Limits

SUBSTANCE	CAS No.	LTEL (8 hr TWA ppm)	LTEL (8 hr TWA mg/m³)	STEL (ppm)	STEL (mg/m³)	Note
2-ethylhexan-1-ol	104-76-7	1	5.4			
2-ethylhexan-1-ol	104-76-7	5.4	1	0	0	IOELV

Region	Source
EU	EU Occupational Exposure Limits
United Kingdom	UK Workplace Exposure Limits EH40/2005 (Third edition, published 2018)

Remark	Notes
IOELV	Indicative Occupational Exposure Limit Value

8.2 Exposure controls

8.2.1. Appropriate engineering controls Use with ventilation, local exhaust ventilation or breathing protection.

8.2.2. Personal protection equipment



Eye Protection Wear eye protection with side protection (EN166).



Skin protection Wear protective clothing and gloves: Nitrile rubber, Neoprene.
Breakthrough time of the glove material: refer to the information provided by the gloves' producer. Recommended: 240 - >480 minutes. Thickness: >0.35 mm.



Respiratory protection Where engineering controls are not fitted or inadequate wear suitable respiratory protective equipment.



Thermal hazards Not applicable.

8.2.3. Environmental Exposure Controls Avoid release to the environment.

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SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance	Liquid. Colour : Dark amber.
Odour	Pungent.
Odour threshold	Not established.
pH	Not available.
Melting point/freezing point	Not available.
Initial boiling point and boiling range	Not available.
Flash Point	79°C [Closed cup]
Evaporation rate	Not available.
Flammability (solid, gas)	Not applicable.
Upper/lower flammability or explosive limits	Not available.
Vapour pressure	Not available.
Vapour density	Not available.
Bulk Density	0.95 g/ml @ 25°C
Relative density	0.93-0.97 @ 15.6°C
Solubility(ies)	Solubility (Water) : Insoluble. Solubility (Other) : Not known.
Partition coefficient: n-octanol/water	Log Pow: 5.24 (2-ethylhexyl nitrate)
Auto-ignition temperature	Not available.
Decomposition Temperature	Not available.
Viscosity	6 mm ² /s @ 40°C 8.5 mm ² /s @ 20°C 19 mm ² /s @ 0°C
Explosive properties	Risk of explosion if heated under confinement.
Oxidising properties	Not oxidising.

9.2 Other information

Pour Point (°C)	-51
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SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity

Stable under normal conditions.

10.2 Chemical Stability

Stable under normal conditions.

10.3 Possibility of hazardous reactions

No hazardous reactions known if used for its intended purpose.
May undergo self-accelerating, exothermic reaction if heated above 100°C.

10.4 Conditions to avoid

Keep away from heat, sources of ignition and direct sunlight.

10.5 Incompatible materials

Strong oxidising agents, Reducing agent, Strongly alkaline, Nitriles.



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10.6 Hazardous decomposition products

No hazardous decomposition products known.

SECTION 11: TOXICOLOGICAL INFORMATION**11.1 Information on toxicological effects**

Acute toxicity - Ingestion	Harmful if swallowed. ATE _{mix} : 300-2000 mg/kg
Acute toxicity - Skin Contact	Harmful in contact with skin. ATE _{mix} : 1000-2000 mg/kg
Acute toxicity - Inhalation	Harmful if inhaled. ATE _{mix} (4 hour(s)): 1-2 mg/l
Skin corrosion/irritation	Non-irritant.
Serious eye damage/irritation	Non-irritant.
Skin sensitization data	It is not a skin sensitiser.
Respiratory sensitization data	Not classified.
Germ cell mutagenicity	There is no evidence of mutagenic potential.
Carcinogenicity	No evidence of carcinogenicity.
Reproductive toxicity	No evidence of reproductive effects.
Lactation	Not classified.
STOT - single exposure	None anticipated.
STOT - repeated exposure	None anticipated.
Aspiration hazard	Not classified.

11.2 Other information

Repeated exposure may cause skin dryness or cracking. No data.

SECTION 12: ECOLOGICAL INFORMATION**12.1 Toxicity**

Toxicity - Fish	Toxic to aquatic life with long lasting effects. 2-ethylhexyl nitrate LC50 (Zebra fish) (4 days): 2 mg/l
Toxicity - Aquatic plants	2-ethylhexyl nitrate EC50 (Algae) (3 days): 3.22 mg/l
Toxicity - Sediment Compartment	Not classified.
Toxicity - Terrestrial Compartment	Not classified.

12.2 Persistence and Degradation

Not readily biodegradable. The product is likely to persist in the environment.

12.3 Bioaccumulative potential

The product has high potential for bioaccumulation.

12.4 Mobility in soil

Insoluble in water. The product is predicted to have low mobility in soil.

12.5 Results of PBT and vPvB assessment

Not classified as PBT or vPvB.

12.6 Other adverse effects

Not known.



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SECTION 13: DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Dispose of this material and its container as hazardous waste. Dispose of wastes in an approved waste disposal facility.

13.2 Additional Information

Disposal should be in accordance with local, state or national legislation.

SECTION 14: TRANSPORT INFORMATION

14.1 UN number

UN No. 3082

14.2 UN proper shipping name

UN proper shipping name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (2-ethylhexyl nitrate)

14.3 Transport hazard class(es)

ADR/RID

ADR/RID Class 9
ADR Classification Code M6
Special Provisions 274 335 375 601
Limited Quantities 5 L
Excepted Quantities E1
Emergency Action Code •3Z
Mixed Packing Instructions for Packages P001 IBC03 LP01 R001
Special Packing Provisions for Packages PP1
Mixed Packing Instructions for Packages MP19
Packing Instructions for Portable Tanks T4
Special Provisions for Portable Tanks TP1 TP29
Tank Code for Tanks LGBV
Vehicle for Tank Carriage AT
ADR Transport Category 3
Tunnel Restriction Code -
Special Provisions for Carriage - Packages V12
Special Provisions for Carriage - Loading, Unloading and Handling CV13

ADR HIN 90

IMDG

IMDG Class 9
Special Provisions 274 335 375 601
Limited Quantities 5 L
Excepted Quantities E1
Mixed Packing Instructions for Packages P001 IBC03 LP01 R001
Special Packing Provisions for Packages PP1
Packing Instructions for Portable Tanks T4
Special Provisions for Portable Tanks TP1 TP29

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IMDG EMS	F-A S-F
Stowage and Handling	Category A
ICAO/IATA	
IATA Proper Shipping Name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (2-ethylhexyl nitrate)
Excepted Quantities	E1
Passenger and Cargo Aircraft Limited Quantities Packing Instructions	Y964
Passenger and Cargo Aircraft Limited Quantities Max net Qty	30Kg
Passenger and Cargo Aircraft Packing Instructions	964
Passenger and Cargo Aircraft Max net Qty	450L
Cargo Aircraft Packing Instructions	964
Cargo Aircraft Max net Qty	450L
Special Provisions	A97, A158 A197
Emergency Response Guidebook (ERG) Code	9L
Labels	9



14.4 Packing group

Packing group III

14.5 Environmental hazards

Environmental hazards Classified as a Marine Pollutant.

14.6 Special precautions for user

Special precautions for user Not known.

14.7 Transport in bulk according to Annex II of Marpol and the IBC Code

Transport in bulk according to Annex II of Marpol and the IBC Code No information available

SECTION 15: REGULATORY INFORMATION

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

European Regulations - Authorisations and/or Restrictions On Use

Candidate List of Substances of Very High Concern for Authorisation Not listed.

REACH: ANNEX XIV list of substances subject to authorisation Not listed.

REACH: Annex XVII Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles Not listed.

Community Rolling Action Plan (CoRAP) 2-ethylhexan-1-ol (104-76-7)

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National regulations

Other Not known.

15.2 Chemical Safety Assessment

Not applicable.

SECTION 16: OTHER INFORMATION

The following sections contain revisions or new statements: 1-16

LEGEND

Hazard Pictogram(s)



GHS07



GHS09

Hazard classification

Acute Tox. 4 : Acute toxicity, Category 4
 Aquatic Chronic 2 : Hazardous to the aquatic environment, Chronic, Category 2
 Eye Irrit. 2 : Serious eye damage/irritation, Category 2
 STOT SE 3_H335 : Specific target organ toxicity — single exposure, Category 3
 Skin Irrit. 2 : Skin corrosion/irritation, Category 2

Hazard Statement(s)

H302: Harmful if swallowed.
 H312: Harmful in contact with skin.
 H315: Causes skin irritation.
 H319: Causes serious eye irritation.
 H332: Harmful if inhaled.
 H335: May cause respiratory irritation.
 H411: Toxic to aquatic life with long lasting effects.
 EUH044: Risk of explosion if heated under confinement.
 EUH066: Repeated exposure may cause skin dryness or cracking.

Precautionary Statement(s)

P261: Avoid breathing vapours.
 P264: Wash hands and exposed skin thoroughly after handling.
 P270: Do not eat, drink or smoke when using this product.
 P271: Use only outdoors or in a well-ventilated area.
 P273: Avoid release to the environment.
 P280: Wear protective gloves/protective clothing/eye protection/face protection.
 P301+P312: IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.
 P302+P352: IF ON SKIN: Wash with plenty of water.
 P304+P340: IF INHALED: Remove person to fresh air and keep comfortable for breathing.
 P312: Call a POISON CENTER/doctor if you feel unwell.
 P321: Specific treatment (see on this label).
 P330: Rinse mouth.
 P362+P364: Take off contaminated clothing and wash it before reuse.
 P391: Collect spillage.



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P501: Dispose of contents in accordance with local, state or national legislation.

Acronyms

ADN : European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
ADR : European Agreement concerning the International Carriage of Dangerous Goods by Road
CAS : Chemical Abstracts Service
CLP : Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures
EC : European Community
EINECS : European Inventory of Existing Commercial Chemical Substances
IATA : International Air Transport Association
IBC : Intermediate Bulk Container
ICAO : International Civil Aviation Organization
IMDG : International Maritime Dangerous Goods
LTEL : Long term exposure limit
PBT : Persistent, Bioaccumulative and Toxic
REACH : Registration, Evaluation, Authorisation and Restriction of Chemicals
RID : Regulations concerning the International Carriage of Dangerous Goods by Rail
STEL : Short term exposure limit
STOT : Specific Target Organ Toxicity
UN : United Nations
vPvB : very Persistent and very Bioaccumulative

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