



# Safety Data Sheet

According to Regulation (EC) No. 1907/2006 (REACH)

## Rix Gas Oil Plus

### SECTION 1: Identification of the substance/mixture and of the company/undertaking

#### 1.1 Product identifier

**Product name:** Rix Gas Oil Plus  
**Trade name(s):** Rix Gas Oil Plus  
**Product description:** Liquid fuel additive  
**CAS No.:** Not applicable.  
**EC No.:** Not applicable.  
**Index No.:** Not applicable.

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

**Identified use(s):** Liquid fuel additive.  
**Uses advised against:** Follow supplier's recommendations on correct use of the product.

#### 1.3 Details of the supplier of the safety data sheet

**Manufacturer/Supplier:** Rix Petroleum Limited  
Witham House,  
45 Spyvee Street,  
Hull  
East Yorkshire, HU8 7JR  
**Telephone:** +44 (0)1482 838383  
**E-mail:** sales@rix.co.uk

#### 1.4 Emergency telephone number

**In case of emergency, call:** +44 (0)1482 838383

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## SECTION 2: Hazard Identification

### 2.1 Classification of the substance or mixture

**Classification according to Regulation (EC) No. 1272/2008 (CLP)**

Asp. Tox. 1; H304

Skin Irrit. 2; H315

Eye Damage. 1; H318

Aquatic Chronic 2; H411

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

**Hazard pictogram(s):**



**Signal Word:**

Danger

**Hazard Statement(s):**

H304: May be fatal if swallowed and enters airways.

H315: Causes skin irritation.

H318: Causes serious eye damage.

H411: Toxic to aquatic life with long lasting effects.

**Precautionary Statement(s):**

P280: Wear protective gloves/protective clothing/eye protection/face protection.

P301 + P310: IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.

P302 + P352: IF ON SKIN: Wash with plenty of soap and water.

P304 + P340: IF INHALED: Remove victim to fresh air and keep at rest in a position for breathing.

P305 + P351 + P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P501: Dispose of contents/container as hazardous waste.

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**Supplemental Hazard information (EU):** EUH066: Repeated exposure may cause skin dryness and cracking.

## 2.3 Other hazards

None known.

## SECTION 3: Composition

### 3.2 Mixtures

Classification according to Regulation (EC) No. 1272/2008 (CLP)

Chemical name	% w/w	CAS No.	EC No.	Index No.	Classification
Hydrocarbons, C10, aromatics, <1% naphthalene <i>REACH Registration. No: 01-2119463583-34-0001</i>	< 5		918-811-1	-	Asp. Tox. 1; H304 STOT SE 3; H336 Aquatic Chronic 2; H411 EUH066
Benzene, ethylenated residues, distn lights <i>REACH Registration. No: 01-2119452499-26</i>	1 - 2	178535-25-6	700-371-5	-	Skin Irrit. 2; H315 Eye Irrit. 2; H319 Aquatic Chronic 2; H411
2-ethylhexyl nitrate <i>REACH Registration. No: 01-2119539586-27</i>	45 - 62	27247-96-7	248-363-6	-	Acute Tox. 4; H302 Acute Tox. 4; H312 Acute Tox. 4; H332 Aquatic Chronic 2; H411
Solvent naphtha (petroleum), heavy arom.	< 1.5	64742-94-5	265-198-5	649-424-00-3	Asp. Tox. 1, H304
Naphthalene <i>REACH Registration. No: 01-2119557899-12-XXXX</i>	< 0.4	91-20-3	202-049-5	601-052-00-2	Acute Tox. 4; H302 Carc 2; H351 Aquatic acute 1; H400 Aquatic chronic 1; H410
Sulphonic acids, petroleum, sodium salts	< 0.5	68608-26-4	271-781-5	-	Eye Dam. 1; H318
3,3' -methylenebis [5-methyloxazolidine]	4	66204-44-2	266-235-8	-	Acute Tox. 4; H302 Acute Tox. 4; H312 Skin Corr. 1C; H314 Eye Dam. 1; H318



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Chemical name	% w/w	CAS No.	EC No.	Index No.	Classification
Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, <2% aromatics	8 - 12		918-481-9	-	Asp. Tox. 1; H304 Flam. Liq. 3; H226
2-ethylhexyl-1-ol <i>REACH Registration. No: 01-2119487289-20</i>	4 - 8	104-76-7	203-234-3	-	Eye Irrit. 2; H319 Skin Irrit. 2; H315 Acute Tox. 4; H332 STOT SE3; H335
Butanedioc acid, polyisobutenyl derivatives	4 - 8	-	Polymer	-	Eye Irrit. 2; H319

See Section 16 for full description of H statements.

## SECTION 4: First Aid Measures

### 4.1 Description of first aid measures

#### INHALATION:

Remove victim to fresh air and keep at rest in a position for breathing. If there are breathing problems, seek medical advice.

#### SKIN CONTACT:

Remove contaminated clothing immediately. Wash affected area with copious amounts of soap and water. If irritation persists, seek medical advice. Discard or wash thoroughly contaminated clothing.

#### EYE CONTACT:

Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing. If eye irritation persists, seek medical advice.

#### INGESTION:

Wash out mouth with water. Do NOT induce vomiting. Obtain immediate medical attention. If vomiting occurs naturally, the patient should lean forward to reduce the risk of aspiration.

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

See section 11 of this safety data sheet. May be fatal if swallowed and enters airways.

### 4.3 Indication of any immediate medical attention and special treatments needed:



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Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested.

## SECTION 5: Fire-fighting Measures

### 5.1 Extinguishing Media

**Suitable extinguishing media:** Foam, CO<sub>2</sub> or dry powder.

**Unsuitable extinguishing media:** Do not use water jet.

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

May decompose violently above 100°C. Vapours may be heavier than air and may travel along the ground to a distant ignition source and flash back. Containers may rupture on heating. Toxic gases may be formed in a fire - carbon dioxide, carbon monoxide, nitrogen oxides.

### 5.3 Advice for fire-fighters

A self-contained breathing apparatus and suitable protective clothing should be worn in fire conditions. Keep fire exposed containers cool by spraying with water. Do not allow to enter drains, sewers or watercourses.

Flash point: > 61°C (closed cup).

## SECTION 6: Accidental Release Measures

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

#### 6.1.1 For non-emergency personnel

Eliminate sources of ignition. Ensure adequate ventilation. Avoid contact with skin and eyes. Avoid inhalation of fumes/vapours. Wear suitable personal protective equipment. Wear appropriate respirator when ventilation is inadequate. (See section 8).

#### 6.1.2 For emergency responders

Keep unnecessary personnel away. Wear suitable protective clothing (See Section 8). Contaminated clothing should be thoroughly cleaned.

### 6.2 Environmental precautions

Collect spillage. Do not allow to enter drains, sewers or watercourses. Spillages or uncontrolled discharges into watercourses must be alerted to the Environment Agency or other appropriate regulatory body.



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## 6.3 Methods and materials for containment and clearing up

### 6.3.1 For containment

Stop the leak if it is safe to do so. Contain the spillage with sand, earth or any suitable adsorbent material.

### 6.3.2 For cleaning up

Use sand, earth or any suitable non-combustible adsorbent material to adsorb spillages. Using non-sparking tools transfer the contaminated adsorbent material into a container for disposal. The containers used should be plastic-lined sealable drums. Containers should be sealed before being disposed of via an authorised waste disposal contractor.

### 6.3.3 Other advice

None.

## 6.4 Reference to other sections

See Section 8 for personal protective equipment. See Section 13 for waste disposal.

## SECTION 7: Handling and Storage

### 7.1 Precautions for safe handling

Provide adequate ventilation, including local extraction to ensure the occupational exposure limit is not exceeded. Avoid inhalation of fumes/vapours. Avoid contact with skin and eyes. Wear suitable personal protective equipment (See Section 8). Eliminate sources of ignition.

Do not eat, drink or smoke when using this product. Wash exposed skin after use. Contaminated work clothing should not be allowed out of the workplace. Contaminated clothing should be thoroughly cleaned or disposed of as hazardous waste.

DO NOT heat above 100°C

### 7.2 Conditions for safe storage, including any incompatibilities

Keep away from heat and sources of ignition. Keep from direct sunlight. Store locked up. Store only in the original container. Store in a cool, well ventilated place. Empty containers retain product residue and can be hazardous.

See section 10 for incompatible materials.

### 7.3 Specific end uses(s)

Liquid fuel additive.



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## SECTION 8: Exposure Controls/Personal Protection

### 8.1 Control parameters

#### Workplace exposure limits

Source: Recommendation from Supplier's Safety Data Sheet :

Substance	CAS no.	LTEL (8 hr TWA)		STEL (15 mins)	
		ppm	mg/m <sup>3</sup>	ppm	mg/m <sup>3</sup>
2-ethylhexyl nitrate	27247-96-7	1	-	1	-

#### Other exposure limits

None assigned.

### 8.2 Exposure controls

#### 8.2.1 Appropriate engineering controls

Provide adequate ventilation, including appropriate local extraction.

#### 8.2.2 Personal protection

<b>Eye protection:</b>	Goggles giving complete protection to eyes (EN 166) or face shield.
<b>Skin protection:</b>	Appropriate barrier creams.
<b>Hand protection:</b>	Chemical resistant gloves. (EN 374).
<b>Other:</b>	Long sleeve protective clothing. Plastic apron. Rubber boots.
<b>Respiratory protection:</b>	In the case of insufficient ventilation, wear suitable respiratory equipment (BS EN 14387:2004+A1).
<b>Thermal hazards:</b>	Not applicable.

#### 8.2.3 Environmental exposure controls

Inform environmental manager of all incidents involving this product.

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## SECTION 9: Physical and Chemical Properties

### 9.1 Information on basic physical and chemical properties

Appearance:	Dark brown liquid.
Odour:	Pungent, aromatic.
Odour threshold:	Not available.
pH:	Not available.
Melting/freezing point::	Not available.
Initial boiling point and boiling range:	Not available.
Flash point:	> 61°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:	>1 (Air = 1).
Relative density:	Approx. 1 at 15°C (Water = 1)
Solubility:	Insoluble in water.
Partition coefficient: n-octanol/water:	Not available.
Auto-ignition temperature:	Not available.
Decomposition temperature:	May decompose violently above 100°C.
Viscosity:	Not available.
Explosive properties:	Can become explosive if allowed to decompose.
Oxidising properties :	Not oxidising.

### 9.2 Other information

None.

## SECTION 10: Stability and Reactivity

10.1 Reactivity	Reacts with strong oxidising agents.
10.2 Chemical stability	Stable under normal conditions.
10.3 Possibility of hazardous reactions	No hazardous reactions expected during normal use.





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<b>10.4 Conditions to avoid</b>	Keep away from sources of ignition, hot surfaces, direct sunlight and contact with incompatible materials. Decomposes violently if heated above 100°C.
<b>10.5 Incompatible materials</b>	Reactive or incompatible with alkalis, oxidising materials, reducing materials, copper, brass.
<b>10.6 Hazardous decomposition products</b>	Combustion may liberate toxic fumes: Carbon monoxide, carbon dioxide, nitrogen oxides.

## SECTION 11: Toxicological Information

### 11.1 Information on toxicological effects

<b>Acute toxicity</b>	Low acute toxicity by all routes.
<b>Skin corrosion/irritation</b>	Irritating to skin. Prolonged or repeated exposure may cause skin dryness or cracking and dermatitis.
<b>Serious eye damage/irritation</b>	Can cause serious eye damage.
<b>Skin sensitisation</b>	Not classified. The product does not contain substances classified as skin sensitisers above the classification thresholds.
<b>Respiratory irritation</b>	High concentrations of the mist or vapour may cause slight irritation to the nose, throat and lungs.
<b>Respiratory sensitisation</b>	No evidence of respiratory sensitisation.
<b>Germ cell mutagenicity</b>	Not classified. The product does not contain substances classified as mutagenic above the classification thresholds.
<b>Carcinogenicity</b>	Not classified. The product does not contain substances classified as carcinogenic above the classification thresholds.
<b>Reproductive toxicity</b>	Not classified. The product does not contain substances classified for reproductive toxicity above the classification thresholds.
<b>Specific Target Organ Toxicity - single exposure</b>	Not classified.
<b>Specific Target Organ Toxicity - repeated exposure</b>	Not classified.



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Aspiration hazard

Harmful: may cause lung damage if swallowed. Pneumonia may result if vomited material containing solvents reaches the lungs.

## Information on likely routes of exposure

Inhalation

See above.

Skin contact

See above.

Eye contact

See above.

Ingestion

See above.

Symptoms related to the physical, chemical and toxicological characteristics

See above.

Other information

None

## SECTION 12: Ecological Information

### 12.1 Toxicity

Product is toxic to aquatic life with long lasting effects.

Acute toxicity data for the major components:

*Hydrocarbons, C10, aromatics, <1% naphthalene*

LC50/96h (Rainbow trout): 2-5 mg/l

EC50/48h (Daphnia magna): 3-10 mg/l

EC50/72h (Selenastrum capricornutum): 1-3 mg/l

EC50/48h (Tetrahymena pyriformis): 1.7 mg/l

*2-ethylhexyl nitrate*

LC50/96h (Danio rerio): 2 mg/l

EC50/48h (Daphnia magna): >10 mg/l estimated

EC50/72h (Algae): 1-10 mg/l estimated

*3,3' -methylenebis[5-methyloxazolidine]*

LC50 (Brachidanio rerio): 58 mg/l

EC50/72h (Scenedesmus subspicatus): 6 mg/l

EC50/48h (Daphnia magna): 38 mg/l

EC50 (bacteria): 44 mg/l (OECD 209)



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<b>12.2 Persistence and degradability</b>	<i>Hydrocarbons, C10, aromatics, &lt;1% naphthalene - inherently degradable</i>  <i>3,3' -methylenebis[5-methyloxazolidine] - readily biodegradable (OECD 301D)</i>  <i>2-ethylhexyl nitrate - not readily biodegradable</i>
<b>12.3 Bioaccumulative potential</b>	<i>2-ethylhexyl nitrate - high bioaccumulative potential</i> Log Pow: 3.74 - 5.24 BCF: 1332
<b>12.4 Mobility in soil</b>	<i>2-ethylhexyl nitrate - volatile</i> Soil/water partition coefficient (Koc): 3.75
<b>12.5 Results of PBT and vPvB assessment</b>	Not classified as PBT/vPvB by current EU criteria.
<b>12.6 Other adverse effects</b>	No known significant effects or critical hazards.

## SECTION 13: Disposal Considerations

### 13.1 Waste treatment methods

Product and packaging to be disposed of as hazardous waste. Disposal should be in accordance with local, state or national legislation.

Contaminated adsorbent must be removed in sealed, plastic lined drums and disposed of via an authorised waste disposal contractor. Do not empty into drains; dispose of this material and its container in a safe way.

## SECTION 14: Transport Information

### ADR

<b>14.1 UN Number</b>	3082
<b>14.2 UN Proper shipping name</b>	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Alkyl benzenes, 2-ethylhexyl nitrate)
<b>14.3 Transport hazard class(es)</b>	9
<b>14.4 Packing group</b>	III
<b>14.5 Environmental hazards</b>	Yes
<b>14.6 Special precautions for the user</b>	Do not heat the product.



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## ADN

14.1	UN Number	3082
14.2	UN Proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Alkyl benzenes, 2-ethylhexyl nitrate)
14.3	Transport hazard class(es)	9
14.4	Packing group	III
14.5	Environmental hazards	Yes
14.6	Special precautions for the user	Do not heat the product.

## RID

14.1	UN Number	3082
14.2	UN Proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Alkyl benzenes, 2-ethylhexyl nitrate)
14.3	Transport hazard class(es)	9
14.4	Packing group	III
14.5	Environmental hazards	Yes
14.6	Special precautions for the user	Do not heat the product.

## IATA/ICAO

14.1	UN Number	3082
14.2	UN Proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Alkyl benzenes, 2-ethylhexyl nitrate)
14.3	Transport hazard class(es)	9
14.4	Packing group	III
14.5	Environmental hazards	Yes
14.6	Special precautions for the user	Do not heat the product.

## IMDG

14.1	UN Number	3082
14.2	UN Proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Alkyl benzenes, 2-ethylhexyl nitrate)
14.3	Transport hazard class(es)	9
14.4	Packing group	III
14.5	Environmental hazards	Marine pollutant.
14.6	Special precautions for the user	Do not heat the product.



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14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC code The product is not intended to be transported in bulk.

## SECTION 15: Regulatory Information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture This Safety Data Sheet was prepared in accordance with EC Regulation (EC) No. 1907/2006 as amended. The product has been classified in accordance with Regulation (EC) No. 1272/2008 (CLP).

15.2 Chemical Safety Assessment Not applicable.

## SECTION 16: Other Information

### Full text of relevant H-statements:

<b>Hazard Statement(s):</b>	H226: Flammable liquid and vapour. H302: Harmful if swallowed. H304: May be fatal if swallowed and enters airways. H312: Harmful in contact with skin. H314: Causes severe skin burns and eye damage. H315: Causes skin irritation. H318: Causes serious eye damage. H319: Causes serious eye irritation. H332: Harmful if inhaled. H335: May cause respiratory irritation. H336: May cause drowsiness or dizziness. H351: Suspected of causing cancer. H400: Very toxic to aquatic life. H410: Very toxic to aquatic life with long lasting effects. H411: Toxic to aquatic life with long lasting effects.
<b>Supplemental Hazard information (EU):</b>	EUH066: Repeated exposure may cause skin dryness or cracking.

### References:

Suppliers' Safety Data Sheets for ingredients  
Product formulation  
Regulation (EC) No. 1272/2008

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## Disclaimer:

THE INFORMATION PRESENTED HEREIN IS BELIEVED TO BE ACCURATE, BUT IS NOT WARRANTED TO BE, WHETHER ORIGINATING WITH THE COMPANY OR NOT. RECIPIENTS ARE ADVISED TO CONFIRM, IN ADVANCE OF NEED, THAT THE INFORMATION IS CURRENT, APPLICABLE, AND SUITABLE TO THEIR CIRCUMSTANCES.

## Version history:

<b>Version:</b>	1
<b>Issue date:</b>	17/03/2016
<b>Previous Version:</b>	None
<b>Issue date of previous version:</b>	Not applicable
<b>Sections changed from previous version:</b>	Not applicable