Safety Data Sheet

According to regulations in the United Kingdom of Great Britain & Northern Ireland

SAFETY DATA SHEET – RIX SUPERHEAT 35

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

1.1. Product identifier

Substance name:	Rix Superheat 35
Code:	RE: Fuel D35
Cas No.	Mixture
EC No.	Mixture
REACH Registration Number:	None assigned

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

Relevant identified uses	Fuel for diesel engines and combustion turbines.
Uses advised against	anything other than above.

1.3 Details of the Supplier of the Safety Data Sheet

Distributor/Supplier:

Rix Petroleum Limited
2 Humber Quays, Wellington Street West
Hull, HU1 2BN, United Kingdom
Telephone: 01482 224422 Email: sales@rix.co.uk

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

2.1.1. CLP Classification (EC No 1272/2008)

H226 -- Flammable liquids -- Category 3
H304 -- Aspiration Hazard -- Category 1
H315 -- Skin corrosion/irritation -- Category 2
H332 – Acute Toxic – Category 4
H351 – Carcinogenicity – Category 2
H373 - Specific target organ toxicity (single exposure) -- Category 2
H411 -- Hazardous to the aquatic environment, chronic toxicity -- Category 2

2.1.2 Directive 67/5448/EEC & Directive 1999/45/EC

R10: Flammable
Xn; R65: Harmful may cause lung damage if swallowed.
Xi; R38: irritating to skin.
Xn; R29; Harmful bu inhalation
R67; Vapouring may cause drowsiness and dizziness
Carc. Category 3; R40: limited evidence of a carcinogenic effect.
Xn; R48/20; Harmful: danger of serious damage to health by prolonged exposure through inhalation.
N; R51/53: Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

2.2. Label elements



DANGER

Hazard Statement(s):

H226 -- Flammable liquid and vapour
H304 – May be fatal if swallowed and enters airway
H315 – Causes skin irritation
H332 – Harmful if inhaled

H336 – May cause drowsiness or dizziness
H351 – Suspected of causing cancer
H373 – May cause damage to organs through prolonged or repeated exposure
H411 – Toxic to aquatic life with long lasting effects

Precautionary Statements:
P201 - Obtain special instructions before use
P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking
P261: Avoid breathing dust/fumes/gas/mist/vapours/spray
P280 - Wear protective gloves/protective clothing/eye protection/face protection
P308+P313: If exposed or concerned; Get medical advice/attention
P501: Dispose of contents/containers to an approved incineration plant.

2.3. Other hazards

Physical and chemical properties: May form explosive mixtures with air. The vapour is heavier than air, beware of pits and confined spaces. May cause irritation to eyes and air passages.

Properties affecting health: Prolonged or repeated contact may cause irritation. Vapours or mists are irritating to mucous membranes, particularly the eyes. May cause central nervous system depression with nausea, headache, dizziness, vomiting and incoordination. If swallowed accidently, 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)

SECTION 3: Composition/information on ingredients

3.1 Substances: Substances in preparations / mixtures

3.2. Mixtures

Regulation (EC) No. 1272/2008 (CLP)

Hazardous Ingredient	% W/W	Identification Numbers(s)	Registration Number	Hazard Statement(s)
Fuels, Diesel	>90	Cas No. 6834-30-5 EC No. 269-9=822-7	01-2119484664-27-XXXX	H226 - Flam liq.Cat 3 H304 - Asp Tox Cat 1 H315 - Skin irri Cat 2 H332 - Acute Tox Cat 4 H351 - Carc. Cat 2 H373 – STOT RE 2 H411 - Aquatic chronic Cat 2
Non-Hazardous ingredients	<10	_	_	Not classified

H226 -- Flammable liquid and vapour. H304 – May be fatal if swallowed and enters airway. H315 – Causes skin irritation. H332 – Harmful if inhaled. H336 – May cause drowsiness or dizziness. H351 – Suspected of causing cancer. H373 – May cause damage to organs through prolonged or repeated exposure. H411 – Toxic to aquatic life with long lasting effects

Hazardous Ingredient	% W/W	Identification Numbers(s)	Registration Number	Hazard Statement(s)
Fuels, Diesel	>90	Cas No. 6834-30-5 EC No. 269-9=822-7	01-2119484664-27-XXXX	Xn; R20 Xi; R38 Carc. Cat 3 R40 Xn; R65 N; R51/53
Non-Hazardous ingredients	<10	_	_	Not classified

N: Environment. Xi: Irritant. Xn: Sensitiser. R20: harmful by inhalation. R38: Irritating to skin. R40: Limited evidence of a cariogenic effect. R51/53: Toxic to aquatic organisms, may cause long term adverse effects in aquatic environment. R65: Harmful: may cause lung damage if swallowed.

3.3 Additional Information

Contains multipurpose additives to boost performance.
Dyes and markers can be used to indicate tax status an prevent fraud.

SECTION 4: First aid measures

4.1. Description of first aid measures

Self-protection of the first aider: Provided it is safe to do so, isolate the source of the leak. Eliminate sources of ignition. If it is suspected that fumes are still present, the responder should wear an appropriate mask or self-contained breathing apparatus.

Inhalation: If inhaled. If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. Maintain an open airway. Loosed tight clothing such as a collar, tie, belt or waistband. Get medical advice attention. If you feel unwell.

Skin Contact: IF ON SKIN (or hair) . remove contaminated clothing immediately and wash affected skin with plenty of water or soap and water. If irritant (redness, rash, blistering) develops, get medical attention.

Eye Contact: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do so. Continue rinsing. If eye irritation persists, get medical advice/attention. .

Ingestion: IF SWALLOWED: Do not induce vomiting because of risk of aspiration into the lungs. Give nothing to drink. If vomiting occurs spontaneously, keep head below hips to prevent aspiration into the lungs. If unconscious, place in the recovery position and get medical attention immediately. Do not wait for symptoms to appear. .

4.2. Most important symptoms and effects, both acute and delayed

Inhalation: harmful if inhaled. May cause irritation to the respiratory system. May cause drowsiness and dizziness.
Skin Contact: Cause skin irritation.
Ingestion: may cause headache, nausea and vomiting. Aspiration into the lungs may cause chemical pneumonia, which can be fatal.

4.3. Indication of any immediate medical attention and special treatment needed

IF SWALLOWED: Do not induce vomiting, if vomiting does occur, have victim lean forward to reduce risk of aspiration

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable Extinguishing media

Dry chemical powder, carbon dioxide, sand or earth may be used for small fires only.
Large fires: Foam. Water fog (trained personal only).

Unsuitable extinguishing media

Do not use water jet. Direct water jet may spread the fire.

5.2 Special hazards arising from the substances or mixtures

Decomposes in a fire giving off toxic fumes: A mixture of solid and liquid particulates and gases including unidentified organic and inorganic compounds. May form explosive mixture with air. Prevent liquid entering sewers, basements and any watercourses. Vapours are heavier than air and may travel considerable distances to a source of ignition and flashback.

5.3 Advice for fire-fighters

Fight fire with normal precautions from a reasonable distance. Fire fighters should wear complete protective clothing including self-contained breathing apparatus. Keep containers cool by spraying with water if exposed to fire. Avoid release to the environment. Dike fire control water for later disposal.

See Section 9 for Flammable Properties including Flash Point and Flammable (Explosive) Limits

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Only trained and properly protected personnel must be involved in clean-up operations.
Caution - spillages may be slippery. Eliminate sources of ignition. Stop leak if safe to do so. Wear appropriate personal protective equipment, avoid direct contact. Keep upwind.
Small spillages: normal antistatic working clothes are usually adequate.
Large spillages: full body suit of chemically resistant and antistatic material. Work gloves (preferably gauntlets) providing adequate chemical resistance. Remarks: gloves made of PVA are not water-resistant, and are not suitable for emergency use. Work helmet. Antistatic non-skid safety shoes or boots. Goggles and /or face shield, if splashes or contact with eyes is possible or anticipated. Respiratory protection. A half or full-face respirator with filter(s) for organic vapours (and when applicable for H2S) a Self Contained Breathing Apparatus (SCBA) can be used according to the extent of spill and predictable amount of exposure. If the situation cannot be completely assessed, or if an oxygen deficiency is possible, only SCBA's should be used.

6.2. Environmental precautions

Avoid release to the environment. 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.

6.3. Methods and material for containment and cleaning up

Use non-sparking equipment when picking up flammable spill. Adsorb spillages onto sand, earth or any suitable adsorbent material. Sweep up and shovel into waste drums or plastic bags. Transfer to a lidded container for disposal or recovery.
In case of spillage in the water contain product with floating barriers or other equipment. The use of dispersants should be advised by an expert, and, if required, approved by local authorities.

6.4 Reference to other sections

See Section: 8,13.
Product may release Hydrogen Sulphide: A specific assessment of inhalation risks from the presence of hydrogen sulphide in tank headspaces, confined spaces, product residue, tank waste and waste water, and unintentional releases should be made to help determine controls appropriate to local circumstances.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Keep away from sources of ignition - No smoking. Use only outdoors or in a well-ventilated area. When using do not eat, drink or smoke. Prevent vapour build up by providing adequate ventilation during and after use. Take precautionary measures against static discharge. Use only non-sparking tools. The vapour is heavier than air; beware of pits and confined spaces. Avoid contact with skin and eyes. Do not ingest. Avoid breathing vapours. Use personal protective equipment as required. See Section: 8. Keep good industrial hygiene. Wash hands thoroughly after handling. Contaminated clothing should be thoroughly cleaned.

7.2. Conditions for safe storage, including any incompatibilities

Light hydrocarbon vapours can build up in the headspace of containers. These can cause flammability / explosion hazards. Bund storage facilities to prevent soil and water pollution in the event of spillage. Keep only in original container. Keep containers properly sealed when not in use. Ensure that the equipment is adequately grounded. Protect from sunlight. Containers of this material may be hazardous when empty since they retain product residue.

Storage temperature

Stable at ambient temperatures.

Storage measures

Keep in the original container or an approved alternative made from a compatible material.
Suitable containers: Stainless steel, Mild steel. Compatibility should be checked with the manufacturer.

Incompatible materials

Avoid contact with: Strong reducing and oxidising agents. Strong acids and alkali. Halogens.

7.3. Specific end use(s)

See Section: 1.2.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.1.1 Occupational Exposure Limits: None assigned

8.1.2 Biological Limit value: Not established

8.1.3 PNECs and DNELs

Derived No Effect Level Fuels, Diesel	Oral (mg/kg bw/day)	Inhalation (mg/m3)	Dermal (mg/kg bw/day)
Industry – Short term – Local effects	-	4,300	-
Industry – Long term – Systemic effects	-	68	2.9
Consumer – Short term – local effects	-	2,600	-
Consumer – Long term – Systemic effects	-	20	1.3

8.2. Exposure controls

8.2.1 Appropriate engineering controls

Ensure adequate ventilation. Do not enter empty storage tanks until measurements of available oxygen have been carried out. Guarantee that the eye flushing systems and safety showers are located close to the working place.

8.2.2 Individual protection measures, such as personal protective equipment (PPE)

Fuels are typically used, transferred and transported in closed systems. If exposure is likely (i.e. during sampling) the following advice may be appropriate.

Eye/ face protection: Wear goggles giving complete protection to eyes to protect against liquid splashes (EN166).

Skin protection: Hand protection: Wear impervious gloves (EN374). Recommended: Nitrile rubber. Gloves should be changed regularly to avoid permeation problems. Breakthrough time: > 480 minutes.

Respiratory protection: When the product is heated /In case of inadequate ventilation wear respiratory protection.
Recommended: Wear a full face respirator conforming to EN136 with Type A filter or better.
Closed system(s): Not normally required.

Thermal hazards: Not applicable.

8.2.3 Environmental Exposure Controls: Avoid release to the environment.

SECTION 9: Physical and chemical properties - typical

9.1. Information on basic physical and chemical properties

Appearance	Liquid. Amber/Red.
Odour	Diesel Odour.
Odour threshold	Not established.
pH	Not established.
Melting point/freezing point	Not established.
Initial boiling point and boiling range	150°C - 380°C (ASTM D 86).
Flash point	>55°C (ASTM D 93).
Evaporation rate	Not established.
Flammability (solid, gas)	Not applicable - Liquid.
Upper/lower flammability or explosive limits	Upper limit: 5%. Lower limit: 0.5%.
Vapour pressure	<1kPa @ 37.8°C (EN 13016-1).
Vapour density	>5 (Air=1).
Relative density	0.820 - 0.845 g/cm³ @ 15°C.
Solubility(ies)	Immiscible with water. Soluble in most organic solvents.
Partition coefficient: n-octanol/water	Not established.
Auto-ignition temperature	>250°C (ASTM E659-78).
Decomposition Temperature	Not established.
Viscosity	<7 mm²/s @ 40°C.
Explosive properties	Not explosive. Vapour may create explosive atmosphere.
Oxidising properties	Not oxidising.

9.2. Other Information None known

SECTION 10: Stability and reactivity

10.1. Stability and Reactivity: Stable under normal conditions.

10.2. Chemical stability: Stable under normal conditions.

10.3. Possibility of hazardous reactions: Flammable liquid.

10.4. Conditions to avoid: Keep away from heat, sources of ignition and direct sunlight.

10.5. Incompatible materials: Avoid contact with: Strong reducing and oxidising agents. Strong acids and alkali. Halogens.

10.6. Hazardous decomposition products: A mixture of solid and liquid particulates and gases including unidentified organic and inorganic compounds. Decomposes in a fire giving off toxic fumes: Carbon oxides and traces of incompletely burned carbon compounds.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity

Ingestion	Based upon the available data, the classification criteria are not met. Fuels, Diesel: LD50 > 2,000 mg/kg bw/day (rat) OECD 401.
Inhalation	Mixture: Acute Tox. 4; Harmful if inhaled. Fuels, Diesel: LC50 = 4.1 mg/l, 4 hour(s) (rat) OECD 403.
Skin Contact	Based upon the available data, the classification criteria are not met. Fuels, Diesel: LD50 > 5,000 mg/kg bw/day (rabbit) OECD 434.
Skin corrosion/irritation	Mixture: Skin Irrit. 2; Causes skin irritation. Fuels, Diesel: Mean erythema score (24 hours) 3.9.
Serious eye damage/irritation	Based upon the available data, the classification criteria are not met.
Respiratory or skin sensitization	Based upon the available data, the classification criteria are not met.
Germ cell mutagenicity	Based upon the available data, the classification criteria are not met.
Carcinogenicity	Mixture: Carc. 2; Suspected of causing cancer. Fuels, diesel - Carc. 2: (mouse) OECD 451.
Reproductive toxicity	Based upon the available data, the classification criteria are not met.
STOT - single exposure	Based upon the available data, the classification criteria are not met.
STOT - repeated exposure	Mixture: STOT RE 2; May cause damage to organs through prolonged or repeated exposure
Aspiration hazard	Mixture: Asp. Tox. 1; Aspiration into the lungs may cause chemical pneumonitis, which can be fatal.

11.2 Other information None

SECTION12: Ecological information

12.1. Toxicity

Toxic to aquatic life with long lasting effects. Aquatic Chronic 2, Classified as a Marine Pollutant.
Estimated Aquatic Compartment LC50 >1 ≤10 mg/l.
Fuels, Diesel: NOEL (21d) 0.2 mg/l (Daphnia magna) OECD 211.
Fuels, Diesel: NOEL (14/28d) 0.083 mg/l (QSAR Petrotox). .

12.2. Persistence and degradability

Readily biodegradable, non-persistent.

12.3. Bioaccumulative potential

The product has low potential for bioaccumulation.

12.4. Mobility in soil

The product has moderate mobility in soil.

12.5. Results of PBT and vPvB assessment

None of the substances in this product fulfil the criteria for being regarded as a PBT or vPvB substance.

12.6. Other adverse effects

None known

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Dispose of this material and its container as hazardous waste (2008/98/EEC). Do not empty into drains, dispose of this material and its container at hazardous or special waste collection point. Disposal should be in accordance with local, state or national legislation. Containers of this material may be hazardous when empty since they retain product residue. Containers must not be punctured or destroyed by burning, even when empty. Allocation of a waste code number, according to the European Waste Catalogue, should be carried out in agreement with the regional waste disposal company.

13.1.1 Waste code(s) waste designation(s)

13 07 01 fuel oil and diesel.

SECTION14: Transport information

	ADR/RID	IMDG/ADN
14.1. UN number:	UN1202	UN1202
14.2. UN proper shipping name:	D35	D35
14.3. Transport hazard class(es):	3	3
14.4. Packing group:	III	III
14.5. Environmental hazards:	Classified as a Marine Pollutant.	
14.6. Special precautions for user:	**See section 2**	

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code: Not applicable

14.8 Additional information

Special Provisions	363 640K 664
Limited Quantity	5L
Tunnel Restriction Code	3 (D/E)
Hazard Identification Number	30

SECTION 15: Regulatory information

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

15.1.1 EU regulations

None known

15.1.2 National Regulations

Germany - Wassergefährdungsklasse (Germany). WGK number: 2.

15.2. Chemical safety assessment

Not available

SECTION 16: Other information

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

References:

Existing Safety Data Sheet (SDS) and Existing ECHA registration(s) for Fuels, diesel (CAS No. 68334-30-5).
This Safety Data Sheet was prepared in accordance with EC Regulation (EC) 1907/2006 (REACH), 1272/2008 (CLP) & 453/2010.

Classification of the substance or mixture According to Regulation (EC) No. 1272/2008CLP	**Classification Procedure**
Flam. Liq.3; H226	Flash Point (ASTM D 86)
Asp. Tox. 1; H304	Kinematic Viscosity
Skin Irrit. 2; H315	Threshold Calculation
Acute Tox. 4; H332	ATEmix Calculation(s)
Carc. 2; H351	Threshold Calculation
STOT RE 2; H373	Threshold Calculation
Aquatic Chronic 2; H411	Summation Calculation

LEGEND

ASTM	American Society for Testing and Materials
ATE	Acute Toxicity Estimate
LTEL	Long Term Exposure Limit
STEL	Short Term Exposure Limit
DNEL	Derived No Effect Level
PNEC	Predicted No Effect Concentration
PBT	PBT: Persistent, Bioaccumulative and Toxic
vPvB	very Persistent and very Bioaccumulative
OECD	Organisation for Economic Cooperation and Development

Training advice: Consideration should be given to the work procedures involved and the potential extent of exposure as they may determine whether a higher level of protection is required.

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