

## Safety data sheet according to 1907/2006/EC, Article 31

Printing date 23.01.2023

Version number 7 (replaces version 6)

Revision: 17.01.2023

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

#### 1.1 Product identifier

Trade name: Radiator Oil Emulsifier

Article number: 84666

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

FOR PROFESSIONAL AND INDUSTRIAL USE ONLY

Application of the substance / the mixture Additive

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

##### Manufacturer/Supplier:

KENT (United Kingdom) Ltd

Forsyth House

Pitreavie Drive

Pitreavie Business Park

Dunfermline

Fife

KY11 8US

Tel: +44 01383 723344 / 0800 136925 Monday - Thursday 8.30am - 5.30pm, Friday 9.00am - 3.00pm

Fax: +44 1383 620079

SDS@kenteurope.com

#### 1.4 Emergency telephone number:

Tel: +44 01383 723344 During normal office hours - Monday - Thursday 8.30am - 5.30pm, Friday 9.00am - 3.00pm

### SECTION 2: Hazards identification

#### 2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008



flame

Flam. Liq. 2 H225 Highly flammable liquid and vapour.



health hazard

Asp. Tox. 1 H304 May be fatal if swallowed and enters airways.



environment

Aquatic Chronic 2 H411 Toxic to aquatic life with long lasting effects.



Skin Irrit. 2 H315 Causes skin irritation.

Eye Irrit. 2 H319 Causes serious eye irritation.

STOT SE 3 H336 May cause drowsiness or dizziness.

#### 2.2 Label elements

Labelling according to Regulation (EC) No 1272/2008 The product is classified and labelled according to the GB CLP regulation.

(Contd. on page 2)

# Safety data sheet

## according to 1907/2006/EC, Article 31

Printing date 23.01.2023

Version number 7 (replaces version 6)

Revision: 17.01.2023

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(Contd. of page 1)

**Hazard pictograms**

GHS02    GHS07    GHS08    GHS09

**Signal word** Danger**Hazard-determining components of labelling:**

Kerosine (petroleum), hydrodesulfurized  
OXIRANE, 2-METHYL-, POLYMER WITH OXIRANE, MONO(2-PROPYLHEPTYL) ETHER  
Propan-2-ol

**Hazard statements**

H225 Highly flammable liquid and vapour.  
H315 Causes skin irritation.  
H319 Causes serious eye irritation.  
H336 May cause drowsiness or dizziness.  
H304 May be fatal if swallowed and enters airways.  
H411 Toxic to aquatic life with long lasting effects.

**Precautionary statements**

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.  
P273 Avoid release to the environment.  
P280 Wear protective gloves / eye protection.  
P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/ doctor.  
P331 Do NOT induce vomiting.  
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 in accordance with local/regional/national/international regulations.

**2.3 Other hazards****Results of PBT and vPvB assessment**

**PBT:** Not applicable.  
**vPvB:** Not applicable.

**SECTION 3: Composition/information on ingredients****3.2 Mixtures****Description:** Mixture of the substances listed below with harmless additions.**Dangerous components:**

CAS: 64742-81-0 EINECS: 265-184-9 Reg.nr.: 01-2119462828-25	Kerosine (petroleum), hydrodesulfurized ⚠ Asp. Tox. 1, H304; ⚠ Aquatic Chronic 2, H411; ⚠ Skin Irrit. 2, H315; STOT SE 3, H336	25-50%
CAS: 64-17-5 EINECS: 200-578-6 Reg.nr.: 01-2119457610-43	Ethanol ⚠ Flam. Liq. 2, H225; ⚠ Eye Irrit. 2, H319	10-25%
CAS: 67-63-0 EINECS: 200-661-7 Reg.nr.: 01-2119457558-25	Propan-2-ol ⚠ Flam. Liq. 2, H225; ⚠ Eye Irrit. 2, H319; STOT SE 3, H336	10-25%
CAS: 1330-20-7 EINECS: 215-535-7 Reg.nr.: 01-2119488216-32	Xylene, mixed isomers, pure ⚠ Flam. Liq. 3, H226; ⚠ Acute Tox. 4, H312; Acute Tox. 4, H332; Skin Irrit. 2, H315	10-25%
CAS: 166736-08-9	OXIRANE, 2-METHYL-, POLYMER WITH OXIRANE, MONO(2-PROPYLHEPTYL) ETHER ⚠ Eye Dam. 1, H318; ⚠ Acute Tox. 4, H302	<5%

**Additional information** For the wording of the listed hazard phrases refer to section 16.**SECTION 4: First aid measures****4.1 Description of first aid measures****After inhalation**

Supply fresh air. If required, provide artificial respiration. Keep patient warm. Consult doctor if symptoms persist.  
In case of unconsciousness bring patient into stable side position for transport.

**After skin contact**

Instantly wash with water and soap and rinse thoroughly.

(Contd. on page 3)

# Safety data sheet

## according to 1907/2006/EC, Article 31

Printing date 23.01.2023

Version number 7 (replaces version 6)

Revision: 17.01.2023

**Trade name: Radiator Oil Emulsifier**

(Contd. of page 2)

- Generally the product is not skin irritating.
- **After eye contact** Rinse opened eye for several minutes under running water. If symptoms persist, consult doctor.
- **After swallowing**  
Rinse out mouth.  
Do not induce vomiting; instantly call for medical help.
- **4.2 Most important symptoms and effects, both acute and delayed** No further relevant information available.
- **4.3 Indication of any immediate medical attention and special treatment needed**  
No further relevant information available.

### SECTION 5: Firefighting measures

- **5.1 Extinguishing media**
- **Suitable extinguishing agents** CO<sub>2</sub>, extinguishing powder or water haze. Fight larger fires with water haze or alcohol-resistant foam.
- **For safety reasons unsuitable extinguishing agents** Water with a full water jet.
- **5.2 Special hazards arising from the substance or mixture** No further relevant information available.
- **5.3 Advice for firefighters**
- **Protective equipment:**  
Do not inhale explosion gases or combustion gases.  
Wear self-contained breathing apparatus.

### SECTION 6: Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures**  
Wear protective equipment. Keep unprotected persons away.  
Keep away from ignition sources
- **6.2 Environmental precautions:**  
Do not allow product to reach sewage system or water bodies.  
Prevent material from reaching sewage system, holes and cellars.  
Inform respective authorities in case product reaches water or sewage system.
- **6.3 Methods and material for containment and cleaning up:**  
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).  
Dispose of contaminated material as waste according to item 13.  
Ensure adequate ventilation.
- **6.4 Reference to other sections**  
See Section 7 for information on safe handling  
See Section 8 for information on personal protection equipment.  
See Section 13 for information on disposal.

### SECTION 7: Handling and storage

- **7.1 Precautions for safe handling** Ensure good ventilation/exhaustion at the workplace.
- **Information about protection against explosions and fires:**  
Keep ignition sources away - Do not smoke.  
Protect against electrostatic charges.
- **7.2 Conditions for safe storage, including any incompatibilities**
- **Storage**
- **Requirements to be met by storerooms and containers:** Store in cool location.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:**  
Keep container tightly sealed.  
Store in cool, dry conditions in well sealed containers.
- **Storage class** 3
- **7.3 Specific end use(s)** No further relevant information available.

GB  
(Contd. on page 4)

# Safety data sheet

## according to 1907/2006/EC, Article 31

Printing date 23.01.2023

Version number 7 (replaces version 6)

Revision: 17.01.2023

Trade name: Radiator Oil Emulsifier

(Contd. of page 3)

### SECTION 8: Exposure controls/personal protection

#### 8.1 Control parameters

##### Components with limit values that require monitoring at the workplace:

<b>64-17-5 Ethanol</b>	
WEL	Long-term value: 1920 mg/m <sup>3</sup> , 1000 ppm
<b>67-63-0 Propan-2-ol</b>	
WEL	Short-term value: 1250 mg/m <sup>3</sup> , 500 ppm Long-term value: 999 mg/m <sup>3</sup> , 400 ppm
<b>1330-20-7 Xylene, mixed isomers, pure</b>	
WEL	Short-term value: 441 mg/m <sup>3</sup> , 100 ppm Long-term value: 220 mg/m <sup>3</sup> , 50 ppm Sk; BMGV

##### Regulatory information WEL: EH40/2020

#### DNELs

<b>64-17-5 Ethanol</b>		
Dermal	Long term local effect	343 mg/kg/day (Worker)
Inhalative	Long term local effect	950 mg/m <sup>3</sup> (Worker)
	Acute systemic effect	1,900 mg/m <sup>3</sup> (Worker)
<b>67-63-0 Propan-2-ol</b>		
Oral	Long term systemic effect	26 mg/kg/day (Consumer)
Dermal	Long term systemic effect	319 mg/kg/day (Consumer) 888 mg/kg bw/day (Worker)
Inhalative	Long term systemic effect	89 mg/m <sup>3</sup> (Consumer) 500 mg/m <sup>3</sup> (Worker)

#### PNECs

<b>64-17-5 Ethanol</b>	
PNEC	0.96 mg/l (Aqua (freshwater)) 0.79 mg/l (Aqua (marine water)) 0.62 mg/kg (Soil)
<b>67-63-0 Propan-2-ol</b>	
PNEC	140.9 mg/l (Aqua (freshwater)) 140.9 mg/l (Aqua (intermittent)) 140.9 mg/l (Aqua (marine water)) 552 mg/kg (Freshwater sediment) 552 mg/kg (Marine water sediment) 2,251 mg/l (Sewage treatment plant) (Assessment factor 1) 28 mg/kg (Soil)

##### Ingredients with biological limit values:

<b>1330-20-7 Xylene, mixed isomers, pure</b>	
BMGV	650 mmol/mol creatinine Medium: urine Sampling time: post shift Parameter: methyl hippuric acid

**Additional information:** The lists that were valid during the compilation were used as basis.

#### 8.2 Exposure controls

- **Appropriate engineering controls** No further data; see item 7.
- **Individual protection measures, such as personal protective equipment**
- **General protective and hygienic measures**  
Keep away from foodstuffs, beverages and food.  
Take off immediately all contaminated clothing  
Wash hands during breaks and at the end of the work.  
Avoid contact with the eyes and skin.
- **Breathing equipment:**  
Use breathing protection in case of insufficient ventilation.  
Filter A2 / P3 (EN 14387)

(Contd. on page 5)

# Safety data sheet

## according to 1907/2006/EC, Article 31

Printing date 23.01.2023

Version number 7 (replaces version 6)

Revision: 17.01.2023

**Trade name: Radiator Oil Emulsifier**

(Contd. of page 4)

**Hand protection**

Protective gloves.

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

**Material of gloves**

Wear suitable gloves tested to EN 374

Nitrile rubber, NBR

Recommended thickness of the material:  $\geq 0.7$  mm

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

**Penetration time of glove material**

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

Value for the permeation: Level 6 > 480 minutes

**Eye/face protection**

Tightly sealed safety glasses. (EN 166)

**SECTION 9: Physical and chemical properties****9.1 Information on basic physical and chemical properties****General Information****Physical state**

Fluid

**Colour:**

Pale

**Odour:**

Characteristic

**Odour threshold:**

Not determined.

**Melting point/freezing point:**

Not determined

**Boiling point or initial boiling point and boiling range**

&gt;35 °C

**Flammability**

Highly flammable.

**Lower and upper explosion limit****Lower:**

Not determined.

**Upper:**

Not determined.

**Flash point:**

12 °C

**Decomposition temperature:**

Not determined.

**pH**

Mixture is non-soluble (in water).

**Viscosity:****Kinematic viscosity at 40 °C**10-6 m<sup>2</sup>/s (ISO 3104/3105)**dynamic:**

Not determined.

**Solubility****Water:**

Not miscible / difficult to mix

**Partition coefficient n-octanol/water (log value)**

Not determined.

**Vapour pressure:**

Not determined.

**Density and/or relative density****Density at 20 °C**0.82 g/cm<sup>3</sup>**Relative density**

Not determined.

**Vapour density**

Not determined.

**9.2 Other information****Appearance:****Form:**

Fluid

**Important information on protection of health and environment, and on safety.****Self-inflammability:**

&gt;200 °C

**Explosive properties:**

Product is not explosive. However, formation of explosive air/steam mixtures is possible.

(Contd. on page 6)

# Safety data sheet

according to 1907/2006/EC, Article 31

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Version number 7 (replaces version 6)

Revision: 17.01.2023

**Trade name: Radiator Oil Emulsifier**

(Contd. of page 5)

· <b>Solvent content:</b>	
· <b>Organic solvents:</b>	780 g/l VOC
· <b>Change in condition</b>	
· <b>Evaporation rate</b>	Not determined.
· <b>Information with regard to physical hazard classes</b>	
· <b>Explosives</b>	Void
· <b>Flammable gases</b>	Void
· <b>Aerosols</b>	Void
· <b>Oxidising gases</b>	Void
· <b>Gases under pressure</b>	Void
· <b>Flammable liquids</b>	Highly flammable liquid and vapour.
· <b>Flammable solids</b>	Void
· <b>Self-reactive substances and mixtures</b>	Void
· <b>Pyrophoric liquids</b>	Void
· <b>Pyrophoric solids</b>	Void
· <b>Self-heating substances and mixtures</b>	Void
· <b>Substances and mixtures, which emit flammable gases in contact with water</b>	Void
· <b>Oxidising liquids</b>	Void
· <b>Oxidising solids</b>	Void
· <b>Organic peroxides</b>	Void
· <b>Corrosive to metals</b>	Void
· <b>Desensitised explosives</b>	Void

## SECTION 10: Stability and reactivity

- **10.1 Reactivity** No further relevant information available.
- **10.2 Chemical stability**
- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **10.3 Possibility of hazardous reactions** No dangerous reactions known
- **10.4 Conditions to avoid** Heat. Hot surfaces. Sources of ignition. Flames.
- **10.5 Incompatible materials:** Strong acids and oxidizing agents
- **10.6 Hazardous decomposition products:** No dangerous decomposition products known

## SECTION 11: Toxicological information

- **11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008**
- **Acute toxicity** Based on available data, the classification criteria are not met.

### · LD/LC50 values that are relevant for classification:

<b>64-17-5 Ethanol</b>		
Oral	LD50	7,060 mg/kg (Rat)
Inhalative	LC50 (4 hr)	117-125 mg/l (Rat)
<b>67-63-0 Propan-2-ol</b>		
Oral	LD50	5,840 mg/kg (Rat)
Dermal	LD50	13,400 mg/kg (Rabbit)
<b>1330-20-7 Xylene, mixed isomers, pure</b>		
Oral	LD50	4,300 mg/kg (Rat)
Dermal	LD50	2,000 mg/kg (rbt)

- **Skin corrosion/irritation** Causes skin irritation.
- **Serious eye damage/irritation** Causes serious eye irritation.
- **STOT-single exposure** May cause drowsiness or dizziness.
- **Aspiration hazard** May be fatal if swallowed and enters airways.
- **11.2 Information on other hazards**

### · Endocrine disrupting properties

None of the ingredients is listed.

GB  
(Contd. on page 7)

# Safety data sheet

## according to 1907/2006/EC, Article 31

Printing date 23.01.2023

Version number 7 (replaces version 6)

Revision: 17.01.2023

Trade name: Radiator Oil Emulsifier

(Contd. of page 6)

### SECTION 12: Ecological information

#### 12.1 Toxicity

##### Aquatic toxicity:

###### 64-17-5 Ethanol

EC50 (24 hr)	>100 mg/l (Daphnia magna)
LC50 (96 hr)	1,030 mg/l (Fish)

###### 67-63-0 Propan-2-ol

EC50 (48 hr)	13,299 mg/l (Daphnia magna)
LC50 (24 hr)	9,714 mg/l (Daphnia magna)
LC50 (96 hr)	4,200 mg/l (FSH) (dynamic)
	9,640 mg/l (Pimephales promelas)
LOEC (8 days)	1,000 mg/l (Algae)

###### 1330-20-7 Xylene, mixed isomers, pure

CE50	10 mg/l (Fish) (72h)
EC50 (48 hr)	7.4 mg/l (Daphnia magna)
LC50 (96 hr)	3.77-13.5 mg/l (Fish)

- **12.2 Persistence and degradability** No further relevant information available.
- **12.3 Bioaccumulative potential** No further relevant information available.
- **12.4 Mobility in soil** No further relevant information available.
- **12.5 Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **12.6 Endocrine disrupting properties** The product does not contain substances with endocrine disrupting properties.
- **12.7 Other adverse effects**
- **Remark:** Toxic for fish
- **Additional ecological information:**
- **General notes:**
- Water hazard class 2 (German Regulation) (Self-assessment): hazardous for water.
- Do not allow product to reach ground water, water bodies or sewage system.
- Danger to drinking water if even small quantities leak into soil.
- Also poisonous for fish and plankton in water bodies.
- Toxic for aquatic organisms

### SECTION 13: Disposal considerations

- **13.1 Waste treatment methods**
- **Recommendation** Must not be disposed of together with household garbage. Do not allow product to reach sewage system.
- **Uncleaned packagings:**
- **Recommendation:** Disposal must be made according to official regulations.

### SECTION 14: Transport information

#### 14.1 UN number or ID number

· **ADR, IMDG, IATA** UN1993

#### 14.2 UN proper shipping name

· **ADR** 1993 FLAMMABLE LIQUID, N.O.S., special provision 640D (ISOPROPANOL (ISOPROPYL ALCOHOL), ethanol), ENVIRONMENTALLY HAZARDOUS

· **IMDG, IATA** FLAMMABLE LIQUID, N.O.S. (ISOPROPANOL (ISOPROPYL ALCOHOL), ethanol)

(Contd. on page 8)

GB

# Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 23.01.2023

Version number 7 (replaces version 6)

Revision: 17.01.2023

Trade name: Radiator Oil Emulsifier

(Contd. of page 7)

### 14.3 Transport hazard class(es)

#### ADR



· **Class** 3 (F1) Flammable liquids.  
 · **Label** 3

#### IMDG



· **Class** 3 Flammable liquids.  
 · **Label** 3

#### IATA



· **Class** 3 Flammable liquids.  
 · **Label** 3

### 14.4 Packing group

· **ADR, IMDG, IATA** II

### 14.5 Environmental hazards:

· **Marine pollutant:** Product contains environmentally hazardous substances: Petroleum distillates

Symbol (fish and tree)

· **14.6 Special precautions for user** Warning: Flammable liquids.

· **Kemler Number:** 33

· **EMS Number:** F-E, S-E

· **Stowage Category** B

### 14.7 Maritime transport in bulk according to IMO instruments

Not applicable.

#### Transport/Additional information:

##### ADR

· **Limited quantities (LQ)** 1L  
 · **Excepted quantities (EQ)** Code: E2  
 Maximum net quantity per inner packaging: 30 ml  
 Maximum net quantity per outer packaging: 500 ml

· **Transport category** 2

· **Tunnel restriction code** D/E

##### IMDG

· **Limited quantities (LQ)** 1L  
 · **Excepted quantities (EQ)** Code: E2  
 Maximum net quantity per inner packaging: 30 ml  
 Maximum net quantity per outer packaging: 500 ml

#### UN "Model Regulation":

UN 1993 FLAMMABLE LIQUID, N.O.S., SPECIAL PROVISION 640D (ISOPROPANOL (ISOPROPYL ALCOHOL), ETHANOL), 3, II, ENVIRONMENTALLY HAZARDOUS

GB

(Contd. on page 9)



# Safety data sheet

## according to 1907/2006/EC, Article 31

Printing date 23.01.2023

Version number 7 (replaces version 6)

Revision: 17.01.2023

Trade name: Radiator Oil Emulsifier

(Contd. of page 8)

### SECTION 15: Regulatory information

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

##### Directive 2012/18/EU

Named dangerous substances - ANNEX I None of the ingredients is listed.

##### Seveso category

E2 Hazardous to the Aquatic Environment

P5c FLAMMABLE LIQUIDS

Qualifying quantity (tonnes) for the application of lower-tier requirements 200 t

Qualifying quantity (tonnes) for the application of upper-tier requirements 500 t

##### National regulations

##### Technical instructions (air):

Class	Share in %
NK	63.0

Water hazard class: Water hazard class 2 (Self-assessment): hazardous for water.

15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

### SECTION 16: Other information

These data are based on our present knowledge. However, they shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

#### Relevant phrases

H225 Highly flammable liquid and vapour.

H226 Flammable liquid and vapour.

H302 Harmful if swallowed.

H304 May be fatal if swallowed and enters airways.

H312 Harmful in contact with skin.

H315 Causes skin irritation.

H318 Causes serious eye damage.

H319 Causes serious eye irritation.

H332 Harmful if inhaled.

H336 May cause drowsiness or dizziness.

H411 Toxic to aquatic life with long lasting effects.

Department issuing data specification sheet: Environment protection department

#### Abbreviations and acronyms:

ADR: European Agreement Concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

DNEL: Derived No-Effect Level (UK REACH)

PNEC: Predicted No-Effect Concentration (UK REACH)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

Flam. Liq. 2: Flammable liquids – Category 2

Flam. Liq. 3: Flammable liquids – Category 3

Acute Tox. 4: Acute toxicity – Category 4

Skin Irrit. 2: Skin corrosion/irritation – Category 2

Eye Dam. 1: Serious eye damage/eye irritation – Category 1

Eye Irrit. 2: Serious eye damage/eye irritation – Category 2

STOT SE 3: Specific target organ toxicity (single exposure) – Category 3

Asp. Tox. 1: Aspiration hazard – Category 1

Aquatic Chronic 2: Hazardous to the aquatic environment - long-term aquatic hazard – Category 2

Data compared to the previous version altered. \*