



SAFETY DATA SHEET

Redex Petrol System Cleaner

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

1.1. Product identifier

Product name	Redex Petrol System Cleaner
Product number	RADD0012B, RADD2801B, RADD0026A, RADD0020A, RADD0042A, RADD0056A, RADD0006A, RADD0014A, RADD1101A, RADD1501A, RADD1801A, RADD2101A, RADD2801A, RADD0012A, RADD0070A
Internal identification	NQA2299
UFI	UFI: MDC6-G0FX-W008-5FTX
REACH registration notes	This is a MIXTURE; no registration information contained in this document . Holts are classed as Downstream User.

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

Identified uses Fuel additive.

1.3. Details of the supplier of the safety data sheet

Supplier	Holt Lloyd Services 52 Rue des 40 Mines, 60000 – Allonne, France Phone: +33 (0)3 64 99 00 32 info@holtsauto.com
Contact person	Contact email address: info@holtsauto.com
Manufacturer	Holt Lloyd International Ltd Barton Dock Road Stretford Manchester M32 0YQ - England, UK +44 (0) 161 866 4800 FAX +44 (0) 161 866 4854 www.holtsauto.com

1.4. Emergency telephone number

Emergency telephone UK - 00 44 (0) 161 866 4800 Office hrs = 0900 - 1700 hrs

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National emergency telephone number +43 1 31304 5620; chemikalien@umweltbundesamt.at (Austria)
 +32022649636; info@poisoncentre.be (Belgium)
 +359 2 9154 409; poison_centre@mail.orbitel.bg (Bulgaria)
 +38514686910; toksikologija@hzjz.hr (Croatia)
 +35722405611; cy-chemregistry@dli.mlsi.gov.cy (Cyprus)
 +420267082257; biocidy@mzcr.cz (Czech Republic)
 +45 72 54 40 00; mst@mst.dk (Denmark)
 +372 794 3500; clp@terviseamet.ee, info@terviseamet.ee (Estonia)
 +358 5052 000; kirjaamo@tukes.fi (Finland)
 + 33 3 83 85 21 92; bnpc@chru-nancy.fr (France)
 +49-30-18412-0; bfr@bfr.bund.de (Germany)
 +302106479250; +302106479450; devxp.gcs@aade.gr, environment.gcs@aade.gr (Greece)
 +36 (1) 476 1135; clp.ca@nnk.gov.hu (Hungary)
 +354 543 22 22; eitur@landspitali.is (Iceland)
 +353 (1) 809 2166 / +353 (1) 809 2566; chemicalsinfo@beaumont.ie (Ireland)
 +390649906140; inscweb@iss.it (Italy)
 +371 67032600; lvgmc@lvgmc.lv (Latvia)
 +370 70662008; aaa@aaa.am.lt (Lithuania)
 +320 22649636; +352 24785551; info@poisoncentre.be; direction-sante@ms.etat.lu (Luxembourg)
 +356 2395 2000; info@mccaa.org.mt (Malta)
 +31 88 75 585 61; productnotificatie@umcutrecht.nl (The Netherlands)
 +4573580500; produktregisteret@miljodir.no / +47 21 07 70 00; folkehelseinstituttet@fhi.no (Norway)
 +48 42 2538 400; biuro@chemikalia.gov.pl (Poland)
 +351213303271; ciav.tox@inem.pt (Portugal)
 +40213183606; infotox@insp.gov.ro (Romania)
 +7 495 621 6885; +7 495 628 1687; rtiac@mail.ru; rtiac2003@yahoo.com (Russia)
 +421 2 5465 2307; ntic@ntic.sk (Slovakia)
 + 386 1 522 1293; gp.ukc@kclj.si (Slovenia)
 +34 917689800; intcf.doc@justicia.es (Spain)
 +46104566750; giftinformation@gic.se (Sweden)
 +44 121 507 4123; allistervale@npis.org, sallybradberry@npis.org (UK)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (EC 1272/2008)

Physical hazards	Flam. Liq. 3 - H226
Health hazards	STOT SE 3 - H336 Asp. Tox. 1 - H304
Environmental hazards	Aquatic Chronic 3 - H412

2.2. Label elements

Hazard pictograms



Signal word

Danger

Hazard statements

H226 Flammable liquid and vapour.
 H336 May cause drowsiness or dizziness.
 H304 May be fatal if swallowed and enters airways.
 H412 Harmful to aquatic life with long lasting effects.

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Precautionary statements	<p>P101 If medical advice is needed, have product container or label at hand.</p> <p>P102 Keep out of reach of children.</p> <p>P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.</p> <p>P261 Avoid breathing vapour/ spray.</p> <p>P271 Use only outdoors or in a well-ventilated area.</p> <p>P273 Avoid release to the environment.</p> <p>P501 Dispose of contents/ container in accordance with national regulations.</p>
Supplemental label information	EUH066 Repeated exposure may cause skin dryness or cracking.
UFI	UFI: MDC6-G0FX-W008-5FTX
Contains	Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, <2% aromatics, Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, < 2% aromatics, Hydrocarbons, C10, aromatics, >1% naphthalene
Supplementary precautionary statements	<p>P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/ doctor.</p> <p>P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.</p> <p>P331 Do NOT induce vomiting.</p> <p>P370+P378 In case of fire: Use foam, carbon dioxide, dry powder or water fog to extinguish.</p> <p>P403+P233 Store in a well-ventilated place. Keep container tightly closed.</p>

2.3. Other hazards

This product does not contain any substances classified as PBT or vPvB.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, <2% aromatics 60-100%			
<table style="width: 100%; border: none;"> <tr> <td style="width: 33%;">CAS number: 64742-48-9</td> <td style="width: 33%;">EC number: 919-857-5</td> <td style="width: 33%;">REACH registration number: 01-2119463258-33-XXXX</td> </tr> </table>	CAS number: 64742-48-9	EC number: 919-857-5	REACH registration number: 01-2119463258-33-XXXX
CAS number: 64742-48-9	EC number: 919-857-5	REACH registration number: 01-2119463258-33-XXXX	
Classification Flam. Liq. 3 - H226 STOT SE 3 - H336 Asp. Tox. 1 - H304			
Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, < 2% aromatics 1-5%			
<table style="width: 100%; border: none;"> <tr> <td style="width: 33%;">CAS number: —</td> <td style="width: 33%;">EC number: 926-141-6</td> <td style="width: 33%;">REACH registration number: 01-2119456620-43-XXXX</td> </tr> </table>	CAS number: —	EC number: 926-141-6	REACH registration number: 01-2119456620-43-XXXX
CAS number: —	EC number: 926-141-6	REACH registration number: 01-2119456620-43-XXXX	
Classification Asp. Tox. 1 - H304			

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Hydrocarbons, C10, aromatics, >1% naphthalene	1-5%
CAS number: 1189173-42-9 EC number: 919-284-0 REACH registration number: 01-2119463588-24-XXXX	
Classification STOT SE 3 - H336 Asp. Tox. 1 - H304 Aquatic Chronic 2 - H411	
NAPHTHALENE	<1%
CAS number: 91-20-3 EC number: 202-049-5 REACH registration number: 01-2119561346-37-XXXX	
M factor (Acute) = 1 M factor (Chronic) = 1	
Classification Acute Tox. 4 - H302 Carc. 2 - H351 Aquatic Acute 1 - H400 Aquatic Chronic 1 - H410	
DISTILLATES (PETROLEUM), HYDROTREATED LIGHT NAPHTHENIC; BASEOIL - U	<1%
CAS number: 64742-53-6 EC number: 265-156-6 REACH registration number: 01-2119480375-34-XXXX	
Classification Carc. 1B - H350	
2-Naphthalenol, 1-[[4 (phenylazo) phenyl]azo]-, ar-heptyl ar', ar" - methyl derivatives	<1%
CAS number: 92257-31-3 EC number: 296-120-8 REACH registration number: 01-2120101938-55-XXXX	
Classification Repr. 2 - H361	

The full text for all hazard statements is displayed in Section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

Treat symptomatically.

Inhalation

Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. If throat irritation or coughing persists, proceed as follows. Get medical attention. Show this Safety Data Sheet to the medical personnel. Place unconscious person on their side in the recovery position and ensure breathing can take place. Do not induce vomiting. Symptoms of lung oedema (shortness of breath) may develop up to 24 hours after exposure. Get medical attention immediately.

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Ingestion	Rinse mouth thoroughly with water. Never give anything by mouth to an unconscious person. Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. Do not induce vomiting. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention.
Skin contact	Remove contaminated clothing immediately and wash skin with soap and water. Get medical attention if irritation persists after washing.
Eye contact	Remove any contact lenses and open eyelids wide apart. Rinse immediately with plenty of water. Continue to rinse for at least 10 minutes. Get medical attention if any discomfort continues.

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

General information	The severity of the symptoms described will vary dependent on the concentration and the length of exposure.
Inhalation	Vapours may cause headache, fatigue, dizziness and nausea.
Ingestion	May cause discomfort if swallowed.
Skin contact	Repeated exposure may cause skin dryness or cracking.
Eye contact	May be slightly irritating to eyes. Prolonged or repeated exposure may cause severe irritation.

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

Notes for the doctor	Treat symptomatically.
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SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media	Extinguish with foam, carbon dioxide, dry powder or water fog.
Unsuitable extinguishing media	Do not use water jet as an extinguisher, as this will spread the fire.

5.2. Special hazards arising from the substance or mixture

Specific hazards	Thermal decomposition or combustion products may include the following substances: Toxic and corrosive gases or vapours.
Hazardous combustion products	Oxides of carbon. Oxides of nitrogen.

5.3. Advice for firefighters

Protective actions during firefighting	No specific firefighting precautions known.
Special protective equipment for firefighters	Use protective equipment appropriate for surrounding materials.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions	Wear protective clothing as described in Section 8 of this safety data sheet.
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6.2. Environmental precautions

Environmental precautions	Avoid release to the environment. Do not discharge into drains or watercourses or onto the ground.
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6.3. Methods and material for containment and cleaning up

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Methods for cleaning up Collect and place in suitable waste disposal containers and seal securely. Label the containers containing waste and contaminated materials and remove from the area as soon as possible. For waste disposal, see Section 13.

6.4. Reference to other sections

Reference to other sections For personal protection, see Section 8. For waste disposal, see section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Usage precautions Avoid spilling. Avoid inhalation of vapours and contact with skin and eyes.

Advice on general occupational hygiene Do not eat, drink or smoke when using this product.

7.2. Conditions for safe storage, including any incompatibilities

Storage precautions Keep away from food, drink and animal feeding stuffs. Store in a cool and well-ventilated place. Keep only in the original container.

Storage class Flammable liquid storage.

7.3. Specific end use(s)

Specific end use(s) The identified uses for this product are detailed in Section 1.2.

SECTION 8: Exposure controls/Personal protection

8.1. Control parameters

Occupational exposure limits

Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, <2% aromatics

Advisory OEL. CEFIC-HSPA : 1200 mg/m³

Hydrocarbons, C10, aromatics, >1% naphthalene

Long-term exposure limit (8-hour TWA): PT 500 ppm

Short-term exposure limit (15-minute): PT ppm 2000 mg/m³

NAPHTHALENE

Long-term exposure limit (8-hour TWA): WEL 10 ppm 53 mg/m³

Short-term exposure limit (15-minute): WEL 15 ppm 80 mg/m³

WEL = Workplace Exposure Limit.

DNEL See ingredient-specific DNELs listed below.

PNEC See ingredient-specific PNECs listed below.

Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, <2% aromatics (CAS: 64742-48-9)

DNEL Industry - Dermal; Long term : 208 mg/kg/day
 Industry - Inhalation; Long term : 871 mg/m³
 Consumer - Dermal; Long term : 125 mg/kg/day
 Consumer - Inhalation; Long term : 185 mg/m³
 Consumer - Oral; Long term : 125 mg/l

Hydrocarbons, C10, aromatics, >1% naphthalene (CAS: 1189173-42-9)

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DNEL	Workers - Inhalation; Long term systemic effects: 151 mg/m ³
	Workers - Dermal; Long term systemic effects: 12.5 mg/kg bw/day
	General population - Inhalation; Long term systemic effects: 32 mg/m ³
	General population - Dermal; Long term systemic effects: 7.5 mg/kg bw/day
	General population - Oral; Long term systemic effects: 7.5 mg/kg bw/day

NAPHTHALENE (CAS: 91-20-3)

DNEL	Workers - Inhalation; Long term systemic effects: 25 mg/m ³
	Workers - Inhalation; Long term local effects: 25 mg/m ³
	Workers - Dermal; Long term systemic effects: 3.57 mg/kg bw/day
PNEC	Fresh water; Long term 2.4 µg/l
	marine water; Long term 2.4 µg/l
	STP; Long term 2.9 mg/l
	Sediment (Freshwater); Long term 67.2 µg/kg sediment dw
	Sediment (Marinewater); Long term 67.2 µg/kg sediment dw
	Soil; Long term 53.3 µg/kg soil dw

2-Naphthalenol, 1-[[4 (phenylazo) phenyl]azo]-, ar-heptyl ar', ar'' - methyl derivatives (CAS: 92257-31-3)

DNEL	Workers - Inhalation; Long term systemic effects: 0.07 mg/m ³
	Workers - Dermal; Long term systemic effects: 0.04 mg/kg/day
	General population - Inhalation; Long term systemic effects: 0.017 mg/m ³
	General population - Dermal; Long term systemic effects: 0.02 mg/kg/day

DISTILLATES (PETROLEUM), HYDROTREATED LIGHT NAPHTHENIC; BASEOIL - U (CAS: 64742-53-6)

DNEL	Workers - Inhalation; Long term systemic effects: 2.73 mg/m ³
	Workers - Inhalation; Long term local effects: 5.58 mg/m ³
	Workers - Dermal; Long term systemic effects: 0.97 mg/kg/day
	General population - Oral; Long term systemic effects: 0.74 mg/kg/day

8.2. Exposure controls

Protective equipment



Appropriate engineering controls

No specific ventilation requirements.

Eye/face protection

Wear chemical splash goggles.

Hand protection

Chemical-resistant, impervious gloves complying with an approved standard should be worn if a risk assessment indicates skin contact is possible. To protect hands from chemicals, gloves should comply with European Standard EN374.

Other skin and body protection

Wear appropriate clothing to prevent reasonably probable skin contact.

Hygiene measures

Wash hands thoroughly after handling.

Respiratory protection

If ventilation is inadequate, suitable respiratory protection must be worn.

Environmental exposure controls

Avoid release to the environment. Contain spillages.

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SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance	Coloured liquid.
Colour	Red.
Odour	Organic solvents.
Initial boiling point and range	130°C @ 760 mm Hg
Flash point	~ 37 - 38°C Closed cup.
Upper/lower flammability or explosive limits	Lower flammable/explosive limit: 0.6 % Upper flammable/explosive limit: 7 %
Vapour pressure	300 - 600 Pa @ 20°C
Relative density	0.78 @ 20°C
Solubility(ies)	Insoluble in water.
Viscosity	Kinematic viscosity ≤ 20.5 mm ² /s.

9.2. Other information

Volatile organic compound This product contains a maximum VOC content of 91 %.

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity There are no known reactivity hazards associated with this product.

10.2. Chemical stability

Stability Stable under the prescribed storage conditions.

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions Not applicable. Will not polymerise.

10.4. Conditions to avoid

Conditions to avoid Avoid heat. Avoid freezing.

10.5. Incompatible materials

Materials to avoid No specific material or group of materials is likely to react with the product to produce a hazardous situation.

10.6. Hazardous decomposition products

Hazardous decomposition products Does not decompose when used and stored as recommended. Oxides of carbon.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Toxicological effects Information given is based on data of the components and of similar products.

Acute toxicity - oral

Notes (oral LD₅₀) Based on available data the classification criteria are not met.

Acute toxicity - dermal

Notes (dermal LD₅₀) Based on available data the classification criteria are not met.

Redex Petrol System Cleaner

Acute toxicity - inhalation

Notes (inhalation LC₅₀) Based on available data the classification criteria are not met.

Skin corrosion/irritation

Skin corrosion/irritation Based on available data the classification criteria are not met.

Serious eye damage/irritation

Serious eye damage/irritation Based on available data the classification criteria are not met.

Respiratory sensitisation

Respiratory sensitisation Based on available data the classification criteria are not met.

Skin sensitisation

Skin sensitisation Based on available data the classification criteria are not met.

Germ cell mutagenicity

Genotoxicity - in vitro Based on available data the classification criteria are not met.

Genotoxicity - in vivo Based on available data the classification criteria are not met.

Carcinogenicity

Carcinogenicity Based on available data the classification criteria are not met. Contains an ingredient listed as: Carc. 1B

Reproductive toxicity

Reproductive toxicity - fertility Based on available data the classification criteria are not met.

Reproductive toxicity - development Contains an ingredient listed as: Repr. 2

Specific target organ toxicity - single exposure

STOT - single exposure A single exposure may cause the following adverse effects: Central and/or peripheral nervous system damage.

Specific target organ toxicity - repeated exposure

STOT - repeated exposure Based on available data the classification criteria are not met.

Aspiration hazard

Aspiration hazard May be fatal if swallowed and enters airways.

Inhalation

Vapours may cause headache, fatigue, dizziness and nausea.

Ingestion

May cause discomfort if swallowed.

Skin contact

May be slightly irritating to skin. Prolonged or repeated exposure may cause severe irritation.

Eye contact

May be slightly irritating to eyes. Prolonged or repeated exposure may cause severe irritation.

Acute and chronic health hazards

No known chronic or acute health risks.

Target organs

Central nervous system

Medical symptoms

No specific symptoms known.

Toxicological information on ingredients.

Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, <2% aromatics

Acute toxicity - oral

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Acute toxicity oral (LD₅₀ mg/kg)	5,000.0
Species	Rat
Notes (oral LD₅₀)	LD ₅₀ > 5000 mg/kg, Oral, Rat
ATE oral (mg/kg)	5,000.0
<u>Acute toxicity - dermal</u>	
Acute toxicity dermal (LD₅₀ mg/kg)	5,000.0
Species	Rat
ATE dermal (mg/kg)	5,000.0
<u>Acute toxicity - inhalation</u>	
Species	Rat
Notes (inhalation LC₅₀)	LC ₅₀ > 5000 mg/m ³ , Inhalation, Rat
<u>Skin corrosion/irritation</u>	
Skin corrosion/irritation	Not irritating.
<u>Serious eye damage/irritation</u>	
Serious eye damage/irritation	Based on available data the classification criteria are not met.
<u>Respiratory sensitisation</u>	
Respiratory sensitisation	No information available.
<u>Skin sensitisation</u>	
Skin sensitisation	Not sensitising.
<u>Germ cell mutagenicity</u>	
Genotoxicity - in vitro	Negative.
Genotoxicity - in vivo	Negative.
<u>Carcinogenicity</u>	
Carcinogenicity	There is no evidence that the product can cause cancer.
<u>Reproductive toxicity</u>	
Reproductive toxicity - fertility	One-generation study - NOAEL >= 3000 mg/kg bw/day, Oral, Rat P
Reproductive toxicity - development	Developmental toxicity: - NOAEC: >= 300 ppm, Inhalation, Rat
<u>Specific target organ toxicity - single exposure</u>	
STOT - single exposure	Central and/or peripheral nervous system damage.
<u>Specific target organ toxicity - repeated exposure</u>	
STOT - repeated exposure	Based on available data the classification criteria are not met.
<u>Aspiration hazard</u>	
Aspiration hazard	May be fatal if swallowed and enters airways.

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Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, < 2% aromatics

Acute toxicity - oral

Notes (oral LD₅₀) LD₅₀ > 5000 mg/kg, Oral, Rat

Acute toxicity - dermal

Notes (dermal LD₅₀) LD₅₀ > 5000 mg/kg, Dermal, Rabbit

Acute toxicity - inhalation

Notes (inhalation LC₅₀) LC₅₀ > 5000 mg/m³, Inhalation, Rat

Skin corrosion/irritation

Skin corrosion/irritation Not irritating.

Serious eye damage/irritation

Serious eye damage/irritation Based on available data the classification criteria are not met.

Respiratory sensitisation

Respiratory sensitisation No information available.

Skin sensitisation

Skin sensitisation Not sensitising.

Germ cell mutagenicity

Genotoxicity - in vitro Negative.

Genotoxicity - in vivo Negative.

Carcinogenicity

Carcinogenicity Based on available data the classification criteria are not met.

Reproductive toxicity

Reproductive toxicity - fertility Based on available data the classification criteria are not met.

Reproductive toxicity - development No evidence of reproductive toxicity in animal studies.

Specific target organ toxicity - single exposure

STOT - single exposure Based on available data the classification criteria are not met.

Specific target organ toxicity - repeated exposure

STOT - repeated exposure Based on available data the classification criteria are not met.

Aspiration hazard

Aspiration hazard May be fatal if swallowed and enters airways.

Inhalation Drowsiness, dizziness, disorientation, vertigo.

Ingestion May be fatal if swallowed and enters airways.

Skin contact May cause skin irritation/eczema. Dryness and/or cracking.

Eye contact May cause eye irritation. Prolonged contact may cause redness and/or tearing.

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Hydrocarbons, C10, aromatics, >1% naphthalene

Acute toxicity - oral

Notes (oral LD₅₀) LD₅₀ 6318 ml/kg, Oral, Rat

Acute toxicity - dermal

Acute toxicity dermal (LD₅₀ 2,000.0 mg/kg)

Species Rabbit

Acute toxicity - inhalation

Acute toxicity inhalation (LC₅₀ vapours mg/l) 590,000.0

Species Rat

Skin corrosion/irritation

Skin corrosion/irritation Not irritating.

Serious eye damage/irritation

Serious eye damage/irritation Based on available data the classification criteria are not met.

Respiratory sensitisation

Respiratory sensitisation No information available.

Skin sensitisation

Skin sensitisation Not sensitising.

Germ cell mutagenicity

Genotoxicity - in vitro Negative with metabolic activation. Negative without metabolic activation.

Genotoxicity - in vivo Negative.

Carcinogenicity

Carcinogenicity Based on available data the classification criteria are not met.

Reproductive toxicity

Reproductive toxicity - fertility Three-generation study - NOAEL > 1500 (C9 aromatic hydrocarbons) ppm, Inhalation, Rat F3 Two-generation study - NOAEL >= 300 (C10 aromatic hydrocarbons) mg/kg/day, Oral, Rat F1

Reproductive toxicity - development Maternal toxicity: - NOAEL: 150 mg/kg/day, Oral, Rat Developmental toxicity: - NOAEL: > 450 mg/kg/day, Oral, Rat

Specific target organ toxicity - single exposure

STOT - single exposure Central and/or peripheral nervous system damage.

Specific target organ toxicity - repeated exposure

STOT - repeated exposure Based on available data the classification criteria are not met.

Aspiration hazard

Aspiration hazard May be fatal if swallowed and enters airways.

NAPHTHALENE

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Acute toxicity - oral

Acute toxicity oral (LD₅₀ mg/kg) 490.0

Species Rat

ATE oral (mg/kg) 490.0

Acute toxicity - dermal

Acute toxicity dermal (LD₅₀ mg/kg) 2,000.0

Species Rabbit

Acute toxicity - inhalation

Acute toxicity inhalation (LC₅₀ vapours mg/l) 340,000.0

Species Rat

Skin corrosion/irritation

Skin corrosion/irritation Not irritating.

Serious eye damage/irritation

Serious eye damage/irritation Based on available data the classification criteria are not met.

Respiratory sensitisation

Respiratory sensitisation No information available.

Skin sensitisation

Skin sensitisation Not sensitising.

Germ cell mutagenicity

Genotoxicity - in vitro Negative with metabolic activation. Negative without metabolic activation.

Genotoxicity - in vivo Negative.

Carcinogenicity

Carcinogenicity Suspected of causing cancer.

Reproductive toxicity

Reproductive toxicity - fertility Based on available data the classification criteria are not met.

Reproductive toxicity - development No evidence of reproductive toxicity in animal studies.

Specific target organ toxicity - single exposure

STOT - single exposure Based on available data the classification criteria are not met.

Specific target organ toxicity - repeated exposure

STOT - repeated exposure Based on available data the classification criteria are not met.

Aspiration hazard

Aspiration hazard Not relevant.

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DISTILLATES (PETROLEUM), HYDROTREATED LIGHT NAPHTHENIC; BASEOIL - U

Acute toxicity - oral

Notes (oral LD₅₀) LD₅₀ > 5000 mg/kg, Oral, Rat

Acute toxicity - dermal

Notes (dermal LD₅₀) LD₅₀ > 2000 mg/kg, Dermal, Rabbit

Acute toxicity - inhalation

Notes (inhalation LC₅₀) LC₅₀ > 5 mg/l, Inhalation, Rat

Skin corrosion/irritation

Skin corrosion/irritation Not irritating.

Serious eye damage/irritation

Serious eye damage/irritation Based on available data the classification criteria are not met.

Respiratory sensitisation

Respiratory sensitisation No information available.

Skin sensitisation

Skin sensitisation Not sensitising.

Germ cell mutagenicity

Genotoxicity - in vitro Negative.

Genotoxicity - in vivo Negative.

Carcinogenicity

Carcinogenicity No information available.

Reproductive toxicity

Reproductive toxicity - fertility Based on available data the classification criteria are not met.

Reproductive toxicity - development This substance has no evidence of toxicity to reproduction.

Specific target organ toxicity - single exposure

STOT - single exposure Based on available data the classification criteria are not met.

Specific target organ toxicity - repeated exposure

STOT - repeated exposure Based on available data the classification criteria are not met.

Aspiration hazard

Aspiration hazard Not relevant.

2-Naphthalenol, 1-[[4 (phenylazo) phenyl]azo]-, ar-heptyl ar', ar'' - methyl derivatives

Acute toxicity - oral

Notes (oral LD₅₀) LD₅₀ > 5000 mg/kg, Oral, Rat

Acute toxicity - dermal

Notes (dermal LD₅₀) LD₅₀ > 10000 mg/kg, Dermal, Rabbit

Acute toxicity - inhalation

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Notes (inhalation LC₅₀)	No specific test data are available.
<u>Skin corrosion/irritation</u>	
Skin corrosion/irritation	Not irritating.
<u>Serious eye damage/irritation</u>	
Serious eye damage/irritation	Based on available data the classification criteria are not met.
<u>Respiratory sensitisation</u>	
Respiratory sensitisation	No information available.
<u>Skin sensitisation</u>	
Skin sensitisation	Not sensitising.
<u>Germ cell mutagenicity</u>	
Genotoxicity - in vitro	Positive.
Genotoxicity - in vivo	Negative.
<u>Carcinogenicity</u>	
Carcinogenicity	No evidence of carcinogenicity in animal studies.
<u>Reproductive toxicity</u>	
Reproductive toxicity - fertility	Two-generation study - NOEL 2 mg/kg/day, Oral, Rat P0, F1 Repr. 2 REACH dossier information.
<u>Specific target organ toxicity - single exposure</u>	
STOT - single exposure	Based on available data the classification criteria are not met.
<u>Specific target organ toxicity - repeated exposure</u>	
STOT - repeated exposure	Prolonged or repeated exposure may cause the following adverse effects: Liver/spleen
<u>Aspiration hazard</u>	
Aspiration hazard	Not relevant.

SECTION 12: Ecological information

Ecotoxicity Product classification: Harmful to aquatic life with long lasting effects.

Ecological information on ingredients.

Hydrocarbons, C10, aromatics, >1% naphthalene

Ecotoxicity Toxic to aquatic life with long lasting effects.

12.1. Toxicity

Toxicity There is no data on the product itself, see ingredient-specific data below.

Ecological information on ingredients.

Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, <2% aromatics

Acute aquatic toxicity

Acute toxicity - fish LC₅₀, 96 hours: > 1000 mg/l, Oncorhynchus mykiss (Rainbow trout)

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Acute toxicity - aquatic invertebrates	EC ₅₀ , 48 hours: > 1000 mg/l, Daphnia magna
Acute toxicity - aquatic plants	IC ₅₀ , 72 hours: > 1000 mg/l, Pseudokirchneriella subcapitata
Acute toxicity - microorganisms	EL ₅₀ , 48 hours: 0.95 mg/l, Tetrahymena pyriformis, QSAR

Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, < 2% aromatics

Acute aquatic toxicity

Acute toxicity - fish	LL ₅₀ , 96 hours: > 1000 mg/l, Oncorhynchus mykiss (Rainbow trout) LL ₀ , 96 hours: 1000 mg/l, Oncorhynchus mykiss (Rainbow trout)
Acute toxicity - aquatic invertebrates	LL ₅₀ , 48 hours: > 1000 mg/l, Daphnia magna LL ₀ , 48 hours: 1000 mg/l, Daphnia magna
Acute toxicity - aquatic plants	EL ₅₀ , 72 hours: > 1000 mg/l, Pseudokirchneriella subcapitata NOELR, 72 hours: 1000 mg/l, Pseudokirchneriella subcapitata
Acute toxicity - microorganisms	EL ₅₀ , 48 hours: > 1000 mg/l, Tetrahymena pyriformis

Chronic aquatic toxicity

Chronic toxicity - fish early life stage	NOELR, 28 days: 0.173 mg/l, QSAR
Chronic toxicity - aquatic invertebrates	NOELR, 21 days: 1.22 mg/l, QSAR

Hydrocarbons, C10, aromatics, >1% naphthalene

Acute aquatic toxicity

Acute toxicity - fish	LC ₅₀ , 96 hours: 2-5 mg/l, Oncorhynchus mykiss (Rainbow trout)
Acute toxicity - aquatic invertebrates	EC ₅₀ , 48 hours: 3-10 mg/l, Daphnia magna
Acute toxicity - aquatic plants	EC ₅₀ , 72 hours: 1-3 mg/l, Pseudokirchneriella subcapitata
Chronic aquatic toxicity	
Chronic toxicity - fish early life stage	NOELR, 28 days: 0.487 mg/l, QSAR
Chronic toxicity - aquatic invertebrates	NOELR, 21 days: 0.851 mg/l, QSAR

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Acute aquatic toxicity

LE(C)₅₀	0.1 < L(E)C ₅₀ ≤ 1
M factor (Acute)	1
Acute toxicity - fish	LC ₅₀ , 96 hours: 1.6 mg/l, Oncorhynchus mykiss (Rainbow trout)

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Acute toxicity - aquatic invertebrates	EC ₅₀ , 48 hours: 1.96 mg/l, Daphnia magna LC ₅₀ , 48 hours: 2350 µg/l, Marinewater invertebrates, Palaemonetes pugio
Acute toxicity - aquatic plants	EC ₅₀ , 4 hours: 2.96 mg/l, Selenastrum capricornutum
Acute toxicity - microorganisms	IC ₅₀ , 15 hours: 29 mg/l, Nitrosomonas sp. NOEC, 15 hours: 10 mg/l, Nitrosomonas sp.
<u>Chronic aquatic toxicity</u>	
M factor (Chronic)	1
Chronic toxicity - fish early life stage	NOEC, 40 days: 0.12 mg/l, Oncorhynchus kisutch (Coho salmon)
Chronic toxicity - aquatic invertebrates	NOEC, 125 days: 0.6 mg/l, Daphnia Pulex

DISTILLATES (PETROLEUM), HYDROTREATED LIGHT NAPHTHENIC; BASEOIL - U

Acute aquatic toxicity

Acute toxicity - fish	LC ₅₀ , 96 hours: > 100 mg/l, Pimephales promelas (Fat-head Minnow)
Acute toxicity - aquatic invertebrates	EL50, 48 hours: > 10000 mg/l, Daphnia magna NOEL, 48 hours: >= 1000 mg/l, Daphnia magna LL ₅₀ , 96 hours: > 10000 mg/l, Gammarus pulex NOEL, 96 hours: >= 10000 mg/l, Gammarus pulex
Acute toxicity - aquatic plants	NOEL, 72 hours: >= 100 mg/l, Pseudokirchneriella subcapitata
Acute toxicity - microorganisms	NOEL, 4 days: > 1.93 mg/l, Photobacterium phosphoreum luminescence inhibition study NOEL, 4 days: > 2.17 mg/l, Photobacterium phosphoreum luminescence inhibition study

2-Naphthalenol, 1-[[4 (phenylazo) phenyl]azo]-, ar-heptyl ar', ar" - methyl derivatives

Acute aquatic toxicity

Acute toxicity - fish	Not applicable. Not relevant.
Acute toxicity - aquatic invertebrates	Not applicable. Not relevant.
Acute toxicity - aquatic plants	Not applicable. Not relevant.
Acute toxicity - microorganisms	Not applicable. Not relevant.

12.2. Persistence and degradability

Persistence and degradability The product is biodegradable.

Ecological information on ingredients.

Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, <2% aromatics

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Persistence and degradability	Rapidly degradable <u>Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, < 2% aromatics</u>
Persistence and degradability	Rapidly degradable <u>Hydrocarbons, C10, aromatics, >1% naphthalene</u>
Biodegradation	Inherently biodegradable. <u>NAPHTHALENE</u>
Persistence and degradability	Rapidly degradable <u>DISTILLATES (PETROLEUM), HYDROTREATED LIGHT NAPHTHENIC; BASEOIL - U</u>
Persistence and degradability	The product is slowly degradable.
Stability (hydrolysis)	Not applicable. REACH dossier information.
Biodegradation	Inherently biodegradable. <u>2-Naphthalenol, 1-[[4 (phenylazo) phenyl]azo]-, ar-heptyl ar', ar" - methyl derivatives</u>
Persistence and degradability	Not readily biodegradable. QSAR
Stability (hydrolysis)	No specific test data are available.

12.3. Bioaccumulative potential

Bioaccumulative potential The product is not bioaccumulating.

Ecological information on ingredients.

	<u>Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, <2% aromatics</u>
Bioaccumulative potential	The product does not contain any substances expected to be bioaccumulating. <u>Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, < 2% aromatics</u>
Bioaccumulative potential	Bioaccumulation is unlikely.
Partition coefficient	Scientifically unjustified. <u>NAPHTHALENE</u>
Bioaccumulative potential	Bioaccumulation is unlikely.
Partition coefficient	log Pow: 3.3 - 3.7

12.4. Mobility in soil

Mobility The product contains substances which are insoluble in water and which may spread on water surfaces.

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Ecological information on ingredients.

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Adsorption/desorption coefficient Koc 378 @ 20 deg C

2-Naphthalenol, 1-[[4 (phenylazo) phenyl]azo]-, ar-heptyl ar', ar" - methyl derivatives

Adsorption/desorption coefficient Log Koc 8.15 - 8.56 @ 20°C QSAR REACH dossier information.

12.5. Results of PBT and vPvB assessment

Results of PBT and vPvB assessment This product does not contain any substances classified as PBT or vPvB.

Ecological information on ingredients.

Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, <2% aromatics

Results of PBT and vPvB assessment This substance is not classified as PBT or vPvB according to current EU criteria.

Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, < 2% aromatics

Results of PBT and vPvB assessment This product does not contain any substances classified as PBT or vPvB.

NAPHTHALENE

Results of PBT and vPvB assessment This substance is not classified as PBT or vPvB according to current EU criteria.

DISTILLATES (PETROLEUM), HYDROTREATED LIGHT NAPHTHENIC; BASEOIL - U

Results of PBT and vPvB assessment This substance is not classified as PBT or vPvB according to current EU criteria.

2-Naphthalenol, 1-[[4 (phenylazo) phenyl]azo]-, ar-heptyl ar', ar" - methyl derivatives

Results of PBT and vPvB assessment This substance is not classified as PBT or vPvB according to current EU criteria.

12.6. Other adverse effects

Other adverse effects None known.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Disposal methods Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority.

SECTION 14: Transport information

14.1. UN number

UN No. (ADR/RID) 1993

UN No. (IMDG) 1993

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UN No. (ICAO) 1993

UN No. (ADN) 1993

14.2. UN proper shipping name

Proper shipping name (ADR/RID) FLAMMABLE LIQUID, N.O.S. (CONTAINS Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, <2% aromatics)

Proper shipping name (IMDG) FLAMMABLE LIQUID, N.O.S. (CONTAINS Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, <2% aromatics)

Proper shipping name (ICAO) FLAMMABLE LIQUID, N.O.S. (CONTAINS Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, <2% aromatics)

Proper shipping name (ADN) FLAMMABLE LIQUID, N.O.S. (CONTAINS Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, <2% aromatics)

14.3. Transport hazard class(es)

ADR/RID class 3

ADR/RID classification code F1

ADR/RID label 3

IMDG class 3

ICAO class/division 3

ADN class 3

Transport labels



14.4. Packing group

ADR/RID packing group III

IMDG packing group III

ICAO packing group III

ADN packing group III

14.5. Environmental hazards

Environmentally hazardous substance/marine pollutant

No.

14.6. Special precautions for user

EmS F-E, S-E

ADR transport category 3

Emergency Action Code •3Y

Hazard Identification Number (ADR/RID) 30

Tunnel restriction code (D/E)

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

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

SECTION 15: Regulatory information

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

National regulations	The Chemicals (Hazard Information and Packaging for Supply) Regulations 2009 (SI 2009 No. 716).
EU legislation	Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures (as amended). Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) (as amended). Commission Regulation (EU) No 2015/830 of 28 May 2015.
Authorisations (Annex XIV Regulation 1907/2006)	No specific authorisations are known for this product.
Restrictions (Annex XVII Regulation 1907/2006)	No specific restrictions on use are known for this product.

15.2. Chemical safety assessment

No chemical safety assessment has been carried out.

SECTION 16: Other information

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Abbreviations and acronyms used in the safety data sheet	<p>ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways.</p> <p>ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road.</p> <p>ATE: Acute Toxicity Estimate.</p> <p>BOD: Biochemical Oxygen Demand.</p> <p>CAS: Chemical Abstracts Service.</p> <p>DNEL: Derived No Effect Level.</p> <p>EC₅₀: 50% of maximal Effective Concentration.</p> <p>GHS: Globally Harmonized System.</p> <p>IARC: International Agency for Research on Cancer.</p> <p>IATA: International Air Transport Association.</p> <p>ICAO: Technical Instructions for the Safe Transport of Dangerous Goods by Air.</p> <p>IMDG: International Maritime Dangerous Goods.</p> <p>LC₅₀: Lethal Concentration to 50 % of a test population.</p> <p>LD₅₀: Lethal Dose to 50% of a test population (Median Lethal Dose).</p> <p>LOAEC: Lowest Observed Adverse Effect Concentration.</p> <p>LOAEL: Lowest Observed Adverse Effect Level.</p> <p>NOAEC: No Observed Adverse Effect Concentration.</p> <p>NOAEL: No Observed Adverse Effect Level.</p> <p>NOEC: No Observed Effect Concentration.</p> <p>PBT: Persistent, Bioaccumulative and Toxic substance.</p> <p>PNEC: Predicted No Effect Concentration.</p> <p>REACH: Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006.</p> <p>RID: European Agreement concerning the International Carriage of Dangerous Goods by Rail.</p> <p>SVHC: Substances of Very High Concern.</p> <p>UVCB - Unknown or variable composition, complex reaction products or Biological materials.</p> <p>vPvB: Very Persistent and Very Bioaccumulative.</p>
Classification procedures according to Regulation (EC) 1272/2008	<p>Flam. Liq. 3 - H226: On basis of test data. STOT SE 3 - H336: Calculation method. Asp. Tox. 1 - H304: Calculation method. Aquatic Chronic 3 - H412: Calculation method.</p>
Training advice	<p>Chemical hazard awareness training, including labelling, Safety Data Sheets, Personal Protective Equipment (PPE) and hygiene as relevant for the target audience.</p>
Issued by	<p>Regulatory Specialist</p>
Revision date	<p>19/08/2021</p>
Revision	<p>4</p>
Supersedes date	<p>12/01/2021</p>
SDS number	<p>21093</p>

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Hazard statements in full

H226 Flammable liquid and vapour.
H302 Harmful if swallowed.
H304 May be fatal if swallowed and enters airways.
H336 May cause drowsiness or dizziness.
H350 May cause cancer.
H351 Suspected of causing cancer.
H361 Suspected of damaging fertility or the unborn child.
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.
H412 Harmful to aquatic life with long lasting effects.

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 particular use.