



Prestone



SAFETY DATA SHEET Redex Lead Replacement

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

1.1. Product identifier

Product name Redex Lead Replacement

Product number RADD1301A, RDX18RRP

UFI UFI: 38S6-E007-T00V-DFAY

EU 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)
 +351 800 250 250; 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 (SI 2019 No. 720)

Physical hazards	Flam. Liq. 3 - H226
Health hazards	Skin Irrit. 2 - H315 Eye Dam. 1 - H318 STOT SE 3 - H336 Asp. Tox. 1 - H304
Environmental hazards	Not Classified

2.2. Label elements

Hazard pictograms



Signal word

Danger

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Hazard statements	H226 Flammable liquid and vapour. H315 Causes skin irritation. H318 Causes serious eye damage. H336 May cause drowsiness or dizziness. H304 May be fatal if swallowed and enters airways.
Precautionary statements	P102 Keep out of reach of children. P101 If medical advice is needed, have product container or label at hand. P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P261 Avoid breathing vapour/ spray. P280 Wear protective gloves/ protective clothing/ eye protection/ face protection. P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/ doctor. P331 Do NOT induce vomiting. P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower. 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 national regulations.
UFI	UFI: 38S6-E007-T00V-DFAY
Contains	Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, <2% aromatics, Potassium 1,2-bis(2-ethylhexyloxycarbonyl)ethanesulphonate, Distillates (Petroleum), Hydrotreated, Light Kerosene, Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, < 2% aromatics
Supplementary precautionary statements	P332+P313 If skin irritation occurs: Get medical advice/ attention. P337+P313 If eye irritation persists: Get medical advice/ attention. P403+P233 Store in a well-ventilated place. Keep container tightly closed.

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	70-90%
CAS number: 64742-48-9 EC number: 919-857-5	
Classification Flam. Liq. 3 - H226 STOT SE 3 - H336 Asp. Tox. 1 - H304	
Potassium 1,2-bis(2-ethylhexyloxycarbonyl)ethanesulphonate	10-25%
CAS number: 7491-09-0 EC number: 231-308-5	
Classification Skin Irrit. 2 - H315 Eye Dam. 1 - H318	

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Distillates (Petroleum), Hydrotreated, Light Kerosene 5-10%
CAS number: 64742-47-8 EC number: 265-149-8
Classification Asp. Tox. 1 - H304
Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, < 2% aromatics 1-5%
CAS number: — EC number: 926-141-6
Classification Asp. Tox. 1 - H304

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	Move affected person to fresh air at once. Get medical attention if any discomfort continues.
Inhalation	Move affected person to fresh air at once. Get medical attention. Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. When breathing is difficult, properly trained personnel may assist affected person by administering oxygen.
Ingestion	Do not induce vomiting. Never give anything by mouth to an unconscious person. Do not induce vomiting. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Give plenty of water to drink. Get medical attention immediately. Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing.
Skin contact	Remove contaminated clothing. Wash skin thoroughly with soap and water. Get medical attention promptly if symptoms occur after washing.
Eye contact	Remove any contact lenses and open eyelids wide apart. Continue to rinse for at least 15 minutes and get medical attention.

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

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

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media Extinguish with the following media: Foam. Dry chemicals, sand, dolomite etc.

5.2. Special hazards arising from the substance or mixture

5.3. Advice for firefighters

Protective actions during firefighting Avoid breathing fire gases or vapours. Cool containers exposed to flames with water until well after the fire is out. Control run-off water by containing and keeping it out of sewers and watercourses.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.2. Environmental precautions

6.3. Methods and material for containment and cleaning up

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Methods for cleaning up Wear suitable protective equipment, including gloves, goggles/face shield, respirator, boots, clothing or apron, as appropriate. Absorb in vermiculite, dry sand or earth and place into containers. Avoid the spillage or runoff entering drains, sewers or watercourses.

6.4. Reference to other sections

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Usage precautions Avoid spilling. Provide adequate ventilation. Avoid inhalation of vapours. Use approved respirator if air contamination is above an acceptable level.

7.2. Conditions for safe storage, including any incompatibilities

Storage precautions Store in tightly-closed, original container in a dry, cool and well-ventilated place.

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

Distillates (Petroleum), Hydrotreated, Light Kerosene

RCP-TWA (Vapour) : 150 ppm / 1200 mg/m³

Ingredient comments WEL = Workplace Exposure Limits

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

Potassium 1,2-bis(2-ethylhexyloxycarbonyl)ethanesulphonate (CAS: 7491-09-0)

DNEL Workers - Inhalation; Long term systemic effects: 98.7 mg/m³
 Workers - Dermal; Long term systemic effects: 10 mg/kg/day
 General population - Inhalation; Long term systemic effects: 14.8 mg/m³
 General population - Dermal; Long term systemic effects: 5 mg/kg/day
 General population - Oral; Long term systemic effects: 5 mg/kg/day

PNEC Fresh water; 0.007 mg/l
 Intermittent release, Fresh water; 0.066 mg/l
 marine water; 0.001 mg/l
 STP; 122 mg/l
 Sediment (Freshwater); 0.525 mg/kg
 Sediment (Marinewater); 0.052 mg/kg
 Soil; 0.101 mg/kg

Distillates (Petroleum), Hydrotreated, Light Kerosene (CAS: 64742-47-8)

DNEL General population - Oral; Long term systemic effects: 18.75 mg/kg bw/day

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8.2. Exposure controls

Protective equipment



Appropriate engineering controls

Provide adequate general and local exhaust ventilation.

Eye/face protection

The following protection should be worn: 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. EN374 It is recommended that gloves are made of the following material: Rubber (natural, latex).

Other skin and body protection

Wear appropriate clothing to prevent any possibility of liquid contact and repeated or prolonged vapour contact.

Hygiene measures

Do not smoke in work area. Wash at the end of each work shift and before eating, smoking and using the toilet. Promptly remove any clothing that becomes contaminated. Wash promptly with soap and water if skin becomes contaminated. Use appropriate skin cream to prevent drying of skin. When using do not eat, drink or smoke.

Respiratory protection

No specific recommendations. Respiratory protection must be used if the airborne contamination exceeds the recommended occupational exposure limit.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance	Liquid.
Colour	Red.
Odour	Characteristic.
Flash point	39°C Closed cup.
Relative density	0.803 @ 20°C
Solubility(ies)	Immiscible with water.

9.2. Other information

SECTION 10: Stability and reactivity

10.1. Reactivity

10.2. Chemical stability

Stability Stable at normal ambient temperatures.

10.3. Possibility of hazardous reactions

10.4. Conditions to avoid

Conditions to avoid Avoid contact with the following materials: Acids. Oxidising agents.

10.5. Incompatible materials

10.6. Hazardous decomposition products

Hazardous decomposition products Fire creates: Toxic gases/vapours/fumes of: Carbon monoxide (CO). Carbon dioxide (CO₂).

SECTION 11: Toxicological information

11.1. Information on toxicological effects

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

Acute and chronic health hazards Inhalation Prolonged inhalation of high concentrations may damage respiratory system. SKIN CONTACT. Product has a defatting effect on skin. May cause allergic contact eczema. Prolonged or repeated exposure may cause severe irritation. EYE CONTACT. May cause severe eye irritation. INGESTION. The product irritates mucous membranes and may cause abdominal discomfort if swallowed.

Target organs Skin Eyes Respiratory system, lungs

Toxicological information on ingredients.

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

Acute toxicity - oral

Acute toxicity oral (LD₅₀ mg/kg) 5,000.0

Species Rat

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

ATE oral (mg/kg) 5,000.0

Acute toxicity - dermal

Acute toxicity dermal (LD₅₀ mg/kg) 5,000.0

Species Rat

ATE dermal (mg/kg) 5,000.0

Acute toxicity - inhalation

Species Rat

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 There is no evidence that the product can cause cancer.

Reproductive toxicity

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Reproductive toxicity - fertility One-generation study - NOAEL \geq 3000 mg/kg bw/day, Oral, Rat P

Reproductive toxicity - development Developmental toxicity: - NOAEC: \geq 300 ppm, Inhalation, 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.

Potassium 1,2-bis(2-ethylhexyloxycarbonyl)ethanesulphonate

Acute toxicity - oral

Notes (oral LD₅₀) LD₅₀ 3000 mg/kg, Oral, Rat

Acute toxicity - dermal

Notes (dermal LD₅₀) LD₅₀ 2525 mg/kg, Dermal, Rabbit

Acute toxicity - inhalation

Notes (inhalation LC₅₀) LC₅₀ 20000 mg/m³, Inhalation, Rat

Skin corrosion/irritation

Skin corrosion/irritation Causes skin irritation.

Serious eye damage/irritation

Serious eye damage/irritation Causes serious eye damage.

Respiratory sensitisation

Respiratory sensitisation No information available.

Skin sensitisation

Skin sensitisation Not sensitising.

Germ cell mutagenicity

Genotoxicity - in vitro No adverse effects observed (negative)

Genotoxicity - in vivo No adverse effects observed (negative)

Carcinogenicity

Carcinogenicity NOAEL 500 mg/kg/day, Oral, Rat Based on available data the classification criteria are not met. REACH dossier information.

Reproductive toxicity

Reproductive toxicity - fertility Three-generation study - NOAEL 750 mg/kg/day, Oral, Rat P0 This substance has no evidence of toxicity to reproduction.

Reproductive toxicity - development Developmental toxicity: - NOAEL: 1074 mg/kg/day, Oral, Rat No evidence of reproductive toxicity in animal studies. REACH dossier

Specific target organ toxicity - single exposure

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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.

Distillates (Petroleum), Hydrotreated, Light Kerosene

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 5280 mg/m³, Inhalation, Rat

Skin corrosion/irritation

Skin corrosion/irritation May cause skin irritation.

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 One-generation study - NOAEL 1500 mg/kg bw/day, Oral, Rat P One-generation study - NOAEC 1000 mg/m³, Inhalation, Rat P One-generation study - NOAEL 494 mg/kg bw/day, Dermal, Rat P

Reproductive toxicity - development Developmental toxicity: - NOAEL: 1000 mg/kg bw/day, Oral, Rat Developmental toxicity: - NOAEC: 364 mg/m³, Inhalation, Rat

Specific target organ toxicity - single exposure

STOT - single exposure No information available.

Specific target organ toxicity - repeated exposure

STOT - repeated exposure No information available.

Aspiration hazard

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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SECTION 12: Ecological information

Ecotoxicity Based on available data, the classification criteria are not met.

12.1. Toxicity

Ecological information on ingredients.

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

Acute aquatic toxicity

Acute toxicity - fish	LC ₅₀ , 96 hours: > 1000 mg/l, Oncorhynchus mykiss (Rainbow trout)
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

Potassium 1,2-bis(2-ethylhexyloxycarbonyl)ethanesulphonate

Acute aquatic toxicity

Acute toxicity - fish	LC ₅₀ , 96 hours: 49 mg/l, Lepomis macrochirus (Bluegill)
Acute toxicity - aquatic invertebrates	EC ₅₀ , 48 hours: 6.6 mg/l, Daphnia magna
Acute toxicity - aquatic plants	EC ₅₀ , 72 hours: 82.5 mg/l, Scenedesmus subspicatus EC ₁₀ , NOEC, 72 hours: 22 mg/l, Scenedesmus subspicatus
Acute toxicity - microorganisms	EC ₅₀ , 16 hours: 164 mg/l, Pseudomonas putida EC ₁₀ , NOEC, 16 hours: 122 mg/l, Pseudomonas putida

Distillates (Petroleum), Hydrotreated, Light Kerosene

Acute aquatic toxicity

Acute toxicity - fish	NOEC, 96 hours: 2.0 mg/l, Oncorhynchus mykiss (Rainbow trout)
Acute toxicity - aquatic invertebrates	EL ₅₀ , 48 hours: 1.4 mg/l, Daphnia magna
Acute toxicity - aquatic plants	EL ₅₀ , 72 hours: 1-3 mg/l, Raphidocelis subcapitata
Acute toxicity - microorganisms	LL ₅₀ , 72 hours: 677.9 mg/l, Tetrahymena pyriformis, QSAR

Chronic aquatic toxicity

Chronic toxicity - aquatic invertebrates	NOEL, 21 days: 0.48 mg/l, Daphnia magna
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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)
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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
<u>Chronic aquatic toxicity</u>	
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

12.2. Persistence and degradability

Ecological information on ingredients.

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

Persistence and degradability Rapidly degradable

Potassium 1,2-bis(2-ethylhexyloxycarbonyl)ethanesulphonate

Persistence and degradability Rapidly degradable

Distillates (Petroleum), Hydrotreated, Light Kerosene

Biodegradation Inherently biodegradable.

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

Persistence and degradability Rapidly degradable

12.3. Bioaccumulative potential

Ecological information on ingredients.

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

Bioaccumulative potential The product does not contain any substances expected to be bioaccumulating.

Potassium 1,2-bis(2-ethylhexyloxycarbonyl)ethanesulphonate

Bioaccumulative potential Bioaccumulation is unlikely.

Partition coefficient log K_{ow}: 2

Distillates (Petroleum), Hydrotreated, Light Kerosene

Bioaccumulative potential The product does not contain any substances expected to be bioaccumulating.

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

Bioaccumulative potential Bioaccumulation is unlikely.

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Partition coefficient Scientifically unjustified.

12.4. Mobility in soil

Mobility Insoluble in water.

Ecological information on ingredients.

Potassium 1,2-bis(2-ethylhexyloxycarbonyl)ethanesulphonate

Adsorption/desorption coefficient Expected to have a low potential for adsorption.

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 UK criteria.

Potassium 1,2-bis(2-ethylhexyloxycarbonyl)ethanesulphonate

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

Distillates (Petroleum), Hydrotreated, Light Kerosene

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

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

UN No. (ICAO) 1993

UN No. (ADN) 1993

14.2. UN proper shipping name

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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

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

SECTION 15: Regulatory information

Redex Lead Replacement

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

National regulations	EH40/2005 Workplace exposure limits.
Authorisations (SI 2020 No. 1577 Annex XIV)	No specific authorisations are known for this product.
Restrictions (SI 2020 No. 1577 Annex XVII)	No specific restrictions on use are known for this product.

15.2. Chemical safety assessment

SECTION 16: Other information

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>BCF: Bioconcentration Factor.</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>IBC: International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk (International Bulk Chemical Code).</p> <p>ICAO: Technical Instructions for the Safe Transport of Dangerous Goods by Air.</p> <p>IMDG: International Maritime Dangerous Goods.</p> <p>Kow: Octanol-water partition coefficient.</p> <p>LOEC: Lowest Observed Effect Concentration.</p> <p>MARPOL 73/78: International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978.</p> <p>NOAEC: No Observed Adverse Effect Concentration.</p> <p>PBT: Persistent, Bioaccumulative and Toxic substance.</p> <p>PNEC: Predicted No Effect Concentration.</p> <p>REACH: The REACH etc. (Amendment etc.) (EU Exit) Regulations 2020 No. 1577.</p> <p>RID: European Agreement concerning the International Carriage of Dangerous Goods by Rail.</p> <p>SVHC: Substances of Very High Concern.</p> <p>UN: United Nations.</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 SI 2019 No. 720	Flam. Liq. 3 - H226: On basis of test data. Skin Irrit. 2 - H315: Calculation method. Eye Dam. 1 - H318: Calculation method. STOT SE 3 - H336: Calculation method.
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Redex Lead Replacement

Hazard statements in full

H226 Flammable liquid and vapour.

H304 May be fatal if swallowed and enters airways.

H315 Causes skin irritation.

H318 Causes serious eye damage.

H336 May cause drowsiness or dizziness.

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