



Prestone



SAFETY DATA SHEET Bradex Easy Start

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

1.1. Product identifier

Product name	Bradex Easy Start
Product number	BES1A
Internal identification	PA013L
UFI	UFI: PM6E-N0Q1-1000-C4ES
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 Car maintenance product.

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)
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 +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	Aerosol 1 - H222, H229
Health hazards	Acute Tox. 4 - H302 STOT SE 3 - H336
Environmental hazards	Aquatic Chronic 3 - H412

2.2. Label elements

Hazard pictograms



Signal word Danger

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Hazard statements	H222 Extremely flammable aerosol. H229 Pressurised container: may burst if heated. H302 Harmful if swallowed. H336 May cause drowsiness or dizziness. H412 Harmful to aquatic life with long lasting effects.
Precautionary statements	P101 If medical advice is needed, have product container or label at hand. P102 Keep out of reach of children. P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P211 Do not spray on an open flame or other ignition source. P251 Do not pierce or burn, even after use. P261 Avoid breathing spray. P271 Use only outdoors or in a well-ventilated area. P410+P412 Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F. P501 Dispose of contents/ container in accordance with national regulations.
Supplemental label information	EUH066 Repeated exposure may cause skin dryness or cracking. EUH019 May form explosive peroxides.
UFI	UFI: PM6E-N0Q1-1000-C4ES
Contains	DIETHYL ETHER, Hydrocarbons, C6, Isoalkanes, <5% n-Hexane, DI-ISOPROPYL ETHER, ACETONE
Supplementary precautionary statements	P264 Wash contaminated skin thoroughly after handling. P270 Do not eat, drink or smoke when using this product. P273 Avoid release to the environment. P301+P312 IF SWALLOWED: Call a POISON CENTRE/doctor if you feel unwell. P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing. P330 Rinse mouth. P403+P233 Store in a well-ventilated place. Keep container tightly closed. P405 Store locked up.

2.3. Other hazards

SECTION 3: Composition/information on ingredients

3.2. Mixtures

DIETHYL ETHER		10-30%
CAS number: 60-29-7	EC number: 200-467-2	REACH registration number: 01-2119535785-29-XXXX
Classification		
Flam. Liq. 1 - H224		
Acute Tox. 4 - H302		
STOT SE 3 - H336		

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Hydrocarbons, C6, Isoalkanes, <5% n-Hexane	10-30%
CAS number: 64742-49-0	EC number: 931-254-9
	REACH registration number: 01-2119484651-34-XXXX
Classification	
Flam. Liq. 2 - H225	
STOT SE 3 - H336	
Asp. Tox. 1 - H304	
Aquatic Chronic 2 - H411	
DI-ISOPROPYL ETHER	10-30%
CAS number: 108-20-3	EC number: 203-560-6
	REACH registration number: 01-2119548382-38-XXXX
Classification	
Flam. Liq. 2 - H225	
STOT SE 3 - H336	
BUTANE	10-30%
CAS number: 106-97-8	EC number: 203-448-7
	REACH registration number: 01-2119474691-32-XXXX
Classification	
Flam. Gas 1A - H220	
Press. Gas	
ACETONE	5-10%
CAS number: 67-64-1	EC number: 200-662-2
	REACH registration number: 01-2119471330-49-XXXX
Classification	
Flam. Liq. 2 - H225	
Eye Irrit. 2 - H319	
STOT SE 3 - H336	
PROPANE	5-10%
CAS number: 74-98-6	EC number: 200-827-9
	REACH registration number: 01-2119486944-21-XXXX
Classification	
Flam. Gas 1A - H220	

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DISTILLATES (PETROLEUM), HYDROTREATED HEAVY NAPHTHENIC; BASEOIL - U 5-10%
CAS number: 64742-52-5 EC number: 265-155-0 REACH registration number: 01-2119467170-45-XXXX
Classification Not Classified
ISOBUTANE 5-10%
CAS number: 75-28-5 EC number: 200-857-2 REACH registration number: 01-2119485395-27-XXXX
Classification Flam. Gas 1A - H220 Press. Gas

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

SECTION 4: First aid measures

4.1. Description of first aid measures

Inhalation	Move affected person to fresh air at once. Keep affected person warm and at rest. Get medical attention immediately.
Ingestion	DO NOT induce vomiting. Get medical attention immediately.
Skin contact	Wash skin thoroughly with soap and water. Get medical attention if any discomfort continues.
Eye contact	Remove any contact lenses and open eyelids wide apart. Continue to rinse for at least 15 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. Get medical attention promptly if symptoms occur after washing.
Inhalation	Vapours may cause headache, fatigue, dizziness and nausea. Overexposure to organic solvents may depress the central nervous system, causing dizziness and intoxication and, at very high concentrations, unconsciousness and death.
Ingestion	Harmful if swallowed. Swallowing concentrated chemical may cause severe internal injury.
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.

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 the following media: Powder. Dry chemicals, sand, dolomite etc.

5.2. Special hazards arising from the substance or mixture

Specific hazards Containers can burst violently or explode when heated, due to excessive pressure build-up.

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Hazardous combustion products Oxides of carbon.

5.3. Advice for firefighters

Protective actions during firefighting Containers close to fire should be removed or cooled with water. Use water to keep fire exposed containers cool and disperse vapours.

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.

6.2. Environmental precautions

Environmental precautions Not considered to be a significant hazard due to the small quantities used. Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up Wear suitable protective equipment, including gloves, goggles/face shield, respirator, boots, clothing or apron, as appropriate. Eliminate all sources of ignition. No smoking, sparks, flames or other sources of ignition near spillage. Provide adequate ventilation. Leave small quantities to evaporate, if safe to do so. Do not allow material to enter confined spaces, due to the risk of explosion. If leakage cannot be stopped, evacuate area.

6.4. Reference to other sections

Reference to other sections For personal protection, see Section 8. See Section 11 for additional information on health hazards. For waste disposal, see section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Usage precautions Keep away from heat, sparks and open flame. Avoid spilling. Avoid contact with skin and eyes. 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 Do not expose to temperatures exceeding 50°C/122°F.

Storage class Aerosol containers and lighters

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

DIETHYL ETHER

Long-term exposure limit (8-hour TWA): WEL 100 ppm 310 mg/m³

Short-term exposure limit (15-minute): WEL 200 ppm 620 mg/m³

DI-ISOPROPYL ETHER

Long-term exposure limit (8-hour TWA): WEL 250 ppm 1060 mg/m³

Short-term exposure limit (15-minute): WEL 310 ppm 1310 mg/m³

BUTANE

Long-term exposure limit (8-hour TWA): WEL 600 ppm 1450 mg/m³

Short-term exposure limit (15-minute): WEL 750 ppm 1810 mg/m³

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ACETONE

Long-term exposure limit (8-hour TWA): WEL 500 ppm 1210 mg/m³

Short-term exposure limit (15-minute): WEL 1500 ppm 3620 mg/m³

ISOBUTANE

Long-term exposure limit (8-hour TWA): OES 800 ppm

Short-term exposure limit (15-minute): OES 800 ppm

WEL = Workplace Exposure Limit.

DIETHYL ETHER (CAS: 60-29-7)

DNEL	Workers - Inhalation; Long term systemic effects: 308 mg/m ³
	Workers - Inhalation; Short term systemic effects: 616 mg/m ³
	Workers - Dermal; Long term systemic effects: 44 mg/kg bw/day
	General population - Inhalation; Long term systemic effects: 54.5 mg/m ³
	General population - Dermal; Long term systemic effects: 15.6 mg/kg bw/day
	General population - Oral; Long term systemic effects: 15.6 mg/kg bw/day
PNEC	Fresh water; 2 mg/l
	marine water; 0.2 mg/l
	STP; 4.2 mg/l
	Sediment (Freshwater); 9.14 mg/kg sediment dry weight
	Sediment (Marinewater); 0.914 mg/kg sediment dry weight
	Soil; 0.66 mg/kg soil dry weight

Hydrocarbons, C6, Isoalkanes, <5% n-Hexane (CAS: 64742-49-0)

DNEL	Workers - Inhalation; Long term systemic effects: 1286.4 mg/m ³
	Workers - Inhalation; Long term local effects: 837.5 mg/m ³
	Workers - Inhalation; Short term local effects: 1066.67 mg/m ³
	General population - Inhalation; Long term systemic effects: 1152 mg/m ³
	General population - Inhalation; Long term local effects: 178.57 mg/m ³

DI-ISOPROPYL ETHER (CAS: 108-20-3)

DNEL	Workers - Inhalation; Long term systemic effects: 850 mg/m ³
	Workers - Inhalation; Short term systemic effects: 1700 mg/m ³
	Workers - Dermal; Long term systemic effects: 121.4 mg/kg bw/day
	General population - Inhalation; Long term systemic effects: 151 mg/m ³
	General population - Inhalation; Short term systemic effects: 302 mg/m ³
	General population - Dermal; Long term systemic effects: 43.1 mg/kg bw/day
PNEC	Fresh water; 0.19 mg/l
	marine water; 0.019 mg/l
	STP; 37 mg/l
	Sediment (Freshwater); 2.79 mg/kg sediment dry weight
	Sediment (Marinewater); 0.28 mg/kg sediment dry weight
	Soil; 0.47 mg/kg soil dry weight

ACETONE (CAS: 67-64-1)

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DNEL	<p>Consumer - Oral; Long term systemic effects: 62 mg/kg/day</p> <p>Workers - Dermal; Long term systemic effects: 186 mg/kg/day</p> <p>Consumer - Dermal; Long term systemic effects: 62 mg/kg/day</p> <p>Workers - Inhalation; Short term local effects: 2420 mg/m³</p> <p>Workers - Inhalation; Long term systemic effects: 1210 mg/m³</p> <p>Consumer - Inhalation; Long term systemic effects: 200 mg/m³</p>
PNEC	<p>Fresh water; 10.6 mg/l</p> <p>marine water; 1.06 mg/l</p> <p>Intermittent release; 21 mg/l</p> <p>Sediment (Freshwater); 30.4 mg/kg</p> <p>Sediment (Marinewater); 3.04 mg/kg</p> <p>Soil; 29.5 mg/kg</p> <p>STP; 100 mg/l</p>

DISTILLATES (PETROLEUM), HYDROTREATED HEAVY NAPHTHENIC; BASEOIL - U (CAS: 64742-52-5)

DNEL	<p>Workers - Inhalation; Long term systemic effects: 2.73 mg/m³</p> <p>Workers - Inhalation; Long term local effects: 5.58 mg/m³</p> <p>Workers - Dermal; Long term systemic effects: 0.97 mg/kg bw/day</p> <p>General population - Oral; Long term systemic effects: 0.74 mg/kg bw/day</p>
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8.2. Exposure controls

Protective equipment



Appropriate engineering controls

Provide adequate ventilation. Avoid inhalation of vapours and spray/mists. Observe any occupational exposure limits for the product or ingredients.

Eye/face protection

No specific eye protection noted, but may be required anyway.

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 after handling.

Respiratory protection

No specific recommendations.

Environmental exposure controls

Residues and empty containers should be taken care of as hazardous waste according to local and national provisions.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance	Aerosol.
Colour	Clear liquid. Colourless.
Odour	Organic solvents.
Flash point	-38°C
Auto-ignition temperature	180°C

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9.2. Other information

Other information Not relevant.

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity Vapours may form explosive mixtures with air.

10.2. Chemical stability

Stability Stable at normal ambient temperatures.

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions Not determined.

10.4. Conditions to avoid

Conditions to avoid Avoid heat, flames and other sources of ignition. Avoid contact with the following materials: Strong oxidising agents. Strong alkalis. Strong mineral acids.

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 Fire creates: Vapours/gases/fumes of: Carbon monoxide (CO). Carbon dioxide (CO₂).

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Toxicological effects No data recorded.

Other health effects There is no evidence that the product can cause cancer.

Acute toxicity - oral

Notes (oral LD₅₀) Harmful if swallowed.

ATE oral (mg/kg) 1,857.36

Acute toxicity - dermal

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

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

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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.
<u>Carcinogenicity</u>	
Carcinogenicity	Based on available data the classification criteria are not met.
<u>Reproductive toxicity</u>	
Reproductive toxicity - fertility	Based on available data the classification criteria are not met.
<u>Specific target organ toxicity - single exposure</u>	
STOT - single exposure	Chronic respiratory failure. 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	Not relevant.
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Inhalation	Vapours may cause drowsiness and dizziness. Vapours may cause headache, fatigue, dizziness and nausea. Overexposure to organic solvents may depress the central nervous system, causing dizziness and intoxication and, at very high concentrations, unconsciousness and death.
Ingestion	Harmful if swallowed. Swallowing concentrated chemical may cause severe internal injury.
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.
Route of exposure	Inhalation Skin and/or eye contact

Toxicological information on ingredients.

DIETHYL ETHER

Acute toxicity - oral

Acute toxicity oral (LD₅₀ mg/kg) 1,200.0

Species Rat

ATE oral (mg/kg) 500.0

Acute toxicity - dermal

Acute toxicity dermal (LD₅₀ mg/kg) 20,000.0

Species Rabbit

Acute toxicity - inhalation

Acute toxicity inhalation (LC₅₀ vapours mg/l) 97.0

Species Mouse

ATE inhalation (vapours mg/l) 97.0

Skin corrosion/irritation

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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 required.

Reproductive toxicity

Reproductive toxicity - fertility No evidence of reproductive toxicity in animal studies. REACH dossier information.

Reproductive toxicity - development Maternal toxicity: - NOAEC: 430 ppm, Inhalation, Rat Teratogenicity: - NOAEL: 500 ppm, Oral, Rat Teratogenicity: - NOAEL: 80 mg/kg/day, Oral, Rabbit

Specific target organ toxicity - single exposure

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

Target organs Central nervous system

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.

Hydrocarbons, C6, Isoalkanes, <5% n-Hexane

Acute toxicity - oral

Notes (oral LD₅₀) LD₅₀ > 16750 mg/kg, Oral, Rat

Acute toxicity - dermal

Notes (dermal LD₅₀) LD₅₀ 3350 mg/kg, Dermal, Rabbit

Acute toxicity - inhalation

Notes (inhalation LC₅₀) LC50 259354 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

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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	Based on available data the classification criteria are not met. NOAEC 31680 mg/m ³ , Inhalation, Mouse
<u>Reproductive toxicity</u>	
Reproductive toxicity - fertility	Two-generation study - NOAEC 31680 mg/m ³ , Inhalation, Rat F1, F2
<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.
Inhalation	May cause drowsiness or dizziness.
Ingestion	May be fatal if swallowed and enters airways.
Skin contact	May be slightly irritating to skin.
Eye contact	May be slightly irritating to eyes.

DI-ISOPROPYL ETHER

<u>Acute toxicity - oral</u>	
Notes (oral LD₅₀)	LD ₅₀ 4600 mg/kg, Oral, Rat
<u>Acute toxicity - dermal</u>	
Notes (dermal LD₅₀)	LD ₅₀ 2000 mg/kg, Dermal, Rabbit
<u>Acute toxicity - inhalation</u>	
Notes (inhalation LC₅₀)	LC ₅₀ 64000 mg/m ³ , Inhalation, Monkey
<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.

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Skin sensitisation

Skin sensitisation Not sensitising.

Germ cell mutagenicity

Genotoxicity - in vitro Negative.

Genotoxicity - in vivo No information available.

Carcinogenicity

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

Reproductive toxicity

Reproductive toxicity - fertility Two-generation study - NOAEL 1000 mg/kg/day, Oral, Rat F1 One-generation study - NOAEC 3560 mg/m³, Inhalation, Rat F0

Reproductive toxicity - development Developmental toxicity: - NOAEL: 1000 mg/kg/day, Oral, Rat Developmental toxicity: - NOAEC: 1800 mg/m³, Inhalation, Rat No evidence of reproductive toxicity in animal studies.

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 Not relevant.

BUTANE

Acute toxicity - oral

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

Species Rat

ACETONE

Acute toxicity - oral

Acute toxicity oral (LD₅₀ mg/kg) 5,800.0

Species Rat

ATE oral (mg/kg) 5,800.0

Acute toxicity - dermal

Acute toxicity dermal (LD₅₀ mg/kg) 7,400.0

Species Rabbit

Acute toxicity - inhalation

Acute toxicity inhalation (LC₅₀ vapours mg/l) 76.0

Species Rat

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Skin corrosion/irritation

Skin corrosion/irritation Not irritating.

Serious eye damage/irritation

Serious eye damage/irritation Causes serious eye irritation.

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 No evidence of reproductive toxicity in animal studies. REACH dossier information.

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

Specific target organ toxicity - single exposure

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

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.

PROPANE

Acute toxicity - oral

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

Species Rat

ATE oral (mg/kg) 5,000.0

DISTILLATES (PETROLEUM), HYDROTREATED HEAVY 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, Rat

Acute toxicity - inhalation

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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 May cause cancer.

Reproductive toxicity

Reproductive toxicity - fertility Two-generation study - NOAEL 1000 mg/kg/day, Oral, Rat F0 This substance has no evidence of toxicity to reproduction.

Reproductive toxicity - development Maternal toxicity: - LOAEL: 125 mg/kg/day, Oral, Rat Teratogenicity: - NOAEL: 2000 mg/kg/day, Oral, Rat 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.

ISOBUTANE

Acute toxicity - oral

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

Species Rat

ATE oral (mg/kg) 5,000.0

SECTION 12: Ecological information

Ecotoxicity Harmful to aquatic life with long lasting effects.

12.1. Toxicity

Acute aquatic toxicity

Acute toxicity - fish No information available.

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Acute toxicity - aquatic invertebrates Not available.

Acute toxicity - aquatic plants Not available.

Acute toxicity - microorganisms Not available.

Acute toxicity - terrestrial Not available.

Chronic aquatic toxicity

Chronic toxicity - fish early life stage Not available.

Short term toxicity - embryo and sac fry stages Not available.

Chronic toxicity - aquatic invertebrates Not available.

Ecological information on ingredients.

DIETHYL ETHER

Acute aquatic toxicity

Acute toxicity - fish LC₅₀, 48 hours: 2840 mg/l, *Leuciscus idus* (Golden orfe)
LC₅₀, 96 hours: 2560 mg/l, *Pimephales promelas* (Fat-head Minnow)
LC₅₀, 14 days: 2138 mg/l, *Poecilia reticulata* (Guppy)
LC₅₀, 96 hours: > 10000 mg/l, *Lepomis macrochirus* (Bluegill)
LC₅₀, 96 hours: > 10000 mg/l, *Menidia peninsulae* (Tidewater silverside)

Acute toxicity - aquatic invertebrates EC₅₀, 24 hours: 165 mg/l, *Daphnia magna*

Acute toxicity - aquatic plants NOEC, 72 hours: 100 mg/l, *Desmodesmus subspicatus*

Acute toxicity - microorganisms EC₅₀, 5 minutes: 3536 mg/l, *Pseudomonas putida*
EC₅₀, 15 minutes: 5620 mg/l, *Photobacterium phosphoreum* luminescence inhibition study
IC₅₀, 15 hours: 17000 mg/l, Activated sludge

Chronic aquatic toxicity

Chronic toxicity - aquatic invertebrates LOEC, 21 days: > 100 mg/l, *Daphnia magna*

Hydrocarbons, C6, Isoalkanes, <5% n-Hexane

Acute aquatic toxicity

Acute toxicity - fish LC₅₀, 96 hours: 18.27 mg/l, QSAR

Acute toxicity - aquatic invertebrates EC₅₀, 48 hours: 31.9 mg/l, QSAR

Acute toxicity - aquatic plants EL50, 72 hours: 13.56 mg/l, QSAR

Acute toxicity - microorganisms EL50, 48 hours: 15.81 mg/l, QSAR

Chronic aquatic toxicity

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Chronic toxicity - fish early life stage NOELR, 28 days: 4.089 mg/l, QSAR

Chronic toxicity - aquatic invertebrates NOELR, 21 days: 7.138 mg/l, QSAR

DI-ISOPROPYL ETHER

Acute aquatic toxicity

Acute toxicity - fish LC₅₀, 96 hours: 402 mg/l, Fish

Acute toxicity - aquatic invertebrates EC₅₀, 48 hours: 190 mg/l, Daphnia magna

Acute toxicity - aquatic plants EC₅₀, 96 hours: 1000 mg/l, Pseudokirchneriella subcapitata
EC10, NOEC, 96 hours: 1000 mg/l, Pseudokirchneriella subcapitata

Acute toxicity - microorganisms EC₅₀, 3 hours: 2249 mg/l, Activated sludge
EC10, NOEC, 3 hours: 370 mg/l, Activated sludge

ACETONE

Acute aquatic toxicity

Acute toxicity - fish LC₅₀, 96 hours: 5540 mg/l, Oncorhynchus mykiss (Rainbow trout)
LC₅₀, 96 hours: 11000 mg/l, Marinewater fish
LC₅₀, 96 hours: 8300 mg/l, Lepomis macrochirus (Bluegill)

Acute toxicity - aquatic invertebrates EC₅₀, 48 hours: 8800 mg/l, Freshwater invertebrates

Acute toxicity - aquatic plants EC₅₀, 96 hours: 7200 mg/l, Algae
NOEC, 96 hours: 430 mg/l, Algae

Acute toxicity - microorganisms EC10, NOEC, 30 minutes: 1000 mg/l, Activated sludge

Acute toxicity - terrestrial LC₅₀, 48 hours: 100-1000 µg/cm², Eisenia Fetida (Earthworm)

Chronic aquatic toxicity

Chronic toxicity - aquatic invertebrates NOEC, 28 days: 2212 mg/l, Daphnia magna

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

Acute aquatic toxicity

Acute toxicity - fish LL₅₀, 96 hours: 100 mg/l, Pimephales promelas (Fat-head Minnow)
NOEL, 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
LL₅₀, 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
Read-across data.

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Chronic aquatic toxicity

Chronic toxicity - aquatic invertebrates NOEL, 21 days: 10 mg/l, Daphnia magna

12.2. Persistence and degradability

Persistence and degradability The product is expected to be biodegradable.

Ecological information on ingredients.

DIETHYL ETHER

Persistence and degradability Not readily biodegradable.

Hydrocarbons, C6, Isoalkanes, <5% n-Hexane

Persistence and degradability 98% 28 days Rapidly degradable

DI-ISOPROPYL ETHER

Persistence and degradability Not readily biodegradable.

ACETONE

Persistence and degradability 90 +/- 2.2%; 28 days Rapidly degradable

Stability (hydrolysis) The substance is readily biodegradable.

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

Persistence and degradability Not readily biodegradable.

12.3. Bioaccumulative potential

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

Ecological information on ingredients.

DIETHYL ETHER

Partition coefficient log Pow: 1.05

DI-ISOPROPYL ETHER

Bioaccumulative potential Bioaccumulation is unlikely.

Partition coefficient log Pow: 2.4

ACETONE

Bioaccumulative potential Bioaccumulation is unlikely.

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

Bradex Easy Start

Partition coefficient Not applicable.

12.4. Mobility in soil

Mobility The product contains volatile organic compounds (VOCs) which will evaporate easily from all surfaces.

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.

DIETHYL ETHER

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

Hydrocarbons, C6, Isoalkanes, <5% n-Hexane

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

DI-ISOPROPYL ETHER

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

ACETONE

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

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

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 The product contains volatile organic compounds (VOCs) which have a photochemical ozone creation potential.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Disposal methods Empty containers must not be punctured or incinerated because of the risk of an explosion. Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority. Avoid the spillage or runoff entering drains, sewers or watercourses.

SECTION 14: Transport information

General Refer to the Dangerous Goods List for information on any Special Provisions 190, 327, 344, 625.

14.1. UN number

UN No. (ADR/RID) 1950

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UN No. (IMDG)	1950
UN No. (ICAO)	1950
UN No. (ADN)	1950

14.2. UN proper shipping name

Proper shipping name (ADR/RID)	AEROSOLS
Proper shipping name (IMDG)	AEROSOLS
Proper shipping name (ICAO)	AEROSOLS
Proper shipping name (ADN)	AEROSOLS

14.3. Transport hazard class(es)

ADR/RID class	2.1
ADR/RID classification code	5F
ADR/RID label	2.1
IMDG class	2.1
ICAO class/division	2.1
ADN class	2.1

Transport labels



14.4. Packing group

Not applicable.

14.5. Environmental hazards

Environmentally hazardous substance/marine pollutant
No.

14.6. Special precautions for user

EmS	F-D, S-U
ADR transport category	2
Tunnel restriction code	(D)

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

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).
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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.

Council Directive of 20 May 1975 on the approximation of the laws of the Member States relating to aerosol dispensers (75/324/EEC) (as amended).

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

Abbreviations and acronyms used in the safety data sheet

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road.

ATE: Acute Toxicity Estimate.

BOD: Biochemical Oxygen Demand.

CAS: Chemical Abstracts Service.

DNEL: Derived No Effect Level.

EC₅₀: 50% of maximal Effective Concentration.

GHS: Globally Harmonized System.

IARC: International Agency for Research on Cancer.

IATA: International Air Transport Association.

ICAO: Technical Instructions for the Safe Transport of Dangerous Goods by Air.

IMDG: International Maritime Dangerous Goods.

LC₅₀: Lethal Concentration to 50 % of a test population.

LD₅₀: Lethal Dose to 50% of a test population (Median Lethal Dose).

LOAEC: Lowest Observed Adverse Effect Concentration.

LOAEL: Lowest Observed Adverse Effect Level.

NOAEL: No Observed Adverse Effect Level.

NOEC: No Observed Effect Concentration.

PBT: Persistent, Bioaccumulative and Toxic substance.

PNEC: Predicted No Effect Concentration.

REACH: Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006.

RID: European Agreement concerning the International Carriage of Dangerous Goods by Rail.

SVHC: Substances of Very High Concern.

UVCB - Unknown or variable composition, complex reaction products or Biological materials.

vPvB: Very Persistent and Very Bioaccumulative.

Revision date 18/03/2021

Revision 8

Supersedes date 01/04/2020

SDS number 14771

Bradex Easy Start

Hazard statements in full

H220 Extremely flammable gas.
H222 Extremely flammable aerosol.
H224 Extremely flammable liquid and vapour.
H225 Highly flammable liquid and vapour.
H229 Pressurised container: may burst if heated.
H302 Harmful if swallowed.
H304 May be fatal if swallowed and enters airways.
H319 Causes serious eye irritation.
H336 May cause drowsiness or dizziness.
H411 Toxic to aquatic life with long lasting effects.
H412 Harmful to aquatic life with long lasting effects.