

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830 Date of issue: 8-10-2018 Revision date: 25-1-2019 Supersedes: 8-10-2018 Version: 1.1

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

1.1. Product identifier

Product form : Mixture

Trade name : Liquid Power

Product code : PK.10.16

Product group : Trade product

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

1.2.1. Relevant identified uses

Intended for general public

Main use category : Industrial use, Professional use, Consumer use

Use of the substance/mixture : Solvent-based cleaner

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

Putoline Oil
Dollegoorweg 15
7602 EC Almelo - Netherlands
T 0031 (0)546 81 81 65
vib@putoline.com

1.4. Emergency telephone number

| ···· =····· g···· j ···· p······ ··· | | | | | |
|--------------------------------------|---|-----------------------------|------------------|---------|--|
| Country | Organisation/Company | Address | Emergency number | Comment | |
| United Kingdom | National Poisons Information Service (Cardiff Centre) Gwenwyn Ward, Llandough Hospital | Penarth CF64 2XX Cardiff | 0344 892 0111 | | |

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Flammable liquids, Category 2

Skin corrosion/irritation, Category 2

H315

Specific target organ toxicity — Single exposure, Category 3, Narcosis

Aspiration hazard, Category 1

H304

Hazardous to the aquatic environment — Chronic Hazard, Category 2

H411

Full text of H statements : see section 16

Adverse physicochemical, human health and environmental effects

Highly flammable liquid and vapour. May cause drowsiness or dizziness. Causes skin irritation. May be fatal if swallowed and enters airways. Toxic to aquatic life with long lasting effects.

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP)







GHS02

GHS07

GHS08

GHS09

Signal word (CLP) : Danger

Hazardous ingredients : Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics; Distillates (petroleum), hydrotreated

heavy paraffinic

Hazard statements (CLP) : H225 - Highly flammable liquid and vapour.

H304 - May be fatal if swallowed and enters airways.

H315 - Causes skin irritation.

H336 - May cause drowsiness or dizziness.

H411 - Toxic to aquatic life with long lasting effects.

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Precautionary statements (CLP) : 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.

P271 - Use only outdoors or in a well-ventilated area.

P273 - Avoid release to the environment.

P301+P310+P331 - IF SWALLOWED: Immediately call a doctor, a POISON CENTER. Do

NOT induce vomiting.

P304+P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P391 - Collect spillage. P405 - Store locked up.

P501 - Dispose of contents/container to hazardous or special waste collection point, in

accordance with local, regional, national and/or international regulation.

2.3. Other hazards

No additional information available

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

| Name | Product identifier | % | Classification according to Regulation (EC) No. 1272/2008 [CLP] |
|--|--|---------|--|
| Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics | (CAS-No.) 64742-49-0 (EC-No.) 927-510-4 (EC Index-No.) 649-328-00-1 (REACH-no) 01-2119475515-33 | 50 - 80 | Flam. Liq. 2, H225 Skin Irrit. 2, H315 STOT SE 3, H336 Asp. Tox. 1, H304 Aquatic Chronic 2, H411 |
| Distillates (petroleum), hydrotreated heavy paraffinic | (CAS-No.) 64742-54-7 (EC-No.) 265-157-1 (EC Index-No.) 649-467-00-8 (REACH-no) 01-2119484627-25 | 25 - 50 | Asp. Tox. 1, H304 |

Full text of H-statements: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general : Call a physician immediately.

First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing.

First-aid measures after skin contact : Rinse skin with water/shower. Take off immediately all contaminated clothing. If skin

irritation occurs: Get medical advice/attention.

First-aid measures after eye contact : Rinse eyes with water as a precaution.

First-aid measures after ingestion : Do not induce vomiting. Call a physician immediately.

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

Symptoms/effects : May cause drowsiness or dizziness.

Symptoms/effects after skin contact : Irritation.

Symptoms/effects after ingestion : Risk of lung oedema.

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

Treat symptomatically.

SECTION 5: Firefighting measures

Hazardous decomposition products in case of fire

5.1. Extinguishing media

Suitable extinguishing media : Water spray. Dry powder. Foam. Carbon dioxide.

Unsuitable extinguishing media : Do not use a heavy water stream.

5.2. Special hazards arising from the substance or mixture

Fire hazard : Highly flammable liquid and vapour.

5.3. Advice for firefighters

Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained

: Toxic fumes may be released.

breathing apparatus. Complete protective clothing.

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SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Emergency procedures

: Ventilate spillage area. No open flames, no sparks, and no smoking. Avoid breathing

dust/fume/gas/mist/vapours/spray. Avoid contact with skin and eyes.

6.1.2. For emergency responders

Protective equipment

: Do not attempt to take action without suitable protective equipment. For further information

refer to section 8: "Exposure controls/personal protection".

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

For containment

: Collect spillage.

Methods for cleaning up

: Take up liquid spill into absorbent material. Notify authorities if product enters sewers or

public waters

Other information : Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections

For further information refer to section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling

: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Ground/bond container and receiving equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Flammable vapours may accumulate in the container. Use explosion-proof equipment. Wear personal protective equipment. Use only outdoors or in a well-ventilated area. Avoid breathing

dust/fume/gas/mist/vapours/spray. Avoid contact with skin and eyes.

Hygiene measures

: Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this

product. Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures

: Ground/bond container and receiving equipment.

Storage conditions

: Store in a well-ventilated place. Keep cool. Keep container tightly closed. Store locked up.

Storage temperature : 0 - 40 °C

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

No additional information available

8.2. Exposure controls

Appropriate engineering controls:

Ensure good ventilation of the work station.

Hand protection:

Protective gloves

| Туре | Material | Permeation | Thickness (mm) | Penetration | Standard |
|-----------------|--|--------------------------------------|----------------|-------------|------------|
| Reusable gloves | Nitrile rubber (NBR), Neoprene rubber (HNBR) | 5 (> 240 minutes), 6 (> 480 minutes) | >=0,35 | | EN ISO 374 |

Eye protection:

Safety glasses

| Туре | Use | Characteristics | Standard |
|----------------|---------|-----------------|----------|
| Safety glasses | Droplet | clear | EN 166 |

Skin and body protection:

Wear suitable protective clothing

Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment

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Personal protective equipment symbol(s):





Environmental exposure controls:

Avoid release to the environment.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state : Liquid
Colour : Blue.
Odour : odourless.

Odour threshold : No data available pH : No data available Relative evaporation rate (butylacetate=1) : No data available Melting point : Not applicable Freezing point : No data available

Boiling point : $83 \, ^{\circ}\text{C}$ Flash point : $-5 \, ^{\circ}\text{C}$

Auto-ignition temperature : No data available
Decomposition temperature : No data available
Flammability (solid, gas) : Not applicable
Vapour pressure : No data available
Relative vapour density at 20 °C : No data available
Relative density : No data available
Density : 0,785 g/cm³

Solubility : Water: Insoluble / Slightly miscible

Log Pow : No data available
Viscosity, kinematic : < 20,5 mm²/s
Viscosity, dynamic : No data available
Explosive properties : No data available
Oxidising properties : No data available
Lower explosive limit (LEL) : 0,6 vol %

Upper explosive limit (UEL) : 8 vol %

9.2. Other information

VOC content : 477,3 g/l

SECTION 10: Stability and reactivity

10.1. Reactivity

Highly flammable liquid and vapour.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

Avoid contact with hot surfaces. Heat. No flames, no sparks. Eliminate all sources of ignition.

10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral) : Not classified
Acute toxicity (dermal) : Not classified
Acute toxicity (inhalation) : Not classified

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| Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics (64742-49-0) | | | |
|---|-----------------------|--|--|
| LD50 oral rat > 5840 mg/kg [OECD 401] | | | |
| LD50 dermal rat | 2920 mg/kg [OECD 402] | | |
| LC50 inhalation rat (mg/l) > 23300 mg/m³ (4h) [OECD 403] | | | |

| Distillates (petroleum), hydrotreated heavy paraffinic (64742-54-7) | | | |
|---|--|--|--|
| LD50 oral rat | > 5000 mg/kg (OECD 420 method) | | |
| LD50 dermal rabbit | > 2000 mg/kg (OECD 402 method) | | |
| LC50 inhalation rat (mg/l) | > 5,53 mg/l/4h (mg/L air, aerosol) (OECD 403 method) | | |
| Skin corrosion/irritation | : Causes skin irritation. | | |
| Serious eye damage/irritation | : Not classified | | |
| Respiratory or skin sensitisation | : Not classified | | |
| Germ cell mutagenicity | : Not classified | | |
| Carcinogenicity | : Not classified | | |
| Reproductive toxicity | : Not classified | | |
| STOT-single exposure | : May cause drowsiness or dizziness. | | |
| STOT-repeated exposure | : Not classified | | |
| Aspiration hazard | : May be fatal if swallowed and enters airways. | | |
| Liquid Power | | | |
| Viscosity, kinematic | < 20,5 mm²/s | | |

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : Toxic to aquatic life with long lasting effects.

Acute aquatic toxicity

Chronic aquatic toxicity : Toxic to aquatic life with long lasting effects.

| Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics (64742-49-0) | | | |
|---|--|--|--|
| LC50 fish 1 > 13,4 mg/l 96h (Oncorhynchus mykiss) [OECD 203] | | | |
| EC50 Daphnia 1 3 mg/l 48h (Daphnia) [OECD 202] | | | |
| ErC50 (algae) 10 - 30 mg/l 72h (Pseudokirchneriella subcapitata) [OECD 201] | | | |
| NOEC chronic fish 1,53 mg/l 28d (Oncorhyncus mykiss) [QSAR Petrotox] | | | |
| NOEC chronic crustacea 1 mg/l 21d (Daphnia magna) [OECD 211] | | | |

| Distillates (petroleum), hydrotreated heavy paraffinic (64742-54-7) | | | |
|---|---|--|--|
| LC50 fish 1 | > 100 mg/l (Pimephales promelas, 96h) (OECD 203 method) | | |
| EC50 Daphnia 1 | > 10000 mg/l (Gammarus pulex, 48h) (OECD 202 method) | | |
| EC50 Daphnia 2 | > 10000 mg/l (Daphnia magna, 48h) (OECD 202 method) | | |
| NOEC (acute) | >= 100 mg/l (Pseudokirchnerella subcapitata, 72h) (OECD 201 method) | | |
| NOEC chronic fish | >= 1000 mg/l (Oncorhynchus mykiss - QSAR Petrotox, 14/28d) | | |
| NOEC chronic crustacea 10 mg/l (Daphnia magna, 21d) (OECD 211 method) | | | |
| 12.2. Persistence and degradability | | | |
| Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics (64742-49-0) | | | |
| Biodegradation 98 % (28d) [OECD 301F] | | | |

| Distillates (petroleum), hydrotreated heavy paraffinic (64742-54-7) | | | |
|---|--|--|--|
| Biodegradation 31 % (28d) (OECD 301F method) | | | |
| 12.3. Bioaccumulative potential | | | |

No additional information available

12.4. Mobility in soil

No additional information available

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12.5. Results of PBT and vPvB assessment

No additional information available

12.6. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.

Additional information : Flammable vapours may accumulate in the container.

SECTION 14: Transport information

In accordance with ADR / RID / IMDG / IATA / ADN

| | | IATA | ADN | RID | |
|---|--|--|--|--|--|
| I4.1. UN number | | | | | |
| UN 1206 | UN 1206 | UN 1206 | UN 1206 | UN 1206 | |
| 14.2. UN proper shipping | g name | | | | |
| HEPTANES (Hydrocarbons, C7, n- alkanes, isoalkanes, cyclics) | HEPTANES (Hydrocarbons, C7, n- alkanes, isoalkanes, cyclics) | Heptanes (Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics) | HEPTANES (Hydrocarbons, C7, n- alkanes, isoalkanes, cyclics) | HEPTANES (Hydrocarbons, C7, n- alkanes, isoalkanes, cyclics) | |
| Transport document descri | iption | | | | |
| UN 1206 HEPTANES (Hydrocarbons, C7, n- alkanes, isoalkanes, cyclics), 3, II, (D/E), ENVIRONMENTALLY HAZARDOUS | UN 1206 HEPTANES (Hydrocarbons, C7, n- alkanes, isoalkanes, cyclics), 3, II, MARINE POLLUTANT/ENVIRONME NTALLY HAZARDOUS (- 5°C c.c.) | UN 1206 Heptanes (Hydrocarbons, C7, n- alkanes, isoalkanes, cyclics), 3, II, ENVIRONMENTALLY HAZARDOUS | UN 1206 HEPTANES (Hydrocarbons, C7, n- alkanes, isoalkanes, cyclics), 3, II, ENVIRONMENTALLY HAZARDOUS | UN 1206 HEPTANES (Hydrocarbons, C7, n- alkanes, isoalkanes, cyclics), 3, II, ENVIRONMENTALLY HAZARDOUS | |
| 14.3. Transport hazard o | class(es) | | | | |
| 3 | 3 | 3 | 3 | 3 | |
| 1 1 1 1 1 1 1 1 1 1 | 1 1 1 1 1 1 1 1 1 1 | № ¥2 | ₩ 2 | № ¥ 2 | |
| 14.4. Packing group | | | | | |
| II | II | II | II | II | |
| 14.5. Environmental hazards | | | | | |
| Dangerous for the environment : Yes | Dangerous for the environment : Yes Marine pollutant : Yes | Dangerous for the environment : Yes | Dangerous for the environment : Yes | Dangerous for the environment : Yes | |

No supplementary information available

14.6. Special precautions for user

Overland transport

Classification code (ADR) : F1
Limited quantities (ADR) : 11
Excepted quantities (ADR) : E2

Packing instructions (ADR) : P001, IBC02, R001

Mixed packing provisions (ADR) : MP19
Portable tank and bulk container instructions : T4
(ADR)

Portable tank and bulk container special provisions

(ADR)

Tank code (ADR) : LGBF

Vehicle for tank carriage : FL

Transport category (ADR) : 2

Special provisions for carriage - Operation (ADR) : S2, S20

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: TP1

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Hazard identification number (Kemler No.) : 33

Orange plates :

33 1206

Tunnel restriction code (ADR) : D/E EAC code : 3YE

Transport by sea

Limited quantities (IMDG) : 1 L Excepted quantities (IMDG) : E2 Packing instructions (IMDG) : P001 IBC packing instructions (IMDG) : IBC02 Tank instructions (IMDG) : T4 Tank special provisions (IMDG) : TP2 : F-E EmS-No. (Fire) EmS-No. (Spillage) : S-D Stowage category (IMDG) : B Flash point (IMDG) : -5°C c.c.

Properties and observations (IMDG) : Colourless, volatile liquids. Explosive limits: 1.1% to 6.7% n-HEPTANE: flashpoint -4°C c.c.

Immiscible with water. Irritating to skin, eyes and mucous membranes.

Air transport

PCA Excepted quantities (IATA) : E2 PCA Limited quantities (IATA) : Y341 PCA limited quantity max net quantity (IATA) : 1L PCA packing instructions (IATA) : 353 PCA max net quantity (IATA) : 5L CAO packing instructions (IATA) : 364 CAO max net quantity (IATA) : 60L ERG code (IATA) : 3H

Inland waterway transport

Number of blue cones/lights (ADN)

Classification code (ADN) : F1
Limited quantities (ADN) : 1 L
Excepted quantities (ADN) : E2
Carriage permitted (ADN) : T
Equipment required (ADN) : PP, EX, A
Ventilation (ADN) : VE01

Rail transport

Classification code (RID) : F1
Limited quantities (RID) : 1L
Excepted quantities (RID) : E2

Packing instructions (RID) : P001, IBC02, R001

Mixed packing provisions (RID) : MP19

Portable tank and bulk container instructions (RID) : T4

Portable tank and bulk container special provisions (RID) : TP1

(RID)

Tank codes for RID tanks (RID): LGBFTransport category (RID): 2Colis express (express parcels) (RID): CE7Hazard identification number (RID): 33

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

Not applicable

SECTION 15: Regulatory information

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

: 1

15.1.1. EU-Regulations

Contains no REACH substances with Annex XVII restrictions

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Contains no substance on the REACH candidate list

Contains no REACH Annex XIV substances

Contains no substance subject to REGULATION (EU) No 649/2012 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 4 July 2012 concerning the export and import of hazardous chemicals.

Substance(s) are not subject to Regulation (EC) No 850/2004 of the European Parliament and of the Council of 29 April 2004 on persistent organic pollutants and amending Directive 79/117/EEC.

VOC content : 477,3 g/l

Directive 2012/18/EU (SEVESO III)

| , | | | | |
|---|------------------------------|------------|--|--|
| Seveso III Part I (Categories of dangerous substances) | Qualifying quantity (tonnes) | | | |
| | Lower-tier | Upper-tier | | |
| P5c FLAMMABLE LIQUIDS Flammable liquids, Categories 2 or 3 not covered by P5a and P5b | 5000 | 50000 | | |
| E2 Hazardous to the Aquatic Environment in Category Chronic 2 | 200 | 500 | | |

15.1.2. National regulations

No additional information available

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

| SECTION 16: Other information | | | | | |
|--------------------------------------|--------------------|-------|--|--|--|
| Indication of changes: | | | | | |
| Section Changed item Change Comments | | | | | |
| | Flash point (IMDG) | Added | | | |

| Full text of H- and EUH-statements: | |
|-------------------------------------|--|
| Aquatic Chronic 2 | Hazardous to the aquatic environment — Chronic Hazard, Category 2 |
| Asp. Tox. 1 | Aspiration hazard, Category 1 |
| Flam. Liq. 2 | Flammable liquids, Category 2 |
| Skin Irrit. 2 | Skin corrosion/irritation, Category 2 |
| STOT SE 3 | Specific target organ toxicity — Single exposure, Category 3, Narcosis |
| H225 | Highly flammable liquid and vapour. |
| H304 | May be fatal if swallowed and enters airways. |
| H315 | Causes skin irritation. |
| H336 | May cause drowsiness or dizziness. |
| H411 | Toxic to aquatic life with long lasting effects. |

SDS EU (REACH Annex II)

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product

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