

Liquid Power Spray 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

	entification of the substa	ance/mixture and of the	company/undertaking		
1.1. Product ide	ntifier	: Mixture			
Product form Trade name		: Liquid Power Spray			
Product code		: PK.10.13			
Vaporizer		: Aerosol			
Product group		: Trade product			
0 1	entified uses of the substar	•	dvisod against		
		ice of mixture and uses a	uviseu agailist		
1.2.1. Relevant ide					
Intended for genera Main use category		: Industrial use, Professional	1150		
Use of the substan	ce/mixture	: Solvent-based cleaner			
1.2.2. Uses advise No additional inform					
	nation available ne supplier of the safety dat	a sheet			
Putoline Oil Dollegoorweg 15 7602 EC Almelo - N T 0031 (0)546 81 8 vib@putoline.com	Netherlands				
1.4. Emergency	telephone number				
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		
2.1. Classification	azards identification on of the substance or mixt ording to Regulation (EC) No.				
Aerosol, Category	1	H222;H22	Q		
Skin corrosion/irrita		H315	0		
	an toxicity — Single exposure, Ca				
Aspiration hazard,		H304			
•	quatic environment — Chronic H				
	nents : see section 16	,			
Pressurised contain	ers airways. Toxic to aquatic life	ely flammable aerosol. May cau	ise drowsiness or dizziness. Ca	uses skin irritation. May be fatal if	
Labelling accordin Hazard pictograms	ng to Regulation (EC) No. 1272 (CLP)	/2008 [CLP]	¥_2		
		GHS02 GHS07	GHS09		
Signal word (CLP)		: Danger			
Hazardous ingredie	ents	: Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics			
Hazard statements	(CLP)		: H222 - Extremely flammable aerosol. H229 - Pressurised container: May burst if heated.		

- 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. P211 - Do not spray on an open flame or other ignition source. P251 - Do not pierce or burn, even after use.
	P271 - Use only outdoors or in a well-ventilated area. P302+P352 - IF ON SKIN: Wash with plenty of water. P304+P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing. P410+P412 - Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F. 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	l 3: Composi	tion/informat	ion on ing	redients
0.4. Output				

3.1. Substances Not applicable

3.2. Mixtures	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	25 - 50	Flam. Liq. 2, H225 Skin Irrit. 2, H315 STOT SE 3, H336 Asp. Tox. 1, H304 Aquatic Chronic 2, H411			
butane (containing < 0,1% butadiene (203-450-8)) substance with national workplace exposure limit(s) (GB)	(CAS-No.) 106-97-8 (EC-No.) 203-448-7 (EC Index-No.) 601-004-00-0 (REACH-no) 01-2119474691-32	25 - 50	Flam. Gas 1, H220 Press. Gas (Comp.), H280			
Propane substance with a Community workplace exposure limit	(CAS-No.) 74-98-6 (EC-No.) 200-827-9 (EC Index-No.) 601-003-00-5 (REACH-no) 01-2119486944-21	10 - 25	Flam. Gas 1, H220 Press. Gas (Comp.), H280			
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	10 - 25	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	: Wash skin with plenty of water. Take off 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,	
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 at	tention and special treatment needed
Treat symptomatically.	
SECTION 5: Firefighting measures	
5.1. Extinguishing media	
Suitable extinguishing media	: Water spray. Dry powder. Foam. Carbon dioxide.
Unsuitable extinguishing media	: Do not use a heavy water stream.

onsultable extinguishing media	. Do not use a neavy water stream.
5.2. Special hazards arising from the substa	ance or mixture
Fire hazard	: Extremely flammable aerosol.
Explosion hazard	: Pressurised container: May burst if heated.

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Hazardous decomposition products in case of fire	: Toxic fumes may be released.
5.3. Advice for firefighters	
Protection during firefighting	: Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.
	breathing apparatus. Complete protective clothing.

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 a	nd cleaning up					
For containment	: Collect spillage.					
Methods for cleaning up	: Mechanically recover the product.					
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. Do not spray on an open flame or other ignition source. Do not pierce or burn, even after use. Use only outdoors or in a well-ventilated area. Avoid breathing dust/fume/gas/mist/vapours/spray. Avoid contact with skin and eyes. Wear personal protective equipment.
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 an	y incompatibilities
Storage conditions	: Protect from sunlight. Do not expose to temperatures exceeding 50 °C/ 122 °F. Store locked up. Store in a well-ventilated place. Keep container tightly closed. Keep cool.

7.3. Specific end use(s) No additional information available

SECTION 8: Exposure controls/personal protection 8.1. Control parameters					
butane (containing < 0,1% butadiene (203-450-8)) (106-97-8)					
Germany	TRGS 910 Acceptable concentration notes				
United Kingdom	Local name	Butane			
United Kingdom	WEL TWA (mg/m³)	1450 mg/m³			
United Kingdom	WEL TWA (ppm)	600 ppm			
United Kingdom	WEL STEL (mg/m ³)	1810 mg/m³			
United Kingdom	WEL STEL (ppm)	750 ppm			
United Kingdom	Remark (WEL)	Carc (Capable of causing cancer and/or heritable genetic damage, only applies if Butane contains more than 0.1% of buta-1,3-diene)			
United Kingdom	Regulatory reference	EH40/2005 (Third edition, 2018). HSE			

Propane (74-98-6)					
EU IOELV TWA (ppm) 1000 ppm					
Germany TRGS 910 Acceptable concentration notes					
2.2. Exposure controls					

8.2. Exposure controls

Appropriate engineering controls: Ensure good ventilation of the work station.

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Hand protection:							
Protective gloves							
Туре	Material		Permeation	Thickness (mm)	Penetratio	on	Standard
Reusable gloves	ble 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 prote	ection:						
Wear suitable protect	tive clothing						
Respiratory protect	ion:						
In case of insufficient	ventilation, we	ar suitable re	espiratory equipment				

Personal protective equipment symbol(s):



Environmental exposure controls:

Avoid release to the environment.

CECTION 0. Developed and advantage and advantage			
SECTION 9: Physical and chemical properties 9.1. Information on basic physical and chemical properties			
Physical state	: Liquid		
Colour	: Colorless to Amber.		
Odour	: characteristic.		
Odour threshold	: No data available		
рН	: No data available		
Relative evaporation rate (butylacetate=1)	: No data available		
Melting point	: Not applicable		
Freezing point	: No data available		
Boiling point	: -44 °C		
Flash point	: -97 °C		
Auto-ignition temperature	: 365 °C		
Decomposition temperature	: No data available		
Flammability (solid, gas)	: Extremely flammable aerosol.		
Vapour pressure	: 8300 hPa at 20 °C		
Relative vapour density at 20 °C	: No data available		
Relative density	: No data available		
Density	: 0,669 g/cm³ at 20 °C		
Solubility	: Water: Insoluble / Slightly miscible		
Log Pow	: No data available		
Viscosity, kinematic	: < 20,5 mm²/s		
Viscosity, dynamic	: No data available		
Explosive properties	: Pressurised container: May burst if heated.		
Oxidising properties	: No data available		
Lower explosive limit (LEL)	: 0,6 vol %		
Upper explosive limit (UEL)	: 10,9 vol %		
9.2. Other information			
VOC content	: 538,2 g/l		

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SECTION 10: Stability and reactivity
10.1. Reactivity
Extremely flammable aerosol. Pressurised container: May burst if heated.
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			
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 Spray		
Vaporizer	Aerosol	
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 :	: Not classified		
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]

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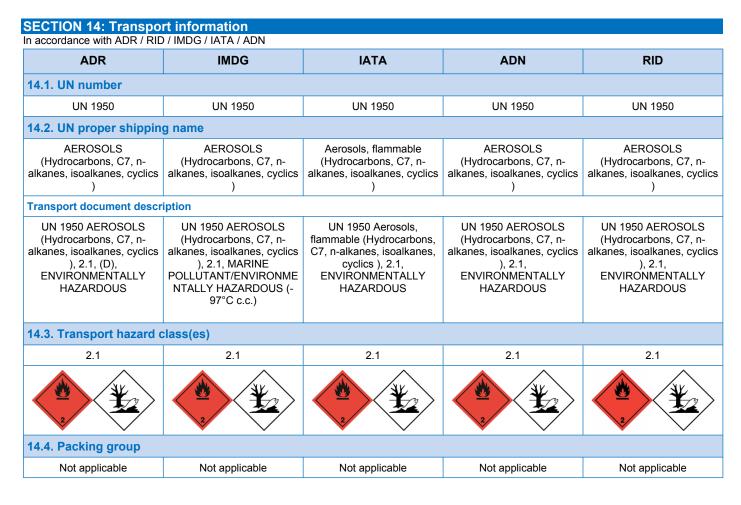
Distillates (petroleum), hydrotreated heavy paraffinic (64742-54-7)			
LC50 fish 1 > 100 mg/l (Pimephales promelas, 96h) (OECD 203 method)			
EC50 Daphnia 1 > 10000 mg/l (Gammarus pulex, 48h) (OECD 202 method)			
EC50 Daphnia 2 > 10000 mg/l (Daphnia magna, 48h) (OECD 202 method)			
NOEC (acute) >= 100 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		
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.



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Dongorous for the	Departure for the	Dongorous for the	Dongorous for the	Dongorous for the		
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)	: 5F					
Special provisions (ADR)	: 190), 327, 344, 625				
Limited quantities (ADR)	: 11					
Excepted quantities (ADR)	: E0					
Packing instructions (ADR)	: P2)7				
Special packing provisions (ADR)	: PP	87, RR6, L2				
Mixed packing provisions (ADR)	: MP	9				
Transport category (ADR)	: 2					
Special provisions for carriage - Pa	ackages (ADR) : V14	4				
Special provisions for carriage - Lo unloading and handling (ADR)	pading, : CV	9, CV12				
Special provisions for carriage - O	peration (ADR) : S2					
Tunnel restriction code (ADR)	: D					
Transport by sea						
Special provisions (IMDG)	· 63	190, 277, 327, 344, 381, 959				
Packing instructions (IMDG)		190, 277, 327, 344, 301, 939 07, LP200				
Special packing provisions (IMDG)		87, L2				
EmS-No. (Fire)	,					
EmS-No. (Spillage)	 : S-l					
Stowage category (IMDG)	: No : SM					
Stowage and handling (IMDG)		/1, SW22				
Segregation (IMDG)	: SG					
Flash point (IMDG)	: -97	°C c.c.				
Air transport						
PCA Excepted quantities (IATA)	: E0					
PCA Limited quantities (IATA)	: Y2					
PCA limited quantity max net quar						
PCA packing instructions (IATA)	: 203	: 203				
PCA max net quantity (IATA)	: 75	kg				
CAO packing instructions (IATA)	: 203	: 203				
CAO max net quantity (IATA)	: 150)kg				
Special provisions (IATA)	: A14	45, A167, A802				
ERG code (IATA)	: 101	-				
Inland waterway transport						
Classification code (ADN)	: 5F					
Special provisions (ADN)), 327, 344, 625				
Limited quantities (ADN)	: 1 L					
Excepted quantities (ADN)	: E0					
Equipment required (ADN)		, EX, A				
Ventilation (ADN)		01, VE04				
Number of blue cones/lights (ADN						
Rail transport	,					
Classification code (RID)	: 5F					
) 227 244 62F				
Special provisions (RID)), 327, 344, 625				
Limited quantities (RID)	: 1L : F0					
Excepted quantities (RID) : E0						
Packing instructions (RID)		07, LP200				
Special packing provisions (RID) : PP87, RR6, L2						
Mixed packing provisions (RID)	: MP	9				
Transport category (RID)	: 2					

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Special provisions for carriage – Packages (RID)	: W14
Special provisions for carriage - Loading, unloading and handling (RID)	: CW9, CW12
Colis express (express parcels) (RID)	: CE2
Hazard identification number (RID)	: 23
14.7 Transport in bulk according to Annex	II of Marpol and the IBC Code

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

15.1.1. EU-Regulations

Contains no REACH substances with Annex XVII restrictions

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 : 538,2 g/l Directive 2012/18/EU (SEVESO III)

Seveso III Part I (Categories of dangerous substances)	Qualifying quantity (tonnes)	
	Lower-tier	Upper-tier
P3a FLAMMABLE AEROSOLS 'Flammable' aerosols Category 1 or 2, containing flammable gases Category 1 or 2 or flammable liquids Category 1	150	500
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. Gas 1	Flammable gases, Category 1
Flam. Liq. 2	Flammable liquids, Category 2
Press. Gas (Comp.)	Gases under pressure : Compressed gas
Skin Irrit. 2	Skin corrosion/irritation, Category 2
STOT SE 3	Specific target organ toxicity — Single exposure, Category 3, Narcosis
H220	Extremely flammable gas.
H222	Extremely flammable aerosol.
H225	Highly flammable liquid and vapour.
H229	Pressurised container: May burst if heated.
H280	Contains gas under pressure; may explode if heated.
H304	May be fatal if swallowed and enters airways.

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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