according to Regulation (EU) 2015/830 Date of issue: 6/27/2016 Version: 1.0



SECTI	ON 1: Identification of the sub	stance/mixture and of the company/undertaking
1.1.	Product identifier	
Product	form	: Mixture
Product	name	: Lucas Diesel Deep Clean
Product	code	40872
1.2.	Relevant identified uses of the subs	tance or mixture and uses advised against
1.2.1.	Relevant identified uses	
Use of th	ne substance/mixture	: Cleaner
1.2.2.	Uses advised against	
No addit	ional information available	
1.3.	Details of the supplier of the safety	data sheet
302 Nort 92880-20 T (951) 2	il Products, Inc h Sheridan Street 067 Corona, California - USA 270-0154 - F (951) 270-1902 I@lucasoil.com - <u>www.LucasOil.com</u>	
1.4.	Emergency telephone number	
Emerger	ncy number	: (951) 493-1149 (951) 847-5949 7:00A.M. to 5:00P.M. Monday thru Friday
SECTI	ON 2: Hazards identification	
2.1.	Classification of the substance or m	ixture

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

Acute toxicity (inhalation:dust,mist) Category 4	H332	
Skin corrosion/irritation, Category 2	H315	
Serious eye damage/eye irritation, Category 2	H319	
Specific target organ toxicity — Single exposure, Category 3, Narcosis	H336	
Aspiration hazard, Category 1	H304	
Hazardous to the aquatic environment — Chronic Hazard, Category 2	H411	
Full taxt of barand alagaan and LL statements , and apartian 16		

Full text of hazard classes and H-statements : see section 16

#### Adverse physicochemical, human health and environmental effects

No additional information available

### 2.2. Label elements

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

Hazard pictograms (CLP) GHS07 GHS08 GHS09 Signal word (CLP) : Danger Hazardous ingredients : 2-ethylhexan-1-ol; Distillates (petroleum), hydrotreated heavy paraffinic (DMSO < 3%); Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, < 2% aromatics; Distillates (petroleum), hydrotreated light Hazard statements (CLP) : H304 - May be fatal if swallowed and enters airways H315 - Causes skin irritation H319 - Causes serious eye irritation H332 - Harmful if inhaled H336 - May cause drowsiness or dizziness H411 - Toxic to aquatic life with long lasting effects : P261 - Avoid breathing mist, spray, vapours Precautionary statements (CLP) P264 - Wash hands thoroughly after handling P271 - Use only outdoors or in a well-ventilated area P273 - Avoid release to the environment P280 - Wear eye protection, protective gloves P301+P310 - If swallowed: Immediately call a poison center or doctor 6/27/2016 EN (English) SDS Ref.: LUK1606004

Safety Data Sheet

according to Regulation (EU) 2015/830

P302+P352 - IF ON SKIN: Wash with plenty of water
P304+P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing
P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
P312 - Call a poison center or doctor if you feel unwell
P321 - Specific treatment (see First aid measures on this label)
P331 - Do NOT induce vomiting
P332+P313 - If skin irritation occurs: Get medical advice/attention
P332+P313 - If eye irritation persists: Get medical advice/attention
P362+P364 - Take off contaminated clothing and wash it before reuse
P391 - Collect spillage
P403+P233 - Store in a well-ventilated place. Keep container tightly closed
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

PBT: not yet assessed

vPvB: not yet assessed

### **SECTION 3: Composition/information on ingredients**

### 3.1. Substance

### Not applicable

### 3.2. Mixture

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Distillates (petroleum), hydrotreated light	(CAS No) 64742-47-8 (EC no) 265-149-8 (EC index no) 649-422-00-2	50 - 80	Flam. Liq. 3, H226 Acute Tox. 4 (Inhalation), H332 Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H336 Asp. Tox. 1, H304 Aquatic Chronic 2, H411
Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, < 2% aromatics	(CAS No) 68551-17-7 (EC no) 918-481-9 (REACH-no) 01-2119457273-39	1 – 10	Asp. Tox. 1, H304
2-ethylhexan-1-ol	(CAS No) 104-76-7 (EC no) 203-234-3 (REACH-no) 01-211948728920	1 – 10	Acute Tox. 4 (Inhalation:dust,mist), H332 Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335
Distillates (petroleum), hydrotreated heavy paraffinic (DMSO < 3%) (Note L)	(CAS No) 64742-54-7 (EC no) 265-157-1 (EC index no) 649-467-00-8 (REACH-no) 01-2119484627-25	0.1 – 5	Asp. Tox. 1, H304
Amines, tallow alkyl, ethoxylated	(CAS No) 61791-26-2 (EC no) 500-153-8	<= 1	Acute Tox. 4 (Oral), H302 Skin Corr. 1B, H314 Eye Dam. 1, H318 Aquatic Acute 1, H400 Aquatic Chronic 1, H410

Note L : The classification as a carcinogen need not apply if it can be shown that the substance contains less than 3 % DMSO extract as measured by IP 346 'Determination of polycyclic aromatics in unused lubricating base oils and asphaltene free petroleum fractions — Dimethyl sulphoxide extraction refractive index method', Institute of Petroleum, London. This note applies only to certain complex oil-derived substances in Part 3. Full text of H-statements: see section 16

SECTION 4: First aid measures		
4.1.	Description of first aid measures	
First-aid	measures general	: Never give anything by mouth to an unconscious person. If medical advice is needed, have product container or label at hand.
First-aid	d measures after inhalation	<ul> <li>Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell. Artificial respiration and/or oxygen if necessary.</li> </ul>
First-aid	d measures after skin contact	: Wash with plenty of soap and water. Wash contaminated clothing before reuse. If skin irritation occurs: Get medical advice/attention.
First-aid	measures after eye contact	: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
First-aid	measures after ingestion	: Immediately call a POISON CENTER or doctor/physician. Do NOT induce vomiting. Rinse mouth.
4.2.	Most important symptoms and effe	cts, both acute and delayed
Sympto	ms/injuries after inhalation	: Danger of serious damage to health by prolonged exposure through inhalation. Harmful if inhaled. May cause drowsiness or dizziness.

# Lucas Diesel Deep Clean Safety Data Sheet

according to Regulation (EU) 2015/830	
Symptoms/injuries after skin contact	: Causes skin irritation.
Symptoms/injuries after eye contact	: Causes serious eye irritation.
Symptoms/injuries after ingestion	: May be fatal if swallowed and enters airways.
	edical attention and special treatment needed
Treat symptomatically.	
SECTION 5: Firefighting measur	es
5.1. Extinguishing media	
Suitable extinguishing media	: Carbon dioxide. Dry chemical. Foam.
Unsuitable extinguishing media	: Do not use a heavy water stream.
5.2. Special hazards arising from the	e substance or mixture
Fire hazard	: Burning produces irritating, toxic and noxious fumes. Combustible liquid.
Explosion hazard	<ul> <li>Heat may build pressure, rupturing closed containers, spreading fire and increasing risk of burns and injuries.</li> </ul>
5.3. Advice for firefighters	
Precautionary measures fire	: Keep away from ignition sources.
Firefighting instructions	: Cool adjacent structures and containers with water spray to protect and prevent ignition. Do no allow run-off from fire fighting to enter drains or water courses.
Protection during firefighting	: Wear a self contained breathing apparatus. Wear fire/flame resistant/retardant clothing. EN46
SECTION 6: Accidental release r	
• •	ve equipment and emergency procedures
General measures	: Avoid all eye and skin contact and do not breathe vapour and mist. No open flames. No smoking.
6.1.1. For non-emergency personnel	
Protective equipment	: Use personal protective equipment as required. Refer to section 8.2.
Emergency procedures	: Evacuate unnecessary personnel.
6.1.2. For emergency responders	
Protective equipment	: Use personal protective equipment as required. Refer to section 8.2.
Emergency procedures	: Stop leak if safe to do so. Ventilate area.
6.2. Environmental precautions	
•	Do not discharge into drains or the environment.
	-
6.3. Methods and material for conta For containment	: Contain any spills with dikes or absorbents to prevent migration and entry into sewers or
r or containment	streams.
Methods for cleaning up	: Absorb and/or contain spill with inert material, then place in suitable container.
6.4. Reference to other sections	
Section 13: disposal information. Section 7:	safe handling. Section 8: personal protective equipment.
SECTION 7: Handling and storage	je
7.1. Precautions for safe handling	
Precautions for safe handling	: Use only outdoors or in a well-ventilated area. Eliminate all ignition sources if safe to do so.

Precautions for safe handling	: Use only outdoors or in a well-ventilated area. Eliminate all ignition sources if safe to do so. Avoid all eye and skin contact and do not breathe vapour and mist.
Hygiene measures	: Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Do not eat, drink or smoke when using this product. Handle in accordance with good industrial hygiene and safety procedures.
7.2. Conditions for safe storage, include	ding any incompatibilities

Storage conditions	<ul> <li>Keep container tightly closed. Do not store near food, foodstuffs, drugs, or potable water supplies.</li> </ul>
Incompatible products	: Strong acids. Strong bases. Strong oxidizers.
Heat and ignition sources	: Keep away from heat, sparks and flame.
Prohibitions on mixed storage	: Incompatible materials.
Storage area	: Store in dry, cool, well-ventilated area.
7.3. Specific end use(s)	

Cleaner.

Safety Data Sheet

according to Regulation (EU) 2015/830

SECTION 8: Exposure c	ontrols/personal protection		
8.1. Control parameters			
2-ethylhexan-1-ol (104-76-7)			
Germany	TRGS 900 Limitation of exposure peaks (mg/m <sup>3</sup> )	110 mg/m³	
Germany	TRGS 900 Limitation of exposure peaks (ppm)	20 ppm	
Distillates (petroleum), hydro	otreated light (64742-47-8)	-	
Germany	TRGS 900 Occupational exposure limit value (mg/m <sup>3</sup> )	600 mg/m³	
8.2. Exposure controls Appropriate engineering controls	of any potential exposure. Emergency	h fountains should be available in the immediate vicinity / safety showers should be available in the immediate sure good ventilation of the work station.	
Personal protective equipment	: Avoid all unnecessary exposure.		
Hand protection:			
Wear suitable gloves resistant to	o chemical penetration. nitrile rubber gloves. EN374		
Eye protection:			
Chemical goggles or safety glas	ses. EN166		
Skin and body protection:			
Wear suitable protective clothing	g. Long sleeved protective clothing		
Respiratory protection:			
Where exposure through inhalat with oil/mist cartridges. EN 1208	tion may occur from use, respiratory protection equipment	is recommended. Use an approved respirator equipped	
Environmental exposure control	s : Prevent contaminated water run-off.	: Prevent contaminated water run-off. Prevent leakage or spillage.	
Other information	: Do not eat, drink or smoke when usin	g this product.	
SECTION 9: Physical an	d chemical properties		
9.1. Information on basic	physical and chemical properties		
Physical state	: Liquid		

Physical state	: Liquid	
Colour	: amber.	
Odour	: No data available.	
Odour threshold	: No data available	
рН	: No data available	
Relative evaporation rate (butylacetate=1)	: No data available	
Melting point	: No data available	
Freezing point	: No data available	
Boiling point	: No data available	
Flash point	: 68.3 °C	
Auto-ignition temperature	: No data available	
Decomposition temperature	: No data available	
Flammability (solid, gas)	: No data available	
Vapour pressure	: No data available	
Relative vapour density at 20 °C	: No data available	
Relative density	: 0.849	
Density	: 7.089 lb/gal	
Solubility	: No data available	
Log Pow	: No data available	
Viscosity, kinematic	: 6.5 - 8.5 cSt @ 40 °C	С
Viscosity, dynamic	: No data available	
Explosive properties	: No data available	
Oxidising properties	: No data available	
Explosive limits	: No data available	

### 9.2. Other information

No additional information available

Safety Data Sheet

according to Regulation (EU) 2015/830

### **SECTION 10: Stability and reactivity**

### 10.1. Reactivity

No dangerous reactions known.

### 10.2. Chemical stability

Stable under normal conditions.

### 10.3. Possibility of hazardous reactions

Hazardous polymerization will not occur.

### 10.4. Conditions to avoid

Heat. Open flame. Sparks.

#### 10.5. Incompatible materials

Strong acids. Strong bases. Strong oxidizers.

#### 10.6. Hazardous decomposition products

Burning produces irritating, toxic and noxious fumes.

11.       Information on toxicological effects         Acute voicity       inhalation:dust,mist: Hamful if inhaled.         ATE CLP (dust,mist)       1.744 mg/l4h         2ethylexan-1-ol (104-76-7)       IbSo demail rat         LDS0 demail rat       20047 mg/kg male         LDS0 oral rat       20047 mg/kg male         LDS0 oral rat       5000 mg/kg         LDS0 oral rat       > 5000 mg/kg         LDS0 oral rat       > 5000 mg/kg         LDS0 oral rat bibi       > 2000 mg/kg         LDS0 oral rat bibi       > 2000 mg/kg         LDS0 oral rat bibi       > 2000 mg/kg         LDS0 oral rat bibi       > 15000 mg/kg         LDS0 demail rabbit       > 2000	SECTION 11: Toxicological information		
ATE CLP (dust,mist)       1.744 mg/l/4h         2ethylhexan-1-ol (104-76-7)         LD50 darl rat       2047 mg/kg male         LD50 darl rat       > 3000 mg/kg         LC50 inhalation rat (mg/l)       0.89 mg/L (vapour); 5.3 mg/L (vapour) (1.1 mg/L) aerosol (4.3 mg/L))         Distillates (petroleum), hydrotreated heavy paraffinic (DMSO < 3%) (64742-54-7)	11.1. Information on toxicological effects		
2-ethylhexan-1-ol (104-76-7)         LD50 oral rat       2047 mg/kg male         LD50 dermal rat       > 3000 mg/kg         LC50 inhalation rat (mg/l)       0.89 mg/L (vapour); 5.3 mg/L (vapour) (1.1 mg/L) aerosol (4.3 mg/L))         Distillates (petroleum), hydrotreated heavy paraffinic (DMSO < 3%) (64742-54-7)	Acute toxicity	: Inhalation:dust,mist: Harmful if inhaled.	
LD50 oral rat       2047 mg/kg male         LD50 dermal rat       > 3000 mg/kg         LC50 inhalation rat (mg/l)       0.89 mg/L (vapour); 5.3 mg/L (vapour (1.1 mg/L) aerosol (4.3 mg/L))         Distillates (petroleum), hydrotreated heavy paraffinic (DMSO < 3%) (64742-54-7)	ATE CLP (dust,mist)	1.744 mg/l/4h	
LD50 dermal rat       > 3000 mg/kg         LC50 inhalation rat (mg/l)       0.89 mg/L (vapour); 5.3 mg/L (vapour (1.1 mg/L) aerosol (4.3 mg/L))         Distillates (petroleum), hydrotreated heavy paraffinic (DMSO < 3%) (64742-54-7)	2-ethylhexan-1-ol (104-76-7)		
LC50 inhalation rat (mg/l)       0.89 mg/L (vapour); 5.3 mg/L (vapour) (1.1 mg/L) aerosol (4.3 mg/L))         Distillates (petroleum), hydrotreated heavy paraffinic (DMSO < 3%) (64742-54-7)	LD50 oral rat	2047 mg/kg male	
Distillates (petroleum), hydrotreated heavp paraffinic (DMSO < 3%) (64742-54-7)	LD50 dermal rat	> 3000 mg/kg	
LD50 oral rat       > 5000 mg/kg         LD50 dermal rabbit       > 2000 mg/kg         LC50 inhalation rat (mg/l)       > 5.53 mg/l/4h         Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, < 2% aromatics (68551-17-7)	LC50 inhalation rat (mg/l)	0.89 mg/L (vapour); 5.3 mg/L (vapour (1.1 mg/L) aerosol (4.3 mg/L))	
LD50 dermal rabbit       > 2000 mg/kg         LC50 inhalation rat (mg/l)       > 5.53 mg/l/4h         Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, < 2% aromatics (68551-17-7)	Distillates (petroleum), hydrotreated heavy pa	araffinic (DMSO < 3%) (64742-54-7)	
LC50 inhalation rat (mg/l)       > 5.53 mg/l/4h         Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, < 2% aromatics (68551-17-7)	LD50 oral rat	> 5000 mg/kg	
Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, < 2% aromatics (68551-17-7)	LD50 dermal rabbit	> 2000 mg/kg	
LD50 oral rat       > 15000 mg/kg         LD50 dermal rabbit       > 3160 mg/kg         LC50 inhalation rat (Dust/Mist - mg/l/4h)       > 4951 mg/l/4h         Distillates (petroleum), hydrotreated light (64742-47-8)         LD50 oral rat       > 5000 mg/kg         LD50 dermal rabbit       > 2000 mg/kg         LD50 dermal rabbit       > 2000 mg/kg         LD50 oral rat       > 5.28 mg/l/4h         Amines, tallow alkyl, ethoxylated (61791-26-2)       LD50 oral rat         LD50 oral rat       1000 (1000 - 2000) mg/kg         Skin corrosion/irritation       : Causes skin irritation.         Serious eye damage/irritation       : Causes serious eye irritation.         Respiratory or skin sensitisation       : Not classified         Germ cell mutagenicity       : Not classified         Carcinogenicity       : Not classified         Specific target organ toxicity (single exposure)       : May cause drowsiness or dizziness.         Specific target organ toxicity (repeated exposure)       : Not classified         Specific target organ toxicity (repeated exposure)       : Not classified         Specific target organ toxicity (repeated exposure)       : Not classified         Aspiration hazard       : May be fatal if swallowed and enters airways.         Lucas Diesel Deep Clean       : May be fatal if swal	LC50 inhalation rat (mg/l)	> 5.53 mg/l/4h	
LD50 dermal rabbit       > 3160 mg/kg         LC50 inhalation rat (Dust/Mist - mg/l/4h)       > 4951 mg/l/4h         Distillates (petroleum), hydrotreated light (64742-47-8)         LD50 oral rat       > 5000 mg/kg         LD50 dermal rabbit       > 2000 mg/kg         LC50 inhalation rat (Dust/Mist - mg/l/4h)       > 5.28 mg/l/4h         Amines, tallow alkyl, ethoxylated (61791-26-2)         LD50 oral rat       1000 (1000 - 2000) mg/kg         Skin corrosion/irritation       : Causes skin irritation.         Serious eye damage/irritation       : Causes serious eye irritation.         Respiratory or skin sensitisation       : Not classified         Germ cell mutagenicity       : Not classified         Reproductive toxicity       : Not classified         Specific target organ toxicity (single exposure)       : May cause drowsiness or dizziness.         Specific target organ toxicity (repeated exposure)       : Not classified         exposure)       : Not classified         Aspiration hazard       : May be fatal if swallowed and enters airways.         Lucas Diesel Deep Clean       : May be fatal if swallowed and enters airways.	Hydrocarbons, C10-C13, n-alkanes, isoalkane	es, cyclics, < 2% aromatics (68551-17-7)	
LC50 inhalation rat (Dust/Mist - mg/l/4h)       > 4951 mg/l/4h         Distillates (petroleum), hydrotreated light (64742-47-8)         LD50 oral rat       > 5000 mg/kg         LD50 dermal rabbit       > 2000 mg/kg         LC50 inhalation rat (Dust/Mist - mg/l/4h)       > 5.28 mg/l/4h         Amines, tallow alkyl, ethoxylated (61791-26-2)	LD50 oral rat	> 15000 mg/kg	
Distillates (petroleum), hydrotreated light (64742-47-8)         LD50 oral rat       > 5000 mg/kg         LD50 dermal rabbit       > 2000 mg/kg         LC50 inhalation rat (Dust/Mist - mg/l/4h)       > 5.28 mg/l/4h         Amines, tallow alkyl, ethoxylated (61791-26-2)       LD50 oral rat         LD50 oral rat       1000 (1000 - 2000) mg/kg         Skin corrosion/irritation       : Causes skin irritation.         Serious eye damage/irritation       : Causes serious eye irritation.         Respiratory or skin sensitisation       : Not classified         Germ cell mutagenicity       : Not classified         Carcinogenicity       : Not classified         Specific target organ toxicity (single exposure)       : May cause drowsiness or dizziness.         Specific target organ toxicity (repeated exposure)       : Not classified         Aspiration hazard       : May be fatal if swallowed and enters airways.         Lucas Diesel Deep Clean       : May be fatal if swallowed and enters airways.	LD50 dermal rabbit	> 3160 mg/kg	
LD50 oral rat       > 5000 mg/kg         LD50 dermal rabbit       > 2000 mg/kg         LC50 inhalation rat (Dust/Mist - mg/l/4h)       > 5.28 mg/l/4h         Amines, tallow alkyl, ethoxylated (61791-26-2)	LC50 inhalation rat (Dust/Mist - mg/l/4h)	> 4951 mg/l/4h	
LD50 dermal rabbit       > 2000 mg/kg         LC50 inhalation rat (Dust/Mist - mg/l/4h)       > 5.28 mg/l/4h         Amines, tallow alkyl, ethoxylated (61791-26-2)       ID50 oral rat         LD50 oral rat       1000 (1000 - 2000) mg/kg         Skin corrosion/irritation       : Causes skin irritation.         Serious eye damage/irritation       : Causes serious eye irritation.         Respiratory or skin sensitisation       : Not classified         Germ cell mutagenicity       : Not classified         Carcinogenicity       : Not classified         Reproductive toxicity       : Not classified         Specific target organ toxicity (single exposure)       : May cause drowsiness or dizziness.         Specific target organ toxicity (repeated exposure)       : Not classified         exposure)       Aspiration hazard       : May be fatal if swallowed and enters airways.	Distillates (petroleum), hydrotreated light (64	742-47-8)	
LC50 inhalation rat (Dust/Mist - mg/l/4h)       > 5.28 mg/l/4h         Amines, tallow alkyl, ethoxylated (61791-26-2)       1000 (1000 - 2000) mg/kg         Skin corrosion/irritation       : Causes skin irritation.         Serious eye damage/irritation       : Causes serious eye irritation.         Respiratory or skin sensitisation       : Not classified         Germ cell mutagenicity       : Not classified         Carcinogenicity       : Not classified         Reproductive toxicity       : Not classified         Specific target organ toxicity (single exposure)       : May cause drowsiness or dizziness.         Specific target organ toxicity (repeated exposure)       : Not classified         exposure)       : Not classified         Aspiration hazard       : May be fatal if swallowed and enters airways.         Lucas Diesel Deep Clean       : May be fatal if swallowed and enters airways.	LD50 oral rat	> 5000 mg/kg	
Amines, tallow alkyl, ethoxylated (61791-26-2)LD50 oral rat1000 (1000 - 2000) mg/kgSkin corrosion/irritation: Causes skin irritation.Serious eye damage/irritation: Causes serious eye irritation.Respiratory or skin sensitisation: Not classifiedGerm cell mutagenicity: Not classifiedCarcinogenicity: Not classifiedReproductive toxicity: Not classifiedSpecific target organ toxicity (single exposure): May cause drowsiness or dizziness.Specific target organ toxicity (repeated exposure): Not classifiedAspiration hazard: May be fatal if swallowed and enters airways.Lucas Diesel Deep Clean:	LD50 dermal rabbit	> 2000 mg/kg	
LD50 oral rat1000 (1000 - 2000) mg/kgSkin corrosion/irritation: Causes skin irritation.Serious eye damage/irritation: Causes serious eye irritation.Respiratory or skin sensitisation: Not classifiedGerm cell mutagenicity: Not classifiedCarcinogenicity: Not classifiedReproductive toxicity: Not classifiedSpecific target organ toxicity (single exposure): May cause drowsiness or dizziness.Specific target organ toxicity (repeated exposure): Not classifiedAspiration hazard: May be fatal if swallowed and enters airways.Lucas Diesel Deep Clean:	LC50 inhalation rat (Dust/Mist - mg/l/4h)	> 5.28 mg/l/4h	
Skin corrosion/irritation: Causes skin irritation.Serious eye damage/irritation: Causes serious eye irritation.Respiratory or skin sensitisation: Not classifiedGerm cell mutagenicity: Not classifiedCarcinogenicity: Not classifiedReproductive toxicity: Not classifiedSpecific target organ toxicity (single exposure): May cause drowsiness or dizziness.Specific target organ toxicity (repeated exposure): Not classifiedAspiration hazard: May be fatal if swallowed and enters airways.Lucas Diesel Deep Clean	Amines, tallow alkyl, ethoxylated (61791-26-2		
Serious eye damage/irritation: Causes serious eye irritation.Respiratory or skin sensitisation: Not classifiedGerm cell mutagenicity: Not classifiedCarcinogenicity: Not classifiedCarcinogenicity: Not classifiedReproductive toxicity: Not classifiedSpecific target organ toxicity (single exposure): May cause drowsiness or dizziness.Specific target organ toxicity (repeated exposure): Not classifiedAspiration hazard: May be fatal if swallowed and enters airways.Lucas Diesel Deep Clean	LD50 oral rat	1000 (1000 - 2000) mg/kg	
Respiratory or skin sensitisation: Not classifiedGerm cell mutagenicity: Not classifiedCarcinogenicity: Not classifiedReproductive toxicity: Not classifiedSpecific target organ toxicity (single exposure): May cause drowsiness or dizziness.Specific target organ toxicity (repeated exposure): Not classifiedAspiration hazard: May be fatal if swallowed and enters airways.Lucas Diesel Deep Clean	Skin corrosion/irritation	: Causes skin irritation.	
Gern cell mutagenicity: Not classifiedCarcinogenicity: Not classifiedReproductive toxicity: Not classifiedSpecific target organ toxicity (single exposure): May cause drowsiness or dizziness.Specific target organ toxicity (repeated exposure): Not classifiedAspiration hazard: May be fatal if swallowed and enters airways.Lucas Diesel Deep Clean	Serious eye damage/irritation	: Causes serious eye irritation.	
Carcinogenicity: Not classifiedReproductive toxicity: Not classifiedSpecific target organ toxicity (single exposure): May cause drowsiness or dizziness.Specific target organ toxicity (repeated exposure): Not classifiedAspiration hazard: May be fatal if swallowed and enters airways.Lucas Diesel Deep Clean	Respiratory or skin sensitisation	: Not classified	
Reproductive toxicity       : Not classified         Specific target organ toxicity (single exposure)       : May cause drowsiness or dizziness.         Specific target organ toxicity (repeated exposure)       : Not classified         Aspiration hazard       : May be fatal if swallowed and enters airways.         Lucas Diesel Deep Clean       : Image: Classified if the system of	Germ cell mutagenicity	: Not classified	
Specific target organ toxicity (single exposure)       : May cause drowsiness or dizziness.         Specific target organ toxicity (repeated exposure)       : Not classified         Aspiration hazard       : May be fatal if swallowed and enters airways.         Lucas Diesel Deep Clean	Carcinogenicity	: Not classified	
Specific target organ toxicity (repeated exposure)       : Not classified         Aspiration hazard       : May be fatal if swallowed and enters airways.         Lucas Diesel Deep Clean	Reproductive toxicity	: Not classified	
exposure) Aspiration hazard : May be fatal if swallowed and enters airways. Lucas Diesel Deep Clean	Specific target organ toxicity (single exposure)	: May cause drowsiness or dizziness.	
Lucas Diesel Deep Clean		: Not classified	
	Aspiration hazard	: May be fatal if swallowed and enters airways.	
Viscosity, kinematic 6.5 - 8.5 mm <sup>2</sup> /s @ 40 °C	Lucas Diesel Deep Clean		
	Viscosity, kinematic	6.5 - 8.5 mm²/s @ 40 °C	

SECTION 12: Ecological information			
12.1. Toxicity			
Ecology - water	: Toxic to aquatic life with long lasting effect	cts.	
2-ethylhexan-1-ol (104-76-7)			
LC50 fish 1	17.1 mg/l 96 h		
NOEC (acute)	14 mg/l 96 h		
6/27/2016	EN (English)	SDS Ref.: LUK1606004	5/11

Safety Data Sheet

according to Regulation (EU) 2015/830

Distillates (petroleum), hydrotreated heavy	paraffinic (DMSO < 3%) (64742-54-7)
EC50 Daphnia 1	> 10000 mg/l
Hydrocarbons, C10-C13, n-alkanes, isoalka	nes, cyclics, < 2% aromatics (68551-17-7)
LC50 fish 1	> 1000 mg/l
EC50 Daphnia 1	> 1000 mg/l
EC50 72h algae (1)	> 1000 mg/l
Distillates (petroleum), hydrotreated light (6	54742-47-8)
LC50 fish 1	> 1 mg/l 96 h
NOEC chronic fish	> 0.01 <= 0.1 mg/l
NOEC chronic crustacea	> 0.01 <= 0.1 mg/l
Amines, tallow alkyl, ethoxylated (61791-26-	-2)
LC50 fish 1	< 1 mg/l
EC50 Daphnia 1	< 1 mg/l
2.2. Persistence and degradability	
Lucas Diesel Deep Clean	
Persistence and degradability	May cause long-term adverse effects in the environment.
2-ethylhexan-1-ol (104-76-7)	
Persistence and degradability	Readily biodegradable.
	Readily blodegradable.
2.3. Bioaccumulative potential	
Lucas Diesel Deep Clean	
Bioaccumulative potential	Not established.
2-ethylhexan-1-ol (104-76-7)	
Log Pow	2.9
Distillates (petroleum), hydrotreated light (6	64742-47-8)
Log Kow	2.1 - 5
Bioaccumulative potential	Bioaccumulative potential.
2.4. Mobility in soil	
Lucas Diesel Deep Clean	
Ecology - soil	No additional information available.
2.5. Results of PBT and vPvB assessme	ent
Lucas Diesel Deep Clean	
PBT: not yet assessed	
vPvB: not yet assessed	
Component	
Distillates (petroleum), hydrotreated heavy	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII
paraffinic (DMSO < 3%) (64742-54-7)	This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII
2.6. Other adverse effects	
Additional information	: No additional information available
SECTION 13: Disposal consideration	ns
3.1. Waste treatment methods	
Vaste disposal recommendations	: Dispose in a safe manner in accordance with local/national regulations.
Ecology - waste materials	: Hazardous waste due to toxicity.
European List of Waste (LoW) code	: For disposal within the EC, the appropriate code according to the European Waste Catalogue (EWC) should be used
SECTION 14: Transport information	
n accordance with ADR / RID / IMDG / IATA / A	

 14.1. UN number

 UN-No. (ADR)
 : 3082

 UN-No. (IMDG)
 : 3082

 UN-No. (IATA)
 : 3082

 UN-No. (ADN)
 : 3082

 UN-No. (RID)
 : 3082

Safety Data Sheet

according to Regulation (EU) 2015/830

### 14.2. UN proper shipping name

Proper Shipping Name (ADR) Proper Shipping Name (IMDG) Proper Shipping Name (IATA) Proper Shipping Name (ADN) Proper Shipping Name (RID)

Transport document description (ADR)

Transport document description (IMDG)

Transport document description (IATA) Transport document description (ADN)

Transport document description (RID)

# 14.3. Transport hazard class(es) ADR

Transport hazard class(es) (ADR) Danger labels (ADR)

### IMDG

Transport hazard class(es) (IMDG) Danger labels (IMDG)

ΙΑΤΑ

Transport hazard class(es) (IATA) Hazard labels (IATA)

:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Petroleum distillates)
:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Petroleum distillates)

- : Environmentally hazardous substance, liquid, n.o.s. (Petroleum distillates)
- Environmentally indeated substance, inquis, incl. (i choicean aldinated)
   ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Petroleum distillates)
- ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Petroleum distillates)
   ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Petroleum distillates)
- : UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Petroleum
- distillates), 9, III, (E)
- : UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Petroleum distillates), 9, III, MARINE POLLUTANT
- : UN 3082 Environmentally hazardous substance, liquid, n.o.s. (Petroleum distillates), 9, III
- : UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Petroleum distillates), 9, III
- : UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Petroleum distillates), 9, III





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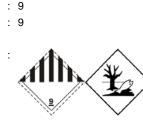


ADN

Transport hazard class(es) (ADN) Danger labels (ADN)

### **RID** Transport ha

Transport hazard class(es) (RID)		
Danger labels (RID)		



:9 :9

Safety Data Sheet

according to Regulation (EU) 2015/830



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14.4. Packing group	
Packing group (ADR)	: 111
Packing group (IMDG)	: 111
Packing group (IATA)	: 111
Packing group (ADN)	: 111
Packing group (RID)	: 111
14.5. Environmental hazards	
Dangerous for the environment	: Yes
Marine pollutant	: Yes
Other information	: No supplementary information available
14.6. Special precautions for user	
- Overland transport	
Classification code (ADR)	: M6
Special provisions (ADR)	: 274, 335, 601, 375
Limited quantities (ADR)	: 51
Excepted quantities (ADR)	: E1
Packing instructions (ADR)	: P001, IBC03, LP01, R001
Special packing provisions (ADR)	: PP1
Mixed packing provisions (ADR)	: MP19
Portable tank and bulk container instructions (ADR)	: T4
Portable tank and bulk container special provisions (ADR)	: TP1, TP29
Tank code (ADR)	: LGBV
Vehicle for tank carriage	: AT
Transport category (ADR)	: 3
Special provisions for carriage - Packages ADR)	: V12
Special provisions for carriage - Loading, Inloading and handling (ADR)	: CV13
Hazard identification number (Kemler No.)	: 90
Orange plates	90 3082
Tunnel restriction code (ADR)	: E
EAC code	: •3Z
Transport by sea	
Special provisions (IMDG)	: 274, 335, 969
Limited quantities (IMDG)	: 5L
Excepted quantities (IMDG)	: E1
Packing instructions (IMDG)	: P001, LP01
Special packing provisions (IMDG)	: PP1
IBC packing instructions (IMDG)	: IBC03
Tank instructions (IMDG)	: T4
Tank special provisions (IMDG)	: TP2, TP29
EmS-No. (Fire)	: F-A
EmS-No. (Spillage)	: S-F
Stowage category (IMDG)	: A
- Air transport	
PCA Excepted quantities (IATA)	: E1
6/27/2016	EN (English)
	(g)

### Safety Data Sheet

according to Regulation (EU) 2015/830

according to Regulation (EO) 2015/850			
PCA Limited quantities (IATA)	: Y964		
PCA limited quantity max net quantity (IATA)	: 30kgG		
PCA packing instructions (IATA)	: 964		
PCA max net quantity (IATA)	: 450L		
CAO packing instructions (IATA)	: 964		
CAO max net quantity (IATA)	: 450L		
Special provisions (IATA)	: A97, A158, A197		
ERG code (IATA)	: 9L		
- Inland waterway transport			
Classification code (ADN)	: M6		
Special provisions (ADN)	: 274, 335, 375, 601		
Limited quantities (ADN)	: 5L		
Excepted quantities (ADN)	: E1		
Carriage permitted (ADN)	: Т		
Equipment required (ADN)	: PP		
Number of blue cones/lights (ADN)	: 0		
- Rail transport			
Classification code (RID)	: M6		
Special provisions (RID)	: 274, 335, 375, 601		
Limited quantities (RID)	: 5L		
Excepted quantities (RID)	: E1		
Packing instructions (RID)	: P001, IBC03, LP01, R001		
Special packing provisions (RID)	: PP1		
Mixed packing provisions (RID)	: MP19		
Portable tank and bulk container instructions (RID)	: T4		
Portable tank and bulk container special provisions (RID)	: TP1, TP29		
Tank codes for RID tanks (RID)	: LGBV		
Transport category (RID)	: 3		
Special provisions for carriage – Packages (RID)	: W12		
Special provisions for carriage - Loading, unloading and handling (RID)	: CW13, CW31		
Colis express (express parcels) (RID)	: CE8		
Hazard identification number (RID)	: 90		
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

### 15.1.2. National regulations

### Germany

VwVwS Annex reference	: Water hazard class (WGK) 2, hazard to waters (Classification according to VwVwS, Annex 4)
12th Ordinance Implementing the Federal Immission Control Act - 12.BImSchV	: Is not subject of the 12. BlmSchV (Hazardous Incident Ordinance)
Netherlands	
SZW-lijst van kankerverwekkende stoffen	<ul> <li>Distillates (petroleum), hydrotreated heavy paraffinic (DMSO &lt; 3%), Distillates (petroleum), hydrotreated light are listed</li> </ul>
SZW-lijst van mutagene stoffen	<ul> <li>Distillates (petroleum), hydrotreated heavy paraffinic (DMSO &lt; 3%), Distillates (petroleum), hydrotreated light are listed</li> </ul>

### Safety Data Sheet

according to Regulation (EU) 2015/830

NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Borstvoeding	: None of the components are listed
NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Vruchtbaarheid	: None of the components are listed
NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Ontwikkeling	: None of the components are listed
Denmark	
Class for fire hazard	: Class III-1
Store unit	: 50 liter
Classification remarks	: Flammable according to the Danish Ministry of Justice; Emergency management guidelines fo the storage of flammable liquids must be followed
Recommendations Danish Regulation	: Young people below the age of 18 years are not allowed to use the product
	The requirements from the Danish Working Environment Authorities regarding work with carcinogens must be followed during use and disposal

#### 15.2. Chemical safety assessment

No chemical safety assessment has been carried out

### **SECTION 16: Other information**

Abbreviations a	nd acronyms:			
	ATE: Acute Toxicity Estimate			
	CAS (Chemical Abstracts Service) number			
	CLP: Classification, Labelling, Packaging.			
	EC50: Environmental Concentration associated with a response by 50% of the test population.			
	European List of Waste (LoW) code			
	GHS: Globally Harmonized System (of Classification and Labeling of Chemicals).			
	LD50: Lethal Dose for 50% of the test population			
	PBT: Persistent, Bioaccumulative, Toxic			
	TWA: Time Weighted Average			
vPvB	Very Persistent and Very Bioaccumulative			
Data sources	: European Chemicals Agency (ECHA) C&L Inventory database. Accessed at http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database.			
	Krister Forsberg and S.Z. Mansdorf, "Quick Selection Guide to Chemical Protective Clothing", Fifth Edition.			

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, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006. United Nations Economic Commission for Europe: About the GHS. Accessed at

http://www.unece.org/trans/danger/publi/ghs/ghs\_welcome\_e.html. : None.

Other information

### Full text of H- and EUH-statements:

Acute Tox. 4 (Inhalation)	Acute toxicity (inhal.), Category 4		
Acute Tox. 4 (Inhalation:dust,mist)	Acute toxicity (inhalation:dust,mist) Category 4		
Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4		
Aquatic Acute 1 Hazardous to the aquatic environment — Acute Hazard, Category 1			
Aquatic Chronic 1 Hazardous to the aquatic environment — Chronic Hazard, Category 1			
Aquatic Chronic 2	Hazardous to the aquatic environment — Chronic Hazard,	Category 2	
Asp. Tox. 1 Aspiration hazard, Category 1			
Eye Dam. 1	Serious eye damage/eye irritation, Category 1		
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2		
Flam. Liq. 3	Flammable liquids, Category 3		
Skin Corr. 1B Skin corrosion/irritation, Category 1B			
Skin Irrit. 2 Skin corrosion/irritation, Category 2			
STOT SE 3	Specific target organ toxicity — Single exposure, Category 3, Narcosis		
STOT SE 3	Specific target organ toxicity — Single exposure, Category	3, Respiratory tract irritation	
H226	Flammable liquid and vapour		
H302 Harmful if swallowed			
H304	May be fatal if swallowed and enters airways		
H314	Causes severe skin burns and eye damage		
H315	315 Causes skin irritation		
6/27/2016	EN (English) SD	S Ref.: LUK1606004	10/11

Safety Data Sheet

### according to Regulation (EU) 2015/830

H318	Causes serious eye damage	
H319	H319 Causes serious eye irritation	
H332	Harmful if inhaled	
H335	35 May cause respiratory irritation	
H336	May cause drowsiness or dizziness	
H400	00 Very toxic to aquatic life	
H410	0 Very toxic to aquatic life with long lasting effects	
H411 Toxic to aquatic life with long lasting effects		

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:

Acute Tox. 4 (Inhalation:dust,mist)	H332	Calculation method
Skin Irrit. 2	H315	Calculation method
Eye Irrit. 2	H319	Calculation method
STOT SE 3	H336	Calculation method
Asp. Tox. 1	H304	Calculation method
Aquatic Chronic 2	H411	Calculation method

SDS prepared by: The Redstone Group, LLC. 6077 Frantz Rd. Suite 206 Dublin, Ohio, USA 43016 614.923.7472 www.redstonegrp.com

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