

Safety Data Sheet according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830 Revision date: 22/04/2020 Supersedes: 05/12/2016 Version: 3.0

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

1.1. Product identifier

Product name

Product code

Product form

- : Mixture : KEMSURF ESD60
- : LK-ESD60

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

1.2.1. Relevant identified uses

Industrial/Professional use spec Use of the substance/mixture : Industrial: Surface-active agents

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

Manufacturer

Lankem Ltd Charles Street SK164SD Dukinfield - United Kingdom T 01613433355 technical@lankem.com - www.lankem.com

1.4. Emergency telephone number

Emergency number

: +447932007892

SECTION 2: Hazards identification2.1. Classification of the substance or mixtureClassification according to Regulation (EC) No. 1272/2008 [CLP]Flammable liquids, Category 3H226Skin corrosion/irritation, Category 2H315Serious eye damage/eye irritation, Category 1H318Hazardous to the aquatic environment — Chronic Hazard, Category 3H412Full text of H statements : see section 16Full text of H statements : see section 16

Adverse physicochemical, human health and environmental effects

Flammable liquid and vapour. Causes skin irritation. Causes serious eye damage. Harmful to aquatic life with long lasting effects.

2.2. Label elements

Labelling according to Regulation (EC) No. 127	72/2008 [CLP]
Hazard pictograms (CLP)	
	GHS02 GHS05
Signal word (CLP)	: Danger
Hazardous ingredients	: ALKYL ETHER SULPHATE, SODIUM SALT
Hazard statements (CLP)	: H226 - Flammable liquid and vapour.
	H315 - Causes skin irritation.
	H318 - Causes serious eye damage.
	H412 - Harmful to aquatic life with long lasting effects.

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Precautionary statements (CLP)	: P210 - Keep away from heat, hot surfaces, open flames, sparks. No smoking.
	P264 - Wash hands, forearms and face thoroughly after handling.
	P280 - Wear protective clothing, eye protection, face protection.
	P305+P351+P338+P310 - IF IN EYES: Rinse cautiously with water for several minutes.
	Remove contact lenses, if present and easy to do. Continue rinsing.Immediately call doctor.
	P332+P313 - If skin irritation occurs: Get medical advice.

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]
ALKYL ETHER SULPHATE, SODIUM SALT	(CAS-No.) 68891-38-3	50 – 75	Skin Irrit. 2, H315 Eye Dam. 1, H318 Aquatic Chronic 3, H412
ETHANOL	(CAS-No.) 64-17-5 (EC-No.) 200-578-6 (EC Index-No.) 603-002-00-5	10 – 25	Flam. Liq. 2, H225 Eye Irrit. 2, H319
METHANOL	(CAS-No.) 67-56-1 (EC-No.) 200-659-6 (EC Index-No.) 603-001-00-X	<1	Flam. Liq. 2, H225 Acute Tox. 3 (Oral), H301 Acute Tox. 3 (Dermal), H311 Acute Tox. 3 (Inhalation), H331 STOT SE 1, H370

Specific concentration limits:		
Name	Product identifier	Specific concentration limits
METHANOL	(CAS-No.) 67-56-1 (EC-No.) 200-659-6 (EC Index-No.) 603-001-00-X	(3 ≤C ≤ 10) STOT SE 2, H371 (10 ≤C < 100) STOT SE 1, H370

Full text of H-statements: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures	
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 cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a physician immediately.
First-aid measures after ingestion	: Call a poison center or a doctor if you feel unwell.
4.2. Most important symptoms and ef	ffects, both acute and delayed
Symptoms/effects after skin contact	: Irritation.
Symptoms/effects after eye contact	: Serious damage to eyes.
4.3. Indication of any immediate med	ical attention and special treatment needed

Treat symptomatically.

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SECTION 5: Firefighting measures		
5.1. Extinguishing media		
Suitable extinguishing media	: Water spray. Dry powder. Foam. Carbon dioxide.	
5.2. Special hazards arising from the substance or mixture		
Fire hazard Hazardous decomposition products in case of fire	Flammable liquid and vapour.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.	

SECTION 6: Accidental release measures			
6.1. Personal precautions, protective equipm	nent and emergency procedures		
6.1.1. For non-emergency personnel			
Emergency procedures	: Ventilate spillage area. No open flames, no sparks, and no smoking. 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		
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 Hygiene measures	 Ensure good ventilation of the work station. 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. Avoid contact with skin and eyes. 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	
Technical measures	: Ground/bond container and receiving equipment. : Store in a well-ventilated place. Keep cool. Keep container tightly closed.
7.3. Specific end use(s)	

Surface-active agents.

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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
Eye protection:
Safety glasses
Skin and body protection:
Wear suitable protective clothing
Respiratory protection:
In case of insufficient ventilation, wear suitable respiratory equipment

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 ch	nemical properties
Physical state	: Liquid
Colour	: Pale yellow.
Odour	: Characteristic odour.
Odour threshold	: No data available
pН	: 6-9
pH solution	: 1%
Relative evaporation rate (butylacetate=1)	: No data available
Melting point	: <0°C
Freezing point	: No data available
Boiling point	: 93 – 99 °C
Flash point	: 32 °C
Auto-ignition temperature	: 425 °C
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	: 1.046
Solubility	: No data available
Partition coefficient n-octanol/water (Log Pow)	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: 90.7 cP @25°C

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Explosive properties	: No data available
Oxidising properties	: No data available
Explosive limits	: No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

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 toxicologica	l effects		
Acute toxicity (oral) Acute toxicity (dermal) Acute toxicity (inhalation)	Not classifiedNot classifiedNot classified		
ALKYL ETHER SULPHATE, SO	IUM SALT		
LD50 oral rat	> 5000 mg/kg		
	·		
METHANOL (67-56-1)			
ATE CLP (oral)	100 ma/ka body	weight	

ATE CLP (oral)	100 mg/kg bodyweight
ATE CLP (dermal)	300 mg/kg bodyweight
ATE CLP (vapours)	3 mg/l/4h
Skin corrosion/irritation	: Causes skin irritation.
	pH: 6 – 9
Serious eye damage/irritation	: Causes serious eye damage.
	pH: 6 – 9
Respiratory or skin sensitisation	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Not classified
STOT-single exposure	: Not classified

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STOT-repeated exposure	: Not classified
Aspiration hazard	: Not classified

12.1. Toxicity	
Ecology - general :	Harmful to aquatic life with long lasting effects.
acute) Hazardous to the aquatic environment long-term	Not classified Harmful to aquatic life with long lasting effects.
ALKYL ETHER SULPHATE, SODIUM SALT	
LC50 fish 1	> 10 – 100 mg/l
EC50 Daphnia 1	> 100 mg/l
ErC50 (other aquatic plants)	100 – 100 mg/l
NOEC chronic crustacea	>0.1 - 1 mg/l
12.2. Persistence and degradability	
KEMSURF ESD60	
Persistence and degradability	Readily biodegradable.
ALKYL ETHER SULPHATE, SODIUM SALT	
Persistence and degradability	Readily biodegradable.
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 consideration	ions
13.1. Waste treatment methods	
Waste treatment methods Additional information	 Dispose of contents/container in accordance with licensed collector's sorting instructions. Flammable vapours may accumulate in the container.

SECTION 14: Transport information

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

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ADR	IMDG	ΙΑΤΑ	ADN	RID
14.1. UN number				
UN 1993	UN 1993	UN 1993	UN 1993	UN 1993
14.2. UN proper shipping n	ame			1
FLAMMABLE LIQUID,	FLAMMABLE LIQUID,	Flammable liquid, n.o.s.	FLAMMABLE LIQUID,	FLAMMABLE LIQUID,
N.O.S. (Contains Ethanol) N	.O.S. (Contains Ethanol)	(Contains Ethanol)	N.O.S. (Contains Ethanol)	N.O.S. (Contains Ethanol
Transport document description	on			·
	UN 1993 FLAMMABLE	UN 1993 Flammable liquid,	UN 1993 FLAMMABLE	UN 1993 FLAMMABLE
	IQUID, N.O.S. (Contains	n.o.s. (Contains Ethanol), 3,	LIQUID, N.O.S. (Contains	LIQUID, N.O.S. (Contains
Ethanol), 3, III, (D/E)	Ethanol), 3, III	III	Ethanol), 3, III	Ethanol), 3, III
14.3. Transport hazard clas	ss(es)			
3	3	3	3	3
14.4. Packing group				1
III	III	III	III	III
14.5. Environmental hazard	ls			
Dangerous for the	Dangerous for the	Dangerous for the	Dangerous for the	Dangerous for the
environment : No	environment : No Marine pollutant : No	environment : No	environment : No	environment : No
No supplementary information a	vailable			
14.6. Special precautions fo	or user			
Overland transport				
Classification code (ADR)	: F1			
Special provisions (ADR)	: 274	4, 601		
imited quantities (ADR)	: 51			
Excepted quantities (ADR)	: E1			
Packing instructions (ADR)	: P0	01, IBC03, LP01, R001		
Aixed packing provisions (ADR)	: MF	°19		
Portable tank and bulk container	instructions (ADR) : T4			
Portable tank and bulk container a ADR)	· · ·	1, TP29		
Tank code (ADR)	: LG	BF		

Orange plates	:	30
		1993
Tunnel restriction code (ADR) EAC code	-	D/E •3YE
Transport by sea Special provisions (IMDG) Limited quantities (IMDG) Excepted quantities (IMDG)	:	223, 274, 955 5 L E1
Packing instructions (IMDG) IBC packing instructions (IMDG)	:	LP01, P001 IBC03

: FL

: 3

: V12

: S2

: 30

Vehicle for tank carriage

Transport category (ADR)

Special provisions for carriage - Packages (ADR)

Special provisions for carriage - Operation (ADR)

Hazard identification number (Kemler No.)

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	ile ameriament (20) 20
Tank instructions (IMDG) Tank special provisions (IMDG) EmS-No. (Fire) EmS-No. (Spillage) Stowage category (IMDG) Air transport PCA Excepted quantities (IATA) PCA Limited quantities (IATA) PCA limited quantity max net quantity (IATA)	: T4 : TP1, TP29 : F-E : S-E : A : E1 : Y344 : 10L
PCA packing instructions (IATA) PCA max net quantity (IATA) CAO packing instructions (IATA) CAO max net quantity (IATA) Special provisions (IATA) ERG code (IATA)	: 355 : 60L : 366 : 220L : A3 : 3L
Inland waterway transport Classification code (ADN) Special provisions (ADN) Limited quantities (ADN) Excepted quantities (ADN) Equipment required (ADN) Ventilation (ADN) Number of blue cones/lights (ADN) Rail transport	: F1 : 274, 601 : 5 L : E1 : PP, EX, A : VE01 : 0
Classification code (RID) Special provisions (RID) Limited quantities (RID) Excepted quantities (RID) Packing instructions (RID) Mixed packing provisions (RID) Portable tank and bulk container instructions (RID) Portable tank and bulk container special provisions (RID)	 F1 274, 601 5L E1 P001, IBC03, LP01, R001 MP19 T4 TP1, TP29
Tank codes for RID tanks (RID) Transport category (RID) Special provisions for carriage – Packages (RID) Colis express (express parcels) (RID) Hazard identification number (RID)	: LGBF : 3 : W12 : CE4 : 30

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.

Contains no substance subject to Regulation (EU) No 2019/1021 of the European Parliament and of the Council of 20 June 2019 on persistent organic pollutants

15.1.2. National regulations

No additional information available

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

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SECTION 16: Other information

Abbreviations and acro	nyms:
ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
ATE	Acute Toxicity Estimate
BLV	Biological limit value
CAS-No.	Chemical Abstract Service number
CLP	Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008
DMEL	Derived Minimal Effect level
DNEL	Derived-No Effect Level
EC50	Median effective concentration
EC-No.	European Community number
EN	European Standard
ΙΑΤΑ	International Air Transport Association
IMDG	International Maritime Dangerous Goods
LC50	Median lethal concentration
LD50	Median lethal dose
LOAEL	Lowest Observed Adverse Effect Level
NOAEC	No-Observed Adverse Effect Concentration
NOAEL	No-Observed Adverse Effect Level
NOEC	No-Observed Effect Concentration
OEL	Occupational Exposure Limit
РВТ	Persistent Bioaccumulative Toxic
PNEC	Predicted No-Effect Concentration
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
SDS	Safety Data Sheet
vPvB	Very Persistent and Very Bioaccumulative
WGK	Water Hazard Class

Classification according to Regulation (EC) No. 1272/2008 [CLP]:		
Flam. Liq. 3	H226	
Skin Irrit. 2	H315	
Eye Dam. 1	H318	
Aquatic Chronic 3	H412	

Full text of H- and EUH-statements:		
Acute Tox. 3 (Dermal)	Acute toxicity (dermal), Category 3	
Acute Tox. 3 (Inhalation)	Acute toxicity (inhal.), Category 3	
Acute Tox. 3 (Oral)	Acute toxicity (oral), Category 3	

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Aquatic Chronic 3	Hazardous to the aquatic environment — Chronic Hazard, Category 3	
Eye Dam. 1	Serious eye damage/eye irritation, Category 1	
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2	
Flam. Liq. 2	Flammable liquids, Category 2	
Skin Irrit. 2	Skin corrosion/irritation, Category 2	
STOT SE 1	Specific target organ toxicity — single exposure, Category 1	
STOT SE 2	Specific target organ toxicity — Single exposure, Category 2	
H225	Highly flammable liquid and vapour.	
H226	Flammable liquid and vapour.	
H301	Toxic if swallowed.	
H311	Toxic in contact with skin.	
H315	Causes skin irritation.	
H318	Causes serious eye damage.	
H319	Causes serious eye irritation.	
H331	Toxic if inhaled.	
H370	Causes damage to organs.	
H371	May cause damage to organs.	
H412	Harmful 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.