	fety Data She		07 (2006 (DEACU)	(EN / D
acc	ording to Regulat	tion (EC) No. 19	07/2006 (REACH)	
levi	ade name : sion date : : date :	Lithofin M 30.01.2019 13.02.2019	IN Outdoor Cleaner Version (Revision) :	4.0.2 (4.0.1)
EC	TION 1: Identific	ation of the sub	ostance/mixture and of the company/ un	dertaking
.1	Product identifie	-		
.2	Relevant identi		substance or mixture and uses advised ag	gainst
.3	-	• •	er/only representative/downstream use	/distributor
		acturer / import	Casdron Enterprises Ltd.	
	Distributor :			
	Street :		Wood End, Prospect Road	
	Postal code/city :		GB- New Alresford, Hants SO 24 9QF	
	Telephone :		+44 1962 732126	
	Telefax :		+44 1962 735373	
	Contact :		Technical Department E-mail: sales@lithofin.co.uk	
			Emergency telephone number: 0196 2732126	
			(Only available during office hours)	
	Supplier :		Lithofin AG	
	Street :		Heinrich-Otto-Str. 36	
	Postal code/city :		73240 Wendlingen	
	Telephone :		+49 (0)7024 9403-0	
	Telefax :		+49 (0)7024 9403-40	
	Contact :		Technical Department E-mail: info@lithofin.de	
			Emergency telephone number: +49 (0)7024 9403-0	
.4	Emergency telep	hone number	(Only available during office hours)	
	see section 1.3			
EC	TION 2: Hazards	identification		
2.1	Aquatic Acute 1 ; H4 Eye Dam. 1 ; H318 - Skin Corr. 1B ; H314 Met. Corr. 1 ; H290 Additional info	ccording to Reg 400 - Hazardous to the Serious eye damage/ - Skin corrosion/irrita - Corrosive to metals : - mation	Julation (EC) No 1272/2008 [CLP] e aquatic environment : Acute 1 ; Very toxic to aquatic life (eye irritation : Category 1 ; Causes serious eye damage. ation : Category 1B ; Causes severe skin burns and eye da : Category 1 ; May be corrosive to metals.	
	Remark	fied as hazardous acco UH-phrases: see sectio	ording to regulation (EC) No 1272/2008 [CLP].	
.2	Label elements			
	Labelling accor Hazard pictogram		ion (EC) No. 1272/2008 [CLP]	
			Page : 1 / 13	/ ENI / F
				(EN / D

(EN/D)

Frade name :	Lithofin MN Out	door Cleaner	
evision date : rint date :	30.01.2019 13.02.2019	Version (Revision) :	4.0.2 (4.0.1
	¥		
Corrosion (GHS05)	• Environment (GHS09)		
Signal word			
Danger			
Hazard component	ts for labelling		
	RITE 5 % ; CAS No. : 7681-52-9		
	,		
SODIUM HYDROXIDE	E ; CAS No. : 1310-73-2		
SODIUM HYDROXIDE Hazard statements	E ; CAS No. : 1310-73-2 5		
SODIUM HYDROXIDE Hazard statements H290	; CAS No. : 1310-73-2 May be corrosive to metals.		
SODIUM HYDROXIDE Hazard statements H290 H314	; CAS No. : 1310-73-2 May be corrosive to metals. Causes severe skin burns and	eye damage.	
SODIUM HYDROXIDE Hazard statements H290 H314 H400	; CAS No. : 1310-73-2 May be corrosive to metals. Causes severe skin burns and Very toxic to aquatic life.	eye damage.	
SODIUM HYDROXIDE Hazard statements H290 H314 H400 Precautionary stat	; CAS No. : 1310-73-2 May be corrosive to metals. Causes severe skin burns and Very toxic to aquatic life. ements	eye damage.	
SODIUM HYDROXIDE Hazard statements H290 H314 H400 Precautionary stat P102	; CAS No. : 1310-73-2 May be corrosive to metals. Causes severe skin burns and Very toxic to aquatic life. ements Keep out of reach of children.		
SODIUM HYDROXIDE Hazard statements H290 H314 H400 Precautionary stat P102 P234	; CAS No. : 1310-73-2 May be corrosive to metals. Causes severe skin burns and Very toxic to aquatic life. Tements Keep out of reach of children. Keep only in original packagin	g.	
SODIUM HYDROXIDE Hazard statements H290 H314 H400 Precautionary stat P102 P234 P280	; CAS No. : 1310-73-2 May be corrosive to metals. Causes severe skin burns and Very toxic to aquatic life. Ements Keep out of reach of children. Keep only in original packagin Wear protective gloves/protective	g. tive clothing/eye protection/face protection.	
SODIUM HYDROXIDE Hazard statements H290 H314 H400 Precautionary stat P102 P234 P280 P301+P330+P331	; CAS No. : 1310-73-2 May be corrosive to metals. Causes severe skin burns and Very toxic to aquatic life. ements Keep out of reach of children. Keep only in original packagin Wear protective gloves/protect IF SWALLOWED: rinse mouth.	g. tive clothing/eye protection/face protection. Do NOT induce vomiting.	if and
SODIUM HYDROXIDE Hazard statements H290 H314 H400 Precautionary stat P102 P234 P280	 ; CAS No. : 1310-73-2 May be corrosive to metals. Causes severe skin burns and Very toxic to aquatic life. ements Keep out of reach of children. Keep only in original packagin Wear protective gloves/protect IF SWALLOWED: rinse mouth. IF IN EYES: Rinse cautiously v 	g. tive clothing/eye protection/face protection. Do NOT induce vomiting. vith water for several minutes. Remove cont	act lenses, if prese
SODIUM HYDROXIDE Hazard statements H290 H314 H400 Precautionary stat P102 P234 P280 P301+P330+P331	; CAS No. : 1310-73-2 May be corrosive to metals. Causes severe skin burns and Very toxic to aquatic life. ements Keep out of reach of children. Keep only in original packagin Wear protective gloves/protect IF SWALLOWED: rinse mouth.	g. tive clothing/eye protection/face protection. Do NOT induce vomiting. vith water for several minutes. Remove cont	act lenses, if prese

2.3 Other hazards

Adverse human health effects and symptoms

Due to its pH value (see section 9), irritation of the skin and eyes cannot be ruled out.

2.4 Additional information

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Hazardous ingredients

	14 - 11 - N - 01 2110/02154 24
SODIUM HYPOCHLORITE ; REACH reg	jistration No. : 01-2119488154-34-xxxx ; EC No. : 231-668-3; CAS No. : 7681-52-9
Weight fraction :	≥ 3 - < 5 %
Classification 1272/2008 [CLP] :	Met. Corr. 1 ; H290 Skin Corr. 1B ; H314 Eye Dam. 1 ; H318 Aquatic Acute 1 ; H400 Aquatic Chronic 2 ; H411
SODIUM CARBONATE ; REACH registr	ation No. : 01-2119485498-19-xxxx ; EC No. : 207-838-8; CAS No. : 497-19-8
Weight fraction :	≥ 1 - < 5 %
Classification 1272/2008 [CLP] :	Eye Irrit. 2 ; H319
SODIUM HYDROXIDE ; EC No. : 215-3	185-5; CAS No. : 1310-73-2
Weight fraction :	≥ 0,5 - < 1 %
Classification 1272/2008 [CLP] :	Met. Corr. 1 ; H290 Skin Corr. 1A ; H314 Eye Dam. 1 ; H318
COCO DIMETHYLAMINE OXIDE ; REA 28-4	CH registration No. : 01-2119490061-47-xxxx ; EC No. : 931-292-6; CAS No. : 308062-
Weight fraction :	< 0,25 %
Classification 1272/2008 [CLP] :	Eye Dam. 1 ; H318 Acute Tox. 4 ; H302 Skin Irrit. 2 ; H315 Aquatic Acute 1 ; H400 Aquatic Chronic 2 ; H411

Additional information

All ingredients of this mixture are (pre)registered according to REACH regulation. Full text of H- and EUH-phrases: see section 16.

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH)

Trade name :

Revision date : Print date :

Lithofin MN Outdoor Cleaner

30.01.2019 13.02.2019 Version (Revision) :

4.0.2 (4.0.1)

SECTION 4: First aid measures

4.1 Description of first aid measures

General information

When in doubt or if symptoms are observed, get medical advice. Never give anything by mouth to an unconscious person or a person with cramps. If unconscious place in recovery position and seek medical advice.

Following inhalation

Remove casualty to fresh air and keep warm and at rest. If breathing is irregular or stopped, administer artificial respiration. In case of respiratory tract irritation, consult a physician.

In case of skin contact

After contact with skin, wash immediately with plenty of water and soap. Immediately remove any contaminated clothing, shoes or stockings. Do not wash with: Cleaning agent, acidic Cleaning agent, alkaline Solvents/Thinner

After eye contact

In case of contact with eyes flush immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart and consult an ophthalmologist. Protect uninjured eye.

After ingestion

Call a physician immediately. Keep at rest. If accidentally swallowed rinse the mouth with plenty of water (only if the person is conscious) and obtain immediate medical attention. Do NOT induce vomiting.

Self-protection of the first aider

First aider: Pay attention to self-protection!

4.2 Most important symptoms and effects, both acute and delayed

No information available.

4.3 Indication of any immediate medical attention and special treatment needed Notes for the doctor

Treat symptomatically. **Special treatment** First Aid, decontamination, treatment of symptoms.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media

Water spray ABC-powder Foam

Unsuitable extinguishing media

Full water jet Strong water jet

5.2 Special hazards arising from the substance or mixture Hazardous combustion products

Carbon monoxide Carbon dioxide (CO2) Hydrogen chloride (HCl) Chlorine (Cl2)

5.3 Advice for firefighters

Use suitable breathing apparatus.

Special protective equipment for firefighters

Wear a self-contained breathing apparatus and chemical protective clothing.

5.4 Additional information

Use water spray jet to protect personnel and to cool endangered containers. Do not allow run-off from fire-fighting to enter drains or water courses. Do not inhale explosion and combustion gases. The product itself does not burn. Co-ordinate fire-fighting measures to the fire surroundings.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Wear personal protection equipment (refer to section 8). Provide adequate ventilation. Remove persons to safety.

	fety Data She ording to Regulat	et tion (EC) No. 1907/	2006 (REACH)	(EN / C
Tra	ade name :	Lithofin MN	Outdoor Cleaner	
	sion date : date :	30.01.2019 13.02.2019	Version (Revision) :	4.0.2 (4.0.1
6.2	Environmental p		ow to enter into surface water or drains.	
6.3			ent and cleaning up	
	Clean contaminated	taking up: Universal binder	to the environmental legislation. Retain contaminat	ed washing water
6.4	Reference to oth	ner sections		
	Safe handling: see see Personal protection ec Disposal: see section	quipment: see section 8		
SEC	TION 7: Handling			
SEC 7.1		g and storage		-
	TION 7: Handling Precautions for s When using do not ea	g and storage safe handling		-
	Precautions for s	g and storage safe handling at, drink, smoke, sniff.		
	Precautions for s When using do not ea Protective meas All work processes m Skin contact Eye con the removal of produ ventilation is not pos	g and storage safe handling at, drink, smoke, sniff. sures nust always be designed so nact Wear personal protecti uct. Do not breathe gas/fun ssible or not sufficient, the e	that the following is excluded: Inhalation of vapours ion equipment (refer to section 8). Always close con nes/vapour/spray. Use only in well-ventilated areas. entire working area must be ventilated by technical r processes have priority over personal protection equi	tainers tightly afte If local exhaust means. Technical
	Precautions for s When using do not ea Protective meas All work processes m Skin contact Eye con the removal of produ ventilation is not pos measures and the ap Measures to prevent	g and storage safe handling at, drink, smoke, sniff. sures nust always be designed so natact Wear personal protecti uct. Do not breathe gas/fum ssible or not sufficient, the e oplication of suitable work p ent fire	ion equipment (refer to section 8). Always close con nes/vapour/spray. Use only in well-ventilated areas. entire working area must be ventilated by technical r processes have priority over personal protection equi	tainers tightly afte If local exhaust means. Technical
	Precautions for s When using do not ea Protective meas All work processes m Skin contact Eye con the removal of produ ventilation is not pos measures and the ap Measures to preve The product is not:	g and storage safe handling at, drink, smoke, sniff. sures nust always be designed so natact Wear personal protecti uct. Do not breathe gas/fun ssible or not sufficient, the e oplication of suitable work p	ion equipment (refer to section 8). Always close con nes/vapour/spray. Use only in well-ventilated areas. entire working area must be ventilated by technical r processes have priority over personal protection equi	tainers tightly afte If local exhaust means. Technical
	Precautions for s When using do not ea Protective meas All work processes m Skin contact Eye con the removal of produ ventilation is not pos measures and the ap Measures to preve The product is not: Fire class :	g and storage safe handling at, drink, smoke, sniff. sures nust always be designed so that Wear personal protection uct. Do not breathe gas/fum ssible or not sufficient, the e oplication of suitable work p ent fire Flammable Usual measures	ion equipment (refer to section 8). Always close con nes/vapour/spray. Use only in well-ventilated areas. entire working area must be ventilated by technical r processes have priority over personal protection equi	tainers tightly afte If local exhaust means. Technical
	Precautions for s When using do not ea Protective meas All work processes m Skin contact Eye con the removal of produ ventilation is not pos measures and the ap Measures to preve The product is not: Fire class : Shake well befor	g and storage safe handling at, drink, smoke, sniff. Sures nust always be designed so tact Wear personal protecti uct. Do not breathe gas/fum ssible or not sufficient, the e oplication of suitable work p ent fire Flammable Usual measures re use nein	ion equipment (refer to section 8). Always close con nes/vapour/spray. Use only in well-ventilated areas. entire working area must be ventilated by technical n processes have priority over personal protection equi s for fire prevention.	tainers tightly afte If local exhaust means. Technical
	Precautions for s When using do not ea Protective meas All work processes m Skin contact Eye con the removal of produ ventilation is not pos measures and the ap Measures to preve The product is not: Fire class : Shake well befor Advices on gene	g and storage safe handling at, drink, smoke, sniff. sures nust always be designed so ntact Wear personal protecti uct. Do not breathe gas/fur ssible or not sufficient, the e oplication of suitable work p ent fire Flammable Usual measures re use nein eral occupational hy	ion equipment (refer to section 8). Always close con hes/vapour/spray. Use only in well-ventilated areas. entire working area must be ventilated by technical r processes have priority over personal protection equi s for fire prevention. ygiene	tainers tightly afte If local exhaust means. Technical
7.1	Precautions for s When using do not ea Protective meas All work processes m Skin contact Eye con the removal of produ ventilation is not pos measures and the ap Measures to preve The product is not: Fire class : Shake well befor Advices on gene P362+P364 - Take o	g and storage safe handling at, drink, smoke, sniff. sures nust always be designed so tact Wear personal protecti uct. Do not breathe gas/fum sible or not sufficient, the e oplication of suitable work p ent fire Flammable Usual measures re use nein eral occupational hy off contaminated clothing an	ion equipment (refer to section 8). Always close con hes/vapour/spray. Use only in well-ventilated areas. entire working area must be ventilated by technical r processes have priority over personal protection equi s for fire prevention. ygiene Ind wash it before reuse.	tainers tightly afte If local exhaust means. Technical
	Precautions for s When using do not ea Protective meas All work processes m Skin contact Eye con the removal of produ- ventilation is not pos measures and the ap Measures to preve The product is not: Fire class : Shake well befor Advices on gene P362+P364 - Take o Conditions for sa	g and storage safe handling at, drink, smoke, sniff. sures nust always be designed so natct Wear personal protecti uct. Do not breathe gas/fum ssible or not sufficient, the e oplication of suitable work p ent fire Flammable Usual measures re use nein eral occupational hy off contaminated clothing an afe storage, includin	tion equipment (refer to section 8). Always close con hes/vapour/spray. Use only in well-ventilated areas. entire working area must be ventilated by technical n processes have priority over personal protection equi s for fire prevention. ygiene Ind wash it before reuse. Ing any incompatibilities	tainers tightly afte If local exhaust means. Technical
7.1	Precautions for a When using do not ea Protective meas All work processes m Skin contact Eye con the removal of produ- ventilation is not pos measures and the ap Measures to preve The product is not: Fire class : Shake well befor Advices on gene P362+P364 - Take o Conditions for sa Requirements f	g and storage safe handling at, drink, smoke, sniff. sures nust always be designed so itact Wear personal protecti uct. Do not breathe gas/fum ssible or not sufficient, the e opplication of suitable work p ent fire Flammable Usual measures re use nein eral occupational hy off contaminated clothing an afe storage, includin for storage rooms an	tion equipment (refer to section 8). Always close con hes/vapour/spray. Use only in well-ventilated areas. entire working area must be ventilated by technical r processes have priority over personal protection equi s for fire prevention. ygiene nd wash it before reuse. ng any incompatibilities nd vessels n original container. The floor should be leak tight, j	itainers tightly aft If local exhaust means. Technical ipment.
7.1	Precautions for a When using do not ea Protective meas All work processes m Skin contact Eye con the removal of produ- ventilation is not pos measures and the ap Measures to preve The product is not: Fire class : Shake well befor Advices on gene P362+P364 - Take o Conditions for sa Requirements f	g and storage safe handling at, drink, smoke, sniff. sures nust always be designed so itact Wear personal protecti uct. Do not breathe gas/fum ssible or not sufficient, the e oplication of suitable work p ent fire Flammable Usual measures re use nein eral occupational hy off contaminated clothing an afe storage, includin for storage rooms an ly closed. Keep/Store only in dequate ventilation of the s	tion equipment (refer to section 8). Always close con hes/vapour/spray. Use only in well-ventilated areas. entire working area must be ventilated by technical r processes have priority over personal protection equi s for fire prevention. ygiene nd wash it before reuse. ng any incompatibilities nd vessels n original container. The floor should be leak tight, j	itainers tightly aft If local exhaust means. Technical ipment.

Protect from frost nein

Recommended storage temperature 5 - 20 °C

Further information on storage conditions

Keep locked up and out of reach of children. Keep container tightly closed in a cool, well-ventilated place.

7.3 Specific end use(s)

Recommendation

Observe technical data sheet. Observe instructions for use.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

None

8.2 Exposure controls

Appropriate engineering controls

Ensure adequate ventilation of the storage area.

Technical measures and the application of suitable work processes have priority over personal protection equipment.

Personal protection equipment

Eye/face protection

Revisio Print da	n date : ate :	30.01.2019 13.02.2019			Version (Rev	ision) :	4.0.2 (4.0.1)
	Suitable eye prot Eye glasses with s		n aogales				
	Required proper	•	in goggies				
	DIN EN 166	lies					
	Skin protection	n					
	Hand protection						
	Suitable gloves		5				
	Suitable materi 0,7mm, >8h;	al : NBR (Nit	rile rubber), 0,4m	m, >8h; Butyl c	aoutchouc, 0,5mm,	>8h; FKM (fluoro rubber),
	Recommended comparable article	-		KCL GmbH/Eic	nenzell-Germany; A	nsell/Yarra (City-Australia Or
	•		•	ck leak tightnes	s/impermeability pr	ior to use.	
	of the protective of concentration and resistance to cher Barrier creams are	ploves resistand quantity of nicals of the	nt to chemicals m hazardous substar protective gloves	ust be chosen a nces. For specia mentioned abov	aterial must be take as a function of the l purposes, it is reco re together with the	specific wor	to check the
	Body protection	_					
	Protective clothing	•	• Chemical prote	ction clothing (hemical resistant s	afety chooc	
	Required prope Protective clothing footwear : DIN EN	rties : alkali g. : DIN EN I	resistant.	5			
	Remark : Barrier	creams are	not substitutes for	body protectio	n.		
	Respiratory pr	otection					
	Usually no persona aerosol or mist forr				protection necessa	ry at: insuffi	cient ventilation
	Suitable respirat Combination filter		••	e mask (DIN EN	N 140) ABEK-P1		
	Remark						
					ding four digit test g respiratory protec		serve the wear time tus (BGR 190).
	General health	and safe	ty measures				
	Minimum standard fr When using do not e skin, eyes and clothe use. Wash hands be gas/fumes/vapour/s	eat, drink, sm es. Remove o fore breaks a	oke, sniff. Keep a ontaminated, satu	way from food, arated clothing i	drink and animal fe	eding stuffs contaminate	a. Avoid contact with a clothing prior to a
ECT	ION 9: Physical	and cher	nical propert	ies			
.1 I	Information on	hasic nhy	sical and che	mical prop	erties		
			Sical and circ				
		Liquid					
		light yellow					
	Odour :	Chlorine					
	Safety relevant	basis da	ta				
	Melting point/meltir		(1013 hPa)	approx.	-11	°C	
	Initial boiling point a range :	and boiling	(1013 hPa)	approx.	102	°C	
	Decomposition temp	erature :	(1013 hPa)		not determined		
	Flash point :		· · · · · · · · · · · · · · · · · · ·		not applicable		closed cup
	-						(EN ISO 3679)
	Ignition temperature				not determined		

according to Regulation (EC) No. 1907/2006 (REACH)

Revisio

Safety Data Sheet

Sustaining combustion

Lower explosion limit :

Trade name : Lithofin MN Outdoor Cleaner

(EN/D)

UN Test L2:Sustained

combustibility test

No

not determined

Safety Data Shee according to Regulati		7/2006 (REAC	:H)		(EN / D)
Trade name : Revision date : Print date :	Lithofin MN 30.01.2019 13.02.2019	N Outdoor	Cleaner Version (Rev	ision) :	4.0.2 (4.0.1)
Upper explosion limit			not determined	LD-	
Vapour pressure : Density :	(50 ℃) (20 ℃)	<	3000 1,11	hPa g/cm ³	Pyknometer (DIN EN ISO 2811-1)
Solvent separation te	st: (20 ℃)	<	3	%	Test L1: Solvent separation test (UN)
Water solubility pH : log P O/W :	(20 ℃)	approx.	miscible 13 not determined		DIN 19268 (Mixture) ISO cup 4 mm
Flow time : Odour threshold : Vapourisation rate : VOC content-EC	(23 ℃)	< approx.	15 not determined not determined 0	s Wt %	(DIN EN ISO 2431)
VOC-France			not applicable		Décret no 2011-321 du 23 mars 2011

(* VOC-EC = "Volatile organic compound (VOC)" means any organic compound having an initial boiling point less than or equal to 250°C measured at a standard pressure of 101,3 kPa; VOC-value in g/L)

9.2 Other information

None

SECTION 10: Stability and reactivity

10.1 Reactivity

No specific test data related to reactivity available for this product or its ingredients.

10.2 Chemical stability

The product is chemically stable under recommended conditions of storage, use and temperature.

10.3 Possibility of hazardous reactions

No hazardous reaction when handled and stored according to provisions.

10.4 Conditions to avoid

Stable under recommended storage and handling conditions.

10.5 Incompatible materials

The product develops hydrogen in an aqueous solution in contact with metals.

10.6 Hazardous decomposition products

Does not decompose when used for intended uses.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute effects

There are no data available on the preparation/mixture itself. Data apply to the main component.

Acute oral toxicity Parameter ·

Parameter :	LD50 (SODIUM CARBONATE ; CAS No. : 497-19-8)
Exposure route :	Oral
Species :	Rat
Effective dose :	2800 mg/kg
Parameter :	LD50 (COCO DIMETHYLAMINE OXIDE ; CAS No. : 308062-28-4)
Exposure route :	Oral
Species :	Rat
Effective dose :	> 300 - 2000 mg/kg
Method :	OECD 401
Parameter :	LD50 (SODIUM HYPOCHLORITE ; CAS No. : 7681-52-9)
Exposure route :	Oral
Species :	Rat

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rade name :	Lithof	in MN Outdoor Cleaner	
vision date :	30.01.2019	Version (Revision) :	4.0.2 (4.0.1
nt date :	13.02.2019		
Effective dose : Method :		> 1100 mg/kg OECD 401	
Acute dermal toxi	city.	0ECD 401	
Parameter :	city		
Exposure route :		LD50 (COCO DIMETHYLAMINE OXIDE ; CAS No. : 308062-28-4) Dermal	
Species :		Rat	
Effective dose :		> 5000 mg/kg	
Method :		OECD 402	
Parameter :		LD50 (SODIUM HYPOCHLORITE ; CAS No. : 7681-52-9)	
Exposure route :			
Species :		Rabbit	
Effective dose :		> 20000	
Method :		OECD 402	
Parameter :		LD50 (SODIUM CARBONATE ; CAS No. : 497-19-8)	
Exposure route :		Dermal	
Species :		Rabbit	
Effective dose :		> 2000 mg/kg	
Acute inhalation t	oxicity		
Parameter :	-	LC50 (SODIUM CARBONATE ; CAS No. : 497-19-8)	
Exposure route :		Inhalation	
Species :		Rat	
Effective dose :		2,3 mg/l	
Method :		OECD 403	
Parameter :		LC50 (SODIUM HYPOCHLORITE ; CAS No. : 7681-52-9)	
Exposure route :		Inhalation	
Species :		Rat	
Effective dose :		> 10,5 mg/l	
Exposure time :		1 h	
Method :		OECD 403	
Specific sympto	oms in anin	nal studies	
There are no data av	ailable on the	preparation/mixture itself.	
Irritant and cor	rosive effe	cts	
Assessment/class	ification		
Causes serious eye		es severe hurns.	
Sensitisation	aamager eaae		
	vailable on the	preparation/mixture itself.	
		•	
-		ubacute, subchronic, chronic)	
		preparation/mixture itself.	
CMR effects (ca	rcinogenic	ity, mutagenicity and toxicity for reproductio	n)
Carcinogenicity			
There are no data a	available on the	e preparation/mixture itself.	
Other informatio			
No indication of h	uman carcinoge	enicity.	
Germ cell mutage	-		
	available on the	e preparation/mixture itself. mutagenicity exist	
Reproductive toxi	-		
-	-	preparation/mixture itself.	
Other informatio	n		
		ctive toxicity exist.	
Overall Assessmer	nt on CMR pro	operties	
The ingredients in t	his mixture do	not meet the criteria for classification as CMR category 1A or 1B	according to CLP
STOT-single ex	posure		
See SECTION 2.1 (cl			
STOT-repeated			
- r			
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according to Regulat	ion (EC) No. 1907/2006 (REACH)
Frade name :	Lithofin MN Outdoor Cleaner
Revision date :	30.01.2019 Version (Revision) : 4.0.2 (4.0.1)
rint date :	13.02.2019
See SECTION 2.1 (cl	assification).
Aspiration haza	rd
See SECTION 2.1 (cl	
SECTION 12: Ecologi	
2.1 Toxicity	
Data apply to the mai	n component. There are no data available on the preparation/mixture itself.
Aquatic toxicity	1
Chronic (long-terr	
Parameter :	NOEC (SODIUM HYPOCHLORITE ; CAS No. : 7681-52-9)
Species :	Fish
Effective dose :	0,04 mg/l
Exposure time :	96 h
Acute (short-term) algae toxicity
Parameter :	EC50 (COCO DIMETHYLAMINE OXIDE ; CAS No. : 308062-28-4)
Species :	Fish
Effective dose :	> 1 - 10 mg/l
Exposure time :	96 h e_{COCO} DIMETHYLAMINE OVIDE 1 CAS No. 1 200062 28 4)
Parameter : Species :	EC50(COCO DIMETHYLAMINE OXIDE;CAS No.:308062-28-4) Daphnia
Effective dose :	> 1 - 10 mg/l
Exposure time :	48 h
Method :	OECD 202
Parameter :	EC50 (SODIUM HYPOCHLORITE ; CAS No. : 7681-52-9)
Species :	Daphnia
Effective dose :	0,141 mg/l
Exposure time :	48 h
Parameter :	EC50 (SODIUM CARBONATE ; CAS No. : 497-19-8)
Species :	Daphnia
Effective dose :	200 - 227 mg/l
Exposure time : Chronic (long-terr	48 h
Parameter :	NOEC (SODIUM HYPOCHLORITE ; CAS No. : 7681-52-9)
Species :	Algae
Effective dose :	0,0021 mg/l
Exposure time :	7 d
Bacteria toxicity	
Parameter :	EC50 (SODIUM HYDROXIDE ; CAS No. : 1310-73-2)
Species :	Bacteria toxicity
Effective dose :	22 mg/l
Exposure time :	
Parameter :	EC50 (SODIUM HYPOCHLORITE, SOLUTION CL ACTIVE ; CAS No. : 7681-52-9)
Species :	Bacteria toxicity
Effective dose :	> 3 mg/l 3 h
Exposure time : Parameter :	3 n EC50(COCO DIMETHYLAMINE OXIDE;CAS No.:308062-28-4)
Species :	Bacteria toxicity
Effective dose :	190 mg/l
Exposure time :	16 h
Method :	DIN 38412 / part 8

Observe local regulations concerning effluent treatment. Before discharge into sewage plants the product normally needs to be neutralised.

12.2 Persistence and degradability

There are no data available on the preparation/mixture itself.

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH)

Lithofin MN Outdoor Cleaner Trade name : Revision date : 30 01 2019 Version (Revision) : Print date : 13.02.2019 **Biodegradation** The surfactant contained in this mixture complies with the biodegradability criteria as laid down in Regulation (EC) No. 648/2004 on detergents. Data to support this assertion are held at the disposal of the competent authorities of the Member States and will be made available to them, at their direct request or at the request of a detergent

12.3 Bioaccumulative potential

There are no data available on the preparation/mixture itself.

12.4 Mobility in soil

manufacturer

There are no data available on the preparation/mixture itself.

12.5 Results of PBT and vPvB assessment

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.

12.6 Other adverse effects

There are no data available on the preparation/mixture itself.

12.7 Additional ecotoxicological information

Additional information

The product has not been tested.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Dispose according to legislation.

Waste disposal according to directive 2008/98/EC, covering waste and dangerous waste.

Product/Packaging disposal

Waste codes/waste designations according to EWC/AVV

Waste code product

Waste code (EWC/AVV): 16 03 03*

Waste code packaging Waste code packaging: 15 01 10*

Waste treatment options

29/35 - Do not empty into drains; dispose of this material and its container in a safe way. Delivery to an approved waste disposal company.

Appropriate disposal / Package

Contaminated packages must be completely emptied and can be re-used following proper cleaning. Packing which cannot be properly cleaned must be disposed of.

13.2 Additional information

These codes are assigned based upon the most common uses for this material and may not reflect contaminants resulting from actual use.

SECTION 14: Transport information

14.1 UN number

UN 1719

14.2 UN proper shipping name

Land transport (ADR/RID) CAUSTIC ALKALI LIQUID, N.O.S. (SODIUM HYPOCHLORITE SODIUM HYDROXIDE) Sea transport (IMDG) CAUSTIC ALKALI LIQUID, N.O.S. (SODIUM HYPOCHLORITE · SODIUM HYDROXIDE) Air transport (ICAO-TI / IATA-DGR) CAUSTIC ALKALI LIQUID, N.O.S. (SODIUM HYPOCHLORITE SODIUM HYDROXIDE) 14.3 Transport hazard class(es)

Land transport (ADR/RID)

		•	•	
Class(es)	:			8
Classifica	itior	n code	:	C5

4.0.2 (4.0.1)

Safety Data She				(EN / D
according to Regulat	ion (EC) No.	1907/2006 (REACH)	
Frade name :	Lithofin	MN Outd	loor Cleaner	
Revision date :	30.01.2019		Version (Revision) :	4.0.2 (4.0.1)
Print date :	13.02.2019			
Hazard identificatio No.) :	on number (Kemi	er 80		
Tunnel restriction c	ode :	E		
Special provisions :		LQ 1 · E 2		
Hazard label(s) :		8 / N		
Sea transport (IMD	G)			
Class(es) :		8		
EmS-No. :		F-A / <u>S-B</u>		
Special provisions :		•	1DG-Code segregation group 8 - Hypochlori	ites
Hazard label(s) :		8 / N		
Air transport (ICAO	-TI / IATA-DGR	•		
Class(es) :		8		
Special provisions :		E 2		
Hazard label(s) :		8		
4.4 Packing group				
not required.				
ECTION 15: Regulat	ory informat	ion		
5.1 Safety, health an mixture	d environme	ental regulation	ons/legislation specific for t	he substance o
EU legislation				
	o 1907/2006 conc	erning the Registra	ation, Evaluation, Authorisation and Rest	triction of Chemicals
			ing and packaging of substances and mix	xtures (clp)
EN 2:1992 (DIN EN 2		Parliament and or i	the Council on waste (2000/532/EC)	
Authorisations and	,	on use		
Restrictions on us	-			
		annex XVII. no. : N	None, if handled according to order.	
Restrictions of oc	0			
Observe restriction Observe employme	is to employment		ling to the 'juvenile work protection guid Protection Directive (92/85/EEC) for exp	
mothers.	(EII)			
Other regulations		ants regulation)		
Regulation (EC) No. Directive 98/24/FC			the health and safety of workers from th	e risks related to
			ive 2006/15/EC, Directive 2009/161/EC)	
REGULATION (EU)	No 649/2012 OF T	HE EUROPEAN PA	ARLIAMENT AND OF THE COUNCIL conce	erning the export and
import of hazardous				
• •		-	se of explosives precursors: Not applicat	
	io. 1005/2009 d	on substances th	hat lead to the depletion of the ozon	e layer
Not applicable.	uing substances th	at doplate the cre		
			ne laver -	
Regulation (FC) N	5	•	one layer: -	
Regulation (EC) N Not applicable.	5	•	one layer: -	

Name of the persistent organic pollutant (POP): -

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Frade name :	Lithofin MN Outdoor Cleaner	
Revision date : Print date :	30.01.2019 Version (Revision 13.02.2019 13.02.2019	h): 4.0.2 (4.0.1)
National regulatio		
National regulatio	ns any national regulations!	
Germany:		
	sessment for activities involving hazardous substances)	
TRGS 500 (Protectiv TRGS 510 (Storage	ve measures) of hazardous substances in non-stationary containers)	
TRGS 555 (Working	g instruction and information for workers)	
Water hazard cla		
	ant hazardous to water) Classification according to AwSV	
	s, restrictions and prohibition regulations	
Switzerland VOCV-Regulati	ion	
	content (Switzerland) : < 3 Wt % according to VOCV	
5.2 Chemical safety		
-	nixture a chemical safety assessment has not been carried out.	
ECTION 16: Other	information	
6.1 Indication of ch	nanges prage - Storage class	
6.2 Abbreviations a		
	-	
ABC-Pulver	Extinguishing powder for fire class A, B and C	
ABEK-P1	combination filter	ana ana la Caada hu Daad
ADR	European Agreement concerning the International Carriage of Da	angerous Goods by Road
AVV AWSV	Abfallverzeichnis-Verordnung (Waste Regulation) Ordinance on facilities for the handling of substances hazardous	to water
BGR	BG rules and regulations	
ca.	circa	
CAS	Chemical Abstract Service	
CLP	classification, labelling and packaging	
CMR		
	Carcinogen, mutagen or toxic for reproduction	
	Carcinogen, mutagen or toxic for reproduction German Institute for Standardization	
DIN DNEL		
DIN DNEL	German Institute for Standardization	
DIN DNEL	German Institute for Standardization Derived No-Effect Level	
din Dnel Eak/EWC/EAC/CWR	German Institute for Standardization Derived No-Effect Level R/CER European Waste Catalogue	
DIN DNEL EAK/EWC/EAC/CWR EC50 / CE50	German Institute for Standardization Derived No-Effect Level R/CER European Waste Catalogue Effective Concentration 50%	
DIN DNEL EAK/EWC/EAC/CWR EC50 / CE50 EG / EC / CE	German Institute for Standardization Derived No-Effect Level X/CER European Waste Catalogue Effective Concentration 50% European Community	
DIN DNEL EAK/EWC/EAC/CWR EC50 / CE50 EG / EC / CE EN	German Institute for Standardization Derived No-Effect Level R/CER European Waste Catalogue Effective Concentration 50% European Community European Standard	
DIN DNEL EAK/EWC/EAC/CWR EC50 / CE50 EG / EC / CE EN EUH	German Institute for Standardization Derived No-Effect Level K/CER European Waste Catalogue Effective Concentration 50% European Community European Standard supplemental hazard statement of the european union	
DIN DNEL EAK/EWC/EAC/CWR EC50 / CE50 EG / EC / CE EN EUH GefStoffV	German Institute for Standardization Derived No-Effect Level X/CER European Waste Catalogue Effective Concentration 50% European Community European Standard supplemental hazard statement of the european union Gefahrstoffverordnung (Hazardous Substances Ordinance)	
DIN DNEL EAK/EWC/EAC/CWR EC50 / CE50 EG / EC / CE EN EUH GefStoffV GHS / SGH	German Institute for Standardization Derived No-Effect Level R/CER European Waste Catalogue Effective Concentration 50% European Community European Standard supplemental hazard statement of the european union Gefahrstoffverordnung (Hazardous Substances Ordinance) Globally Harmonised System	tions
DIN DNEL EAK/EWC/EAC/CWR EC50 / CE50 EG / EC / CE EN EUH GefStoffV GHS / SGH H-Sätze	German Institute for Standardization Derived No-Effect Level K/CER European Waste Catalogue Effective Concentration 50% European Community European Standard supplemental hazard statement of the european union Gefahrstoffverordnung (Hazardous Substances Ordinance) Globally Harmonised System hazard statements	
DIN DNEL EAK/EWC/EAC/CWR EC50 / CE50 EG / EC / CE EN EUH GefStoffV GHS / SGH H-Sätze IATA-DGR	German Institute for Standardization Derived No-Effect Level K/CER European Waste Catalogue Effective Concentration 50% European Community European Standard supplemental hazard statement of the european union Gefahrstoffverordnung (Hazardous Substances Ordinance) Globally Harmonised System hazard statements International Air Transport Association-Dangerous Goods Regular International Code for the Construction and Equipment of Ships of	
DIN DNEL EAK/EWC/EAC/CWR EC50 / CE50 EG / EC / CE EN EUH GefStoffV GHS / SGH H-Sätze IATA-DGR IBC-Code	German Institute for Standardization Derived No-Effect Level R/CER European Waste Catalogue Effective Concentration 50% European Community European Standard supplemental hazard statement of the european union Gefahrstoffverordnung (Hazardous Substances Ordinance) Globally Harmonised System hazard statements International Air Transport Association-Dangerous Goods Regular International Code for the Construction and Equipment of Ships of Chemicals in Bulk	
DIN DNEL EAK/EWC/EAC/CWR EC50 / CE50 EG / EC / CE EN EUH GefStoffV GHS / SGH H-Sätze IATA-DGR IBC-Code ICAO-TI	German Institute for Standardization Derived No-Effect Level R/CER European Waste Catalogue Effective Concentration 50% European Community European Standard supplemental hazard statement of the european union Gefahrstoffverordnung (Hazardous Substances Ordinance) Globally Harmonised System hazard statements International Air Transport Association-Dangerous Goods Regular International Code for the Construction and Equipment of Ships of Chemicals in Bulk International Civil Aviation Organization-Technical Instructions	
DIN DNEL EAK/EWC/EAC/CWR EC50 / CE50 EG / EC / CE EN EUH GefStoffV GHS / SGH H-Sätze IATA-DGR IBC-Code ICAO-TI IMDG-Code	German Institute for Standardization Derived No-Effect Level K/CER European Waste Catalogue Effective Concentration 50% European Community European Standard supplemental hazard statement of the european union Gefahrstoffverordnung (Hazardous Substances Ordinance) Globally Harmonised System hazard statements International Air Transport Association-Dangerous Goods Regular International Code for the Construction and Equipment of Ships of Chemicals in Bulk International Civil Aviation Organization-Technical Instructions International Maritime Dangerous Goods Code	
DIN DNEL EAK/EWC/EAC/CWR EC50 / CE50 EG / EC / CE EN EUH GefStoffV GHS / SGH H-Sätze IATA-DGR IBC-Code ICAO-TI IMDG-Code ISO	German Institute for Standardization Derived No-Effect Level K/CER European Waste Catalogue Effective Concentration 50% European Community European Standard supplemental hazard statement of the european union Gefahrstoffverordnung (Hazardous Substances Ordinance) Globally Harmonised System hazard statements International Air Transport Association-Dangerous Goods Regular International Code for the Construction and Equipment of Ships of Chemicals in Bulk International Civil Aviation Organization-Technical Instructions International Maritime Dangerous Goods Code International Organization for Standardization	
DIN DNEL EAK/EWC/EAC/CWR EC50 / CE50 EG / EC / CE EN EUH GefStoffV GHS / SGH H-Sätze IATA-DGR IBC-Code ICAO-TI IMDG-Code ISO LC50 / CL50	German Institute for Standardization Derived No-Effect Level K/CER European Waste Catalogue Effective Concentration 50% European Community European Standard supplemental hazard statement of the european union Gefahrstoffverordnung (Hazardous Substances Ordinance) Globally Harmonised System hazard statements International Air Transport Association-Dangerous Goods Regular International Code for the Construction and Equipment of Ships of Chemicals in Bulk International Civil Aviation Organization-Technical Instructions International Maritime Dangerous Goods Code International Organization for Standardization Lethal Concentration 50%	

Safety Data She	et ion (EC) No. 1907/2006 (REACH)	(EN / D
Trade name : Revision date : Print date :	Lithofin MN Outdoor Cleaner 30.01.2019 Version (Revision) : 13.02.2019	4.0.2 (4.0.1)
NOAEL (DSET)	No observed adverse effect level	
NOEC (CSEO)	No observed effect concentration	
Nr.	Number	
OECD	Organisation for Economic Co-operation and Development	
PBT	persistent, bioaccumulative and toxic	
pH	Potentia hydrogenii	
•		
PIC	prior informed consent Predicted No-Effect Concentration	
PNEC		
POP	Persistent organic pollutants	
P-Sätze	precautionary statements	
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals	
RID	International Carriage of Dangerous Goods by Rail	
STEL / LECT	short-term exposure limit	
TRGS	Technische Regeln für Gefahrstoffe (Technical Rules for Hazardous Substar	ices)
TWA / MPT	time-weighted average	
UN/ONU	United Nations	
VOC/COV/VOS/LZO	Volatile Organic Compound	
VOCV	Ordinance on the Incentive Tax on Volatile Organic Compounds (SR 814.01	8)
vPvB	very persistent and very bioaccumulative	
WGK	Wassergefährdungsklasse (Water hazard class)	
Guidance on informati abbreviations). I.6.3 Key literature re Regulation (EC) No 12 ECHA: Registered sub REACH Art. 59: -Cand	acronyms, see table at http://abbrev.esdscom.eu. For abbreviations and acrony on requirements and chemical safety assessment, chapter R.20 (Table of terms ferences and sources for data 72/2008 (GHS) stances (https://echa.europa.eu/information-on-chemicals/registered-substance idate List of substances of very high concern for Authorisation ropa.eu/candidate-list-table)	and
Classification for No 1272/2008 [mixtures and used evaluation method according to reg	ulation (EC)
Hazard statements for	health hazards : Calculation method. environmental hazards : Calculation method.	
6.5 Relevant H- and	EUH-phrases (Number and full text)	
H290	May be corrosive to metals.	
H302	Harmful if swallowed.	
H314 H315	Causes severe skin burns and eye damage. Causes skin irritation.	
H318	Causes serious eye damage.	
H319	Causes serious eye irritation.	
H400	Very toxic to aquatic life.	
H411	Toxic to aquatic life with long lasting effects.	
6.6 Training advice		
None		
L6.7 Additional inform	nation	
The above information describ	es exclusively the safety requirements of the product and is based on our prese	ent-dav
nowledge. The information is	bes exclusively the safety requirements of the product and is based on our prese s intended to give you advice about the safe handling of the product named in t , transport and disposal. The information cannot be transferred to other produc	his safety data

		tdoor Cleaner	
Revision date :	30.01.2019	Version (Revision) :	4.0.2 (4.0.1
Print date :	13.02.2019		