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

1.1. Product identifier

Lithodur

UFI: XD10-80TD-T00N-EX7F

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

Use of the substance/mixture

Product for professional cleaning and maintenance

1.3. Details of the supplier of the safety data sheet

Company name:	Johannes Kiehl KG
Street:	Robert-Bosch-Str. 9
Place:	D-85235 Odelzhausen
Telephone:	+49 8134 9305-0 Telefax: +49 8134 6466
E-mail:	info@kiehl-group.com
Contact person:	Laboratory department
Internet:	www.kiehl-group.com
Responsible Department:	Notrufnummer für deutsch- und englischsprachige Länder: +49/89/19240 Vergiftungsinformationszentrale (VIZ) Österreich: +43 1 406 43 43 Nationale Notrufnummer für die Schweiz (Tox-Zentrum Zürich): 145 Numéro d'urgence France: INRS: +33 (0) 1 45 42 59 59 Numero d' emergenza Italia: Centro Antiveleni - 20162 Milano: 02/66101029 ETTSZ /Egészségügyi Toxikológiai Tájékoztató Szolgálat/, 1096 Budapest, Nagyvárad tér 2. Ügyeleti telefonszám: +36 80 201-199 Eesti: Häirekeskuse number: 112 / Mürgistusteabekeskuse number: 16662 Emergency telephone number for all other countries: +49/8134/9305-169

KIEHL Austria GmbH	Perfektastr. 57;	A-1230 Wien	Tel. +43 (0) 1 / 604 99 93
KIEHL FRANCE SAS	5, rue de Londres;	F-67670 Mommenheim	Tél. +33 (0) 3.88.59.52.25
KIEHL Italia s.r.l.	Via San Rocco, 101;	I-16036 Recco (GE)	Tel. +39 / 0185 730 008
KIEHL Schweiz AG	St. Dionys-Str. 33;	CH-8645 Jona	Tel. +41 (0) 55 / 254 74 74
KIEHL Hungary Kft.	Felsöipari körút 3/ D	HU-2142 Nagytarcsa	Tel. +36 (0) 1 / 348-08 41
KIEHL Middle East LLC	A8-LIU 48/49 - KIZAD	Abu Dhabi, U.A.E.	Tel. +971 2 550 33 96

1.4. Emergency telephone number:

+49/89/19240 (germanophone and anglophone)
For Belgium: +32 70 245 245 (free, 24/7) or +32 2 264 96 30 (normal rate)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Regulation (EC) No 1272/2008

Skin Corr. 1B; H314
Aquatic Chronic 3; H412

Full text of hazard statements: see SECTION 16.

2.2. Label elements

Regulation (EC) No 1272/2008

Hazard components for labelling

Fluorosilicic Acid / PEG-2 Oleamine

Signal word: Danger

Pictograms:



Hazard statements

H314	Causes severe skin burns and eye damage.
H412	Harmful to aquatic life with long lasting effects.

Precautionary statements

P280	Wear protective gloves/protective clothing/eye protection/face protection.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P308+P313	IF exposed or concerned: Get medical advice/attention.

2.3. Other hazards

None known.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Chemical characterization

waxes, emulsifiers, hexafluorosilicates, additives

Relevant ingredients

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	Classification (Regulation (EC) No 1272/2008)			
16961-83-4	Fluorosilicic acid ... %			10 - < 15 %
	241-034-8	009-011-00-5	01-2119488906-19	
	Skin Corr. 1B; H314			
25307-17-9	Oleylamine, ethoxylated			1 - < 5 %
	246-807-3		01-2119510876-35	
	Acute Tox. 4, Skin Corr. 1B, Aquatic Acute 1, Aquatic Chronic 1; H302 H314 H400 H410			

Full text of H and EUH statements: see section 16.

Specific Conc. Limits, M-factors and ATE

CAS No	EC No	Chemical name	Quantity
	Specific Conc. Limits, M-factors and ATE		
25307-17-9	246-807-3	Oleylamine, ethoxylated	1 - < 5 %
	oral: LD50 = 1260 mg/kg Aquatic Acute 1; H400: M=10 Aquatic Chronic 1; H410: M=1		

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

Avoid contact with skin and eyes.

After inhalation

not hazardous by inhalation

After contact with skin

Wash off immediately with soap and plenty of water. Take off all contaminated clothing immediately.

After contact with eyes

Rinse thoroughly with plenty of water, also under the eyelids.
If eye irritation persists, consult a specialist.

After ingestion

Clean mouth with water and drink afterwards plenty of water. Prevent vomiting if possible.
Consult a physician.

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

This information is not available.

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

Show this safety data sheet to the doctor in attendance.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

Any extinguishing means and measures are acceptable.

5.2. Special hazards arising from the substance or mixture

This information is not available.

5.3. Advice for firefighters

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. The product itself does not burn.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General advice

Avoid contact with skin, eyes and clothing.

For non-emergency personnel

Use personal protection equipment.

For emergency responders

Use personal protection equipment.

6.2. Environmental precautions

Do not flush into surface water.

6.3. Methods and material for containment and cleaning up

For containment

Stop leak if safe to do so. Cover drains.
Prevent spread over a wide area (e.g. by containment or oil barriers).

For cleaning up

Wipe up with absorbent material (e.g. cloth, fleece).
Clean contaminated articles and floor according to the environmental legislation.

Other information

Never return spills in original containers for re-use.

6.4. Reference to other sections

Refer to protective measures listed in sections 7 and 8.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling

Avoid contact with skin and eyes.

Advice on protection against fire and explosion

No special protective measures against fire required.

Advice on general occupational hygiene

Wash hands before breaks and at the end of workday.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Store at room temperature in the original container. Store in a place accessible by authorized persons only.

Hints on joint storage

Keep away from food, drink and animal feedingstuffs.

Further information on storage conditions

Keep container tightly closed.
Never return unused material to storage receptacle.

7.3. Specific end use(s)

This information is not available.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure limits (EH40)

CAS No	Substance	ppm	mg/m³	fibres/ml	Category	Origin
16984-48-8	Fluoride (inorganic as F)	-	2.5		TWA (8 h)	WEL

8.2. Exposure controls

Appropriate engineering controls

Not required.

Individual protection measures, such as personal protective equipment

Eye/face protection

Safety glasses with side-shields conforming to EN166

Hand protection

Protective gloves
Recommendation: Nature latex gloves with parts of polychloropren latex and a coating thickness of 0.6 mm which protect at least 8 hours (corresponds to the permeability level 6 of the European norm DIN/EN 374) and provide a resistance to swelling of < 15%.

Skin protection

Wear suitable protective clothing.

Respiratory protection

Not required

Environmental exposure controls

Handle in accordance with good industrial hygiene and safety practice.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state:	liquid
Colour:	off-white-brown
Odour:	mild

	Test method
Melting point/freezing point:	<0 °C

Boiling point or initial boiling point and boiling range:	>98 °C	
Flammability:	not applicable	
Lower explosion limits:	not applicable	
Upper explosion limits:	not applicable	
Flash point:	>100 °C	
Auto-ignition temperature:	>300 °C	
Decomposition temperature:	not determined	
pH-Value (at 20 °C):	approx. 2,0	K-QP1012C
Viscosity / kinematic:	not determined	
Water solubility: (at 20 °C)	completely miscible	

Solubility in other solvents

not determined

Partition coefficient n-octanol/water:	not determined	
Vapour pressure:	not determined	
Density (at 20 °C):	1,11 g/cm³	K-QP1012E
Relative vapour density:	not determined	
Particle characteristics:	not applicable	

9.2. Other information

Information with regard to physical hazard classes

Explosive properties

Not explosive

Self-ignition temperature

Solid:	not applicable
Gas:	not applicable

Oxidizing properties

Not relevant

Other safety characteristics

Evaporation rate:	not determined
Solid content:	not determined
Sublimation point:	not applicable
Softening point:	not applicable
Pour point:	not applicable
Viscosity / dynamic:	not determined
Flow time:	not determined

SECTION 10: Stability and reactivity

10.1. Reactivity

This information is not available.

10.2. Chemical stability

This information is not available.

10.3. Possibility of hazardous reactions

This information is not available.

10.4. Conditions to avoid

Do not expose to temperatures above 35 °C.
Protect from frost.

10.5. Incompatible materials

alkalis

10.6. Hazardous decomposition products

No decomposition if stored and applied as directed.

Further information

Do not mix with other detergents or chemicals.

SECTION 11: Toxicological information

11.1. Information on hazard classes

Acute toxicity

Based on available data, the classification criteria are not met.

ATEmix calculated

ATE (oral) > 2000 mg/kg; ATE (dermal) > 2000 mg/kg; ATE (inhalation vapour) > 20 mg/l; ATE (inhalation dust/mist) > 5 mg/l

CAS No	Chemical name				
	Exposure route	Dose	Species	Source	Method
25307-17-9	Oleylamine, ethoxylated				
	oral	LD50 1260 mg/kg	Rat		

Irritation and corrosivity

Skin corrosion/irritation / Serious eye damage/eye irritation: Causes severe skin burns and eye damage.

Sensitising effects

Based on available data, the classification criteria are not met.

Carcinogenic/mutagenic/toxic effects for reproduction

Germ cell mutagenicity: Based on available data, the classification criteria are not met.
Carcinogenicity: Based on available data, the classification criteria are not met.
Reproductive toxicity: Based on available data, the classification criteria are not met.

STOT-single exposure

Based on available data, the classification criteria are not met.

STOT-repeated exposure

Based on available data, the classification criteria are not met.

Aspiration hazard

Based on available data, the classification criteria are not met.

Additional information on tests

Classification according to European directive on classification of hazardous preparations 1999/45/EC.

11.2. Information on other hazards

Endocrine disrupting properties

This information is not available.

Further information

Health injuries are not known or expected under normal use.

SECTION 12: Ecological information

12.1. Toxicity

Harmful to aquatic life with long lasting effects.

CAS No	Chemical name						
	Aquatic toxicity	Dose		[h] | [d]	Species	Source	Method
25307-17-9	Oleylamine, ethoxylated						
	Acute algae toxicity	ErC50 mg/l	0,0867	72 h	Pseudokirchneriella subcapitata (green algae)		
	Acute crustacea toxicity	EC50 mg/l	0,043	48 h	Daphnia magna (Big water flea)		

12.2. Persistence and degradability

This information is not available.

12.3. Bioaccumulative potential

This information is not available.

12.4. Mobility in soil

This information is not available.

12.5. Results of PBT and vPvB assessment

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

12.6. Endocrine disrupting properties

This product does not contain a substance that has endocrine disrupting properties with respect to non-target organisms as no components meets the criteria.

12.7. Other adverse effects

This information is not available.

Further information

The organic ingredients can be biodegraded in a sewage plant after neutralization. Chemical Oxygen Demand (COD) 300 mg O2/g.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Disposal recommendations

Container should be emptied thoroughly. Do not pour remains of product in large quantities into the sewage.

List of Wastes Code - residues/unused products

070699 WASTES FROM ORGANIC CHEMICAL PROCESSES; wastes from the MFSU of fats, grease, soaps, detergents, disinfectants and cosmetics; wastes not otherwise specified

List of Wastes Code - used product

070699 WASTES FROM ORGANIC CHEMICAL PROCESSES; wastes from the MFSU of fats, grease, soaps, detergents, disinfectants and cosmetics; wastes not otherwise specified

Contaminated packaging

Return cleaned containers to the company for recycling.

SECTION 14: Transport information

Land transport (ADR/RID)

14.1. UN number or ID number: UN 1778

14.2. UN proper shipping name: FLUOROSILICIC ACID

14.3. Transport hazard class(es): 8

14.4. Packing group: II

Hazard label: 8



Classification code:	C1
Limited quantity:	1 L
Excepted quantity:	E2
Transport category:	2
Hazard No:	80
Tunnel restriction code:	E

Marine transport (IMDG)

14.1. UN number or ID number:	UN 1778
14.2. UN proper shipping name:	FLUOROSILICIC ACID
14.3. Transport hazard class(es):	8
14.4. Packing group:	II
Hazard label:	8



Special Provisions:	-
Limited quantity:	1 L
Excepted quantity:	E2
EmS:	F-A, S-B
Segregation group:	Acids

14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: No

14.6. Special precautions for user

Not required

14.7. Maritime transport in bulk according to IMO instruments

not applicable

SECTION 15: Regulatory information

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

EU regulatory information

Restrictions on use (REACH, annex XVII):

Entry 3, Entry 75

National regulatory information

Water hazard class (D): 2 - obviously hazardous to water

15.2. Chemical safety assessment

Chemical safety assessments for substances in this mixture were not carried out.

SECTION 16: Other information

Changes

This data sheet contains changes from the previous version in section(s): 3 / 6 / 7 / 8 / 12

Abbreviations and acronyms

Acute Tox. 4: Acute toxicity, hazard category 4
Skin Corr. 1B: Skin corrosion, sub-category 1B
Aquatic Acute 1: Hazardous to the aquatic environment, hazard category: Acute 1
Aquatic Chronic 1: Hazardous to the aquatic environment, long-term hazard category: Chronic 1
Aquatic Chronic 3: Hazardous to the aquatic environment, long-term hazard category: Chronic 3
ADR: Accord européen sur le transport des marchandises dangereuses par Route
(European Agreement concerning the International Carriage of Dangerous Goods by Road)
IMDG: International Maritime Code for Dangerous Goods
IATA: International Air Transport Association
GHS: Globally Harmonized System of Classification and Labelling of Chemicals
EINECS: European Inventory of Existing Commercial Chemical Substances
ELINCS: European List of Notified Chemical Substances
CAS: Chemical Abstracts Service
LC50: Lethal concentration, 50%
LD50: Lethal dose, 50%
CLP: Classification, labelling and Packaging
REACH: Registration, Evaluation and Authorization of Chemicals
GHS: Globally Harmonised System of Classification, Labelling and Packaging of Chemicals
UN: United Nations
DNEL: Derived No Effect Level
DMEL: Derived Minimal Effect Level
PNEC: Predicted No Effect Concentration
ATE: Acute toxicity estimate
LL50: Lethal loading, 50%
EL50: Effect loading, 50%
EC50: Effective Concentration 50%
ErC50: Effective Concentration 50%, growth rate
NOEC: No Observed Effect Concentration
BCF: Bio-concentration factor
PBT: persistent, bioaccumulative, toxic
vPvB: very persistent, very bioaccumulative
RID: Regulations concerning the international carriage of dangerous goods by rail
ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
(Accord européen relatif au transport international des marchandises dangereuses par voies de navigation intérieures)
EmS: Emergency Schedules
MFAG: Medical First Aid Guide
MARPOL: International Convention for the Prevention of Marine Pollution from Ships
IBC: Intermediate Bulk Container
SVHC: Substance of Very High Concern

For abbreviations and acronyms, see table at http://abbrev.esdscom.eu

Classification for mixtures and used evaluation method

Classification	Classification procedure
Skin Corr. 1B; H314	Calculation method
Aquatic Chronic 3; H412	Calculation method

Relevant H and EUH statements (number and full text)

H302	Harmful if swallowed.
H314	Causes severe skin burns and eye damage.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.

(The data for the relevant ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)