Safety data sheet according to 1907/2006/EC. Article 31

Printing date 04.09.2018 Version number 5 Revision: 04.09.2018

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

· 1.1 Product identifier

· Trade name: Slate oil

· Article number: 12012, 12013, 12011

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

No further relevant information available.

· Application of the substance / the

Maintenance product mixture

· 1.3 Details of the supplier of the safety data sheet

AKEMI chemisch technische Spezialfabrik GmbH Manufacturer/Supplier:

Laboratory

Tel. +49(0)911-642960 Lechstrasse 28 Fax. +49(0)911-644456 D 90451 Nürnberg e-mail info@akemi.de

· Further information obtainable

from: · 1.4 Emergency telephone

Product Safety Department AKEMI chemisch technische Spezialfabrik GmbH

Tel. +49(0)911-64296-59

Reachable during the following office hours: Monday – Thursday from 07:30 a.m. to 16:30 p.m.

Friday from 07:30 a.m. to 13:30 p.m.

+44 (171) 635 91 91

National Poison Inform. Centre

Medical Toxicology Unit Avalonley Road

London SE14 5ER

SECTION 2: Hazards identification

· 2.1 Classification of the substance or mixture

· Classification according to Regulation (EC) No 1272/2008



number:

GHS02 flame

Flam. Liq. 3 H226 Flammable liquid and vapour.



GHS08 health hazard

STOT RE 2 H373 May cause damage to organs through prolonged or repeated exposure.

May be fatal if swallowed and enters airways. Asp. Tox. 1 H304



GHS09 environment

Aquatic Chronic 2 H411 Toxic to aquatic life with long lasting effects.



Acute Tox. 4

H332 Harmful if inhaled.

STOT SE 3

H335-H336 May cause respiratory irritation. May cause drowsiness or dizziness.

· Response: IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact

lenses, if present and easy to do. Continue rinsing.

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IF INHALED: Remove person to fresh air and keep comfortable for breathing.

Call a POISON CENTER/doctor if you feel unwell.

IF SWALLOWED: Immediately call a POISON CENTER/ doctor. IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. Store in a well-ventilated place. Keep container tightly closed.

Store locked up.

· 2.2 Label elements

Storage:

· Labelling according to Regulation

(EC) No 1272/2008
- Hazard pictograms

The product is classified and labelled according to the CLP regulation.









GHS02 GHS07 GHS08 GHS09

· Signal word

Danger

- Hazard-determining components

of labelling:

Solvent naphtha (petroleum), light arom.

naphtha (petroleum), hydrodesulphurized heavy

• <u>Hazard statements</u> H226 Flammable liquid and vapour.

P101

H332 Harmful if inhaled.

H335-H336 May cause respiratory irritation. May cause drowsiness or dizziness.
H373 May cause damage to organs through prolonged or repeated

exposure.

H304 May be fatal if swallowed and enters airways.
H411 Toxic to aquatic life with long lasting effects.

· Precautionary statements

If medical advice is needed, have product container or label

at hand.

P102 Keep out of reach of children. P103 Read label before use.

P210 Keep away from heat, hot surfaces, sparks, open flames and

other ignition sources. No smoking.

P260 Do not breathe mist/vapours/spray. P273 Avoid release to the environment.

P280 Wear protective gloves/protective clothing/eye protection/face

protection.

P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/

doctor.

P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated

clothing. Rinse skin with water [or shower].

P312 Call a POISON CENTER/doctor if you feel unwell.

P403+P233 Store in a well-ventilated place. Keep container tightly closed.

P405 Store locked up.

P501 Dispose of contents/container in accordance with local/

regional/national/international regulations.

· Additional information: EUH066 Repeated exposure may cause skin dryness or cracking.

· 2.3 Other hazards

· Results of PBT and vPvB assessment

PBT: Not applicable.vPvB: Not applicable.

SECTION 3: Composition/information on ingredients

· 3.2 Chemical characterisation: Mixtures

• Description: Mixture of substances listed below with nonhazardous additions.

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Trade name: Slate oil (Contd. of page 2) · Dangerous components: EC number: 918-668-5 Solvent naphtha (petroleum), light arom. 50-100% Index number: 649-356-00-4 Flam. Liq. 3, H226 Reg.nr.: 01-2119455851-35 & Asp. Tox. 1, H304 Aquatic Chronic 2, H411 STOT SE 3, H335-H336 CAS: 8002-74-2 Parraffinwachs 1-5% EINECS: 232-315-6 substance with a Community workplace exposure limit EC number: 919-164-8 naphtha (petroleum), hydrodesulphurized heavy 1-5% Reg.nr.: 01-2119473977-17 STOT RE 1, H372; Asp. Tox. 1, H304 Aquatic Chronic 3, H412 · Regulation (EC) No 648/2004 on detergents / Labelling for contents aromatic hydrocarbons ≥30% aliphatic hydrocarbons <5%

SECTION 4: First aid measures

Additional information:

· 4.1 Description of first aid measures

· General information: Symptoms of poisoning may even occur after several hours; therefore medical

observation for at least 48 hours after the accident.

For the wording of the listed hazard phrases refer to section 16.

· After inhalation: Supply fresh air. If required, provide artificial respiration. Keep patient warm.

Consult doctor if symptoms persist.

In case of unconsciousness place patient stably in side position for

transportation.

Immediately wash with water and soap and rinse thoroughly. After skin contact:

Rinse opened eye for several minutes under running water. If symptoms persist, · After eye contact:

consult a doctor.

If symptoms persist consult doctor. After swallowing:

· 4.2 Most important symptoms and effects, both acute and

delayed

Breathing difficulty

Headache Dizziness Dizziness

Gastric or intestinal disorders

Nausea

· Information for doctor: Symptoms in intoxication with (aromatic) hydrocarbons (dosis letalis about 30 g)

a) In acute intoxication: headache, dizziness, euphoria, gastro-intestinal

dysfunction, state of excitement, coma.

b) In chronic intoxication: myelotoxic damage, fatigue, dizziness, emaciation,

cardiac palpitation after physical exercise, leucopenia, anemia, leukosis.

Therapy in hydrocarbons intoxication: In case of inhalation provision of fresh air; in case of peroral intake administration of Carbo medicinalis; only after intubation conduct of gastrolavage in application of Carbo medicinalis; in case of

cramps administration of Diazepam 20 mg intravenously.

· 4.3 Indication of any immediate medical attention and special

treatment needed No further relevant information available.

SECTION 5: Firefighting measures

5.1 Extinguishing media

 Suitable extinguishing agents: CO2, powder or water spray. Fight larger fires with water spray or alcohol

resistant foam.

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· For safety reasons unsuitable

Water with full jet

extinguishing agents: 5.2 Special hazards arising from

the substance or mixture

Formation of toxic gases is possible during heating or in case of fire.

In case of fire, the following can be released:

Carbon monoxide (CO)

· 5.3 Advice for firefighters

Protective equipment:

Wear fully protective suit.

Wear self-contained respiratory protective device.

Mount respiratory protective device.

SECTION 6: Accidental release measures

· 6.1 Personal precautions, protective equipment and emergency procedures

6.2 Environmental precautions:

Wear protective equipment. Keep unprotected persons away. Do not allow product to reach sewage system or any water course.

Inform respective authorities in case of seepage into water course or sewage

system.

Do not allow to enter sewers/ surface or ground water.

· 6.3 Methods and material for

containment and cleaning up: Absorb with liquid-binding material (sand, diatomite, acid binders, universal

binders, sawdust).

Dispose contaminated material as waste according to item 13.

Ensure adequate ventilation.

· 6.4 Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

SECTION 7: Handling and storage

· 7.1 Precautions for safe

handling

Ensure good ventilation/exhaustion at the workplace.

· Information about fire - and

explosion protection:

Keep ignition sources away - Do not smoke.

Protect against electrostatic charges.

· 7.2 Conditions for safe storage, including any incompatibilities

Storage:

· Requirements to be met by

storerooms and receptacles:

No special requirements.

Information about storage in one

common storage facility:

Not required.

Further information about storage

conditions:

Protect from frost.

Keep container tightly sealed.

No further relevant information available. · 7.3 Specific end use(s)

SECTION 8: Exposure controls/personal protection

· Additional information about

design of technical facilities: No further data; see item 7.

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· 8.1 Control parameters

· Ingredients with limit values that require monitoring at the workplace:

8002-74-2 Parraffinwachs

WEL Short-term value: 6 mg/m³ Long-term value: 2 mg/m³

· DNELs

Solvent naphtha (petroleum), light arom.

DNEL (Langzeit-wiederholt) 11 mg/kg bw/day (BEV) Dermal DNEL (Langzeit-wiederholt) 25 mg/kg bw/day (ARB) 11 mg/kg bw/day (BEV)

Inhalative DNEL (Langzeit-wiederholt) 150 mg/m³ Air (ARB) 32 mg/m³ Air (BEV)

The lists valid during the making were used as basis.

· Additional information: · 8.2 Exposure controls

- · Personal protective equipment:
- General protective and hygienic

measures:

Do not eat, drink, smoke or sniff while working. Use skin protection cream for skin protection.

Clean skin thoroughly immediately after handling the product.

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing Wash hands before breaks and at the end of work.

Do not inhale gases / fumes / aerosols. Avoid contact with the eyes and skin.

· Respiratory protection:

Filter AX

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device. Preventive skin protection by use of skin-protecting agents is recommended.

· Protection of hands:

After use of gloves apply skin-cleaning agents and skin cosmetics.

Skin protection agent recommendation for preventive skin shelter without use of

protective gloves:

STOKODERM (http://www.stoko.com)

Skin protection agent recommendation for preventive skin shelter in application

and combination of protective gloves: STOKO EMULSION (http://www.stoko.com)

Skin protection recommendation for skin cleaning after product handling:

FRAPANTOL (http://www.stoko.com)

Skin protection agent recommendation for skin aftercare:

STOKO VITAN (http://www.stoko.com)

The protection gloves to be used have to comply with the specifications of the directive 89/686/EC and the directive derived decree EN374, respectively, e.g. the above listed protection glove type. The mentioned permeation times' data were generated and verified with material samples of the recommended protection glove type in the scope of laboratory anylyses of the company KCL

GmbH in compliance with EN374.

This recommendation refers exclusively to the material safety data sheet referenced product delivered by Akemi and the indicated field of application. In case of product dilution or in case of mixture with different substances or chemicals, and in condition of EN374 deviation the producer of CE-approved protection gloves must be contacted for detailed information (e.g., KCL GmbH, Germany, 36124 Eichenzell, internet: http://www.kcl.de).

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Protective gloves

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The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration

times, rates of diffusion and the degradation

· Material of gloves Fluorocarbon rubber (Viton)

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked

prior to the application.

 Penetration time of glove material Value for the permeation: Level \leq 6; 480 min

The exact break trough time has to be found out by the manufacturer of the

protective gloves and has to be observed.

· For the permanent contact gloves made of the following materials are

suitable:

Fluorocarbon rubber (Viton) Vitoject (KCL, Art_No. 890)

· As protection from splashes gloves made of the following materials are suitable:

Fluorocarbon rubber (Viton) Vitoject (KCL, Art_No. 890)

Nitrile rubber, NBR

Camatril (KCL, 730, 731, 732, 733)

· Not suitable are gloves made of

the following materials:

Leather gloves

Strong material gloves

· Eye protection:



Tightly sealed goggles

Protective work clothing Body protection:

SECTION 9: Physical and chemical properties

· 9.1 Information on basic physical and chemical properties

· General Information

· Appearance:

Form: Fluid Colour: Colourless · Odour: Specific type · Odour threshold: Not determined. Not applicable

· pH-value: · Change in condition

> Melting point/freezing point: Undetermined.

Initial boiling point and boiling range: 160 °C

41 °C · Flash point:

>300 °C · Ignition temperature:

 Decomposition temperature: Not determined.

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Trade name: Slate oil

	(Contd. of page 6)
· Auto-ignition temperature:	Product is not selfigniting.
· Explosive properties:	Product is not explosive. However, formation of explosive air/vapour mixtures are possible.
 Explosion limits: Lower: Upper: 	0.8 Vol % 7 Vol %
· Vapour pressure at 20 °C:	5 hPa
Density at 20 °C:Relative densityVapour densityEvaporation rate	0.87 g/cm ³ Not determined. Not determined. Not determined.
Solubility in / Miscibility with water:	Not miscible or difficult to mix.
· Partition coefficient: n-octanol/water:	Not determined.
 Viscosity: Dynamic: Kinematic: 	Not determined. Not determined.
 Solvent content: Organic solvents: 9.2 Other information 	85.0 % No further relevant information available.

SECTION 10: Stability and reactivity

· 10.1 Reactivity No further relevant information available.

· 10.2 Chemical stability

 Thermal decomposition / conditions to be avoided:

No decomposition if used according to specifications.

· 10.3 Possibility of hazardous

reactions

No dangerous reactions known.

No further relevant information available. · 10.4 Conditions to avoid · 10.5 Incompatible materials: No further relevant information available.

· 10.6 Hazardous decomposition

products: No dangerous decomposition products known.

SECTION 11: Toxicological information

· 11.1 Information on toxicological effects

Harmful if inhaled. Acute toxicity

· LD/LC50 values relevant for classification:

ATE (Acute Toxicity Estimates)

Inhalative LC50/4 h >12.2 mg/l (rat)

Solvent naphtha	(petroleum)	, light arom.
-----------------	-------------	---------------

		,, ,
Oral		3,492 mg/kg (rat)
Dermal	LD50	>3,160 mg/kg (rabbit)
		>2,000 mg/kg (rat)
Inhalative	LC50/4 h	>10.2 mg/l (rat)

· Primary irritant effect:

· Skin corrosion/irritation Based on available data, the classification criteria are not met.

· Serious eye damage/irritation Based on available data, the classification criteria are not met.

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· Respiratory or skin sensitisation Based on available data, the classification criteria are not met.

· CMR effects (carcinogenity, mutagenicity and toxicity for reproduction)

· Germ cell mutagenicity Based on available data, the classification criteria are not met. Based on available data, the classification criteria are not met. Carcinogenicity · Reproductive toxicity Based on available data, the classification criteria are not met. · STOT-single exposure May cause respiratory irritation. May cause drowsiness or dizziness. May cause damage to organs through prolonged or repeated exposure. STOT-repeated exposure

· Aspiration hazard May be fatal if swallowed and enters airways.

SECTION 12: Ecological information

· 12.1 Toxicity

· Aquatic toxicity:		
Solvent nap	Solvent naphtha (petroleum), light arom.	
EC50	<10 mg/l (daphnia magna)	
IC50	<10 mg/l (daphnia magna)	
LC50	<10 mg/l (green alge)	
	>1-<10 mg/l (piscis)	
EL50/48h	3.2 mg/l (ceriodaphnia Dubai)	
	3.2 mg/l (daphnia magna)	
EL50/72h	2.6-2.9 mg/l (Pseudokirchneriella subcapitata)	
	2.9 mg/l (selenastrum capricornutum)	
LL50/96h	9.2 mg/l (Oncorhynchus mykiss)	
NOELR/72h	1 mg/l (Pseudokirchneriella subcapitata)	
EC50/48h	3.2 mg/l (daphnia magna)	
EC50/72h	2.9 mg/l (Pseudokirchneriella subcapitata)	
LC50/96h	9.2 mg/l (Oncorhynchus mykiss)	

· 12.2 Persistence and

No further relevant information available. degradability No further relevant information available. · 12.3 Bioaccumulative potential · 12.4 Mobility in soil No further relevant information available.

Ecotoxical effects:

Toxic for fish · Remark:

· Additional ecological information:

Do not allow product to reach ground water, water course or sewage system. General notes:

Also poisonous for fish and plankton in water bodies.

Toxic for aquatic organisms

Water hazard class 2 (German Regulation) (Self-assessment): hazardous for

water

· 12.5 Results of PBT and vPvB assessment

· PBT: Not applicable. · vPvB: Not applicable.

No further relevant information available. · 12.6 Other adverse effects

SECTION 13: Disposal considerations

· 13.1 Waste treatment methods

· Recommendation Must not be disposed together with household garbage. Do not allow product to

reach sewage system.

· European waste catalogue		
l	16 00 00	WASTES NOT OTHERWISE SPECIFIED IN THE LIST
l	16 03 00	off-specification batches and unused products
		(0 (1 0)

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16 03 05* organic wastes containing hazardous substances

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Uncleaned packaging:

· Recommendation:

Empty contaminated packagings thoroughly. They may be recycled after

thorough and proper cleaning.

SECTION 14: Transport information

· <u>14.1 UN-Number</u> · <u>ADR, IMDG, IATA</u>	UN1993
· 14.2 UN proper shipping name	
ADR	1993 FLAMMABLE LIQUID, N.O.S. (Solvent naphtha
	(petroleum), light arom., 1,2,4-trimethylbenzene),
	ENVIRONMENTALLY HAZARDOUS
· <u>IMDG</u>	FLAMMABLE LIQUID, N.O.S. (Solvent naphtha (petroleum), light
	arom., 1,2,4-trimethylbenzene), MARINE POLLUTANT
· <u>IATA</u>	FLAMMABLE LIQUID, N.O.S. (Solvent naphtha (petroleum), light
	arom., 1,2,4-trimethylbenzene)

· 14.3 Transport hazard class(es)

ADR





3 (F1) Flammable liquids. Class · Label

· IMDG





3 Flammable liquids. Class Label

· IATA



3 Flammable liquids. Class · Label

· 14.4 Packing group

· ADR, IMDG, IATA Ш

· 14.5 Environmental hazards: Product contains environmentally hazardous substances:

· Marine pollutant: Yes

Symbol (fish and tree) · Special marking (ADR): Symbol (fish and tree)

· 14.6 Special precautions for user Warning: Flammable liquids.

· Danger code (Kemler): 30 · EMS Number: F-E,S-E

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· Stowage Category A

· 14.7 Transport in bulk according to Annex II of

Marpol and the IBC Code Not applicable.

· Transport/Additional information:

ADR

Limited quantities (LQ)
Excepted quantities (EQ)
Code: E1

Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml

Transport category
 Tunnel restriction code

IMDG

Limited quantities (LQ)
Excepted quantities (EQ)
Code: E1

Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml

• <u>UN "Model Regulation":</u>

UN 1993 FLAMMABLE LIQUID, N.O.S. (SOLVENT NAPHTHA (PETROLEUM), LIGHT AROM., 1,2,4-TRIMETHYLBENZENE),

3, III, ENVIRONMENTALLY HAZARDOUS

SECTION 15: Regulatory information

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

Labelling according to Regulation

(EC) No 1272/2008 GHS label elements

· Directive 2012/18/EU

· Named dangerous substances -

ANNEX I None of the ingredients is listed.

Seveso category
 E2 Hazardous to the Aquatic Environment

P5c FLAMMABLE LIQUIDS

Qualifying quantity (tonnes) for the

application of lower-tier

requirements 200 t

· Qualifying quantity (tonnes) for the

application of upper-tier

requirements 500 t

- REGULATION (EC) No 1907/2006

ANNEX XVII Conditions of restriction: 3

· National regulations:

Waterhazard class: Water hazard class 2 (Self-assessment): hazardous for water.

. VOC EU 739.5 g/l

· 15.2 Chemical safety

assessment: A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

• Relevant phrases H226 Flammable liquid and vapour.

H304 May be fatal if swallowed and enters airways.

H335 May cause respiratory irritation. H336 May cause drowsiness or dizziness.

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H372 Causes damage to organs through prolonged or repeated exposure.

H411 Toxic to aquatic life with long lasting effects. H412 Harmful to aquatic life with long lasting effects.

· Recommended restriction of use

refer to Technical Data Sheet (TDS)

Department issuing SDS:

Laboratory

· Contact:

Dieter Zimmermann

· Abbreviations and acronyms:

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de

fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

ICAO: International Civil Aviation Organisation

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 Harmonised 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 (division of the American Chemical Society)

DNEL: Derived No-Effect Level (REACH) LC50: Lethal concentration, 50 percent LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic vPvB: very Persistent and very Bioaccumulative

Flam. Liq. 3: Flammable liquids - Category 3 Acute Tox. 4: Acute toxicity - Category 4

STOT SE 3: Specific target organ toxicity (single exposure) - Category 3 STOT RE 1: Specific target organ toxicity (repeated exposure) - Category 1 STOT RE 2: Specific target organ toxicity (repeated exposure) – Category 2 Asp. Tox. 1: Aspiration hazard – Category 1

Aquatic Chronic 2: Hazardous to the aquatic environment - long-term aquatic hazard - Category 2 Aquatic Chronic 3: Hazardous to the aquatic environment - long-term aquatic hazard - Category 3

· * Data compared to the previous version altered.

Adaptation in accordance with REACH directive 1907/2006/EC