Printing date 26.02.2019 Revision: 26.02.2019

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

- · 1.1 Product identifier
- · Trade name: Clinker oil No. 114
- · Article number: 114
- · 1.2 Relevant identified uses of the substance or mixture and uses advised against No further relevant information available.
- · Application of the substance / the mixture Coating material
- · 1.3 Details of the supplier of the safety data sheet
- · Manufacturer/Supplier:

AURO AG

Alte Frankfurter Str. 211 D-38122 Braunschweig nieder@auro.de

- · Further information obtainable from: product safety department
- · 1.4 Emergency telephone number: During normal opening times: +49 531 281 41 19

SECTION 2: Hazards identification

- · 2.1 Classification of the substance or mixture
- · Classification according to Regulation (EC) No 1272/2008



GHS02 flame

Flam. Liq. 3 H226 Flammable liquid and vapour.



GHS08 health hazard

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



GHS09 environment

Aquatic Acute 1 H400 Very toxic to aquatic life.

Aquatic Chronic 1 H410 Very toxic to aquatic life with long lasting effects.



GHS07

Skin Irrit. 2 H315 Causes skin irritation.

Skin Sens. 1 H317 May cause an allergic skin reaction.

- · 2.2 Label elements
- · Labelling according to Regulation (EC) No 1272/2008 The product is classified and labelled according to the CLP regulation.
- · Hazard pictograms GHS02, GHS07, GHS08, GHS09
- · Signal word Danger
- · Hazard-determining components of labelling:

Orange terpenes

terpinolene

p-mentha-1,3-diene

· Hazard statements

H226 Flammable liquid and vapour.

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

H304 May be fatal if swallowed and enters airways.

H410 Very toxic to aquatic life with long lasting effects.

· Precautionary statements

P101 If medical advice is needed, have product container or label at hand.

P102 Keep out of reach of children.

(Contd. on page 2)

(Contd. of page 1)

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

Printing date 26.02.2019 Revision: 26.02.2019

Trade name: Clinker oil No. 114

P103 Read label before use.

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

P321 Specific treatment (see on this label).

P331 Do NOT induce vomiting.

P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

P362+P364 Take off contaminated clothing and wash it before reuse.

P405 Store locked up.

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

- · 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.

· Dangerous components:			
CAS: 138-86-3	Orange terpenes	10-25%	
EINECS: 205-341-0	Flam. Liq. 3, H226; Asp. Tox. 1, H304; Aquatic Acute 1, H400; Aquatic Chronic 1, H410; Skin Irrit. 2, H315; Skin Sens. 1, H317		
CAS: 586-62-9	terpinolene	10-25%	
	Asp. Tox. 1, H304; Aquatic Acute 1, H400; Aquatic Chronic 1, H410; Skin Sens. 1B, H317		
	p-mentha-1,3-diene	10-25%	
EINECS: 202-795-1	♠ Flam. Liq. 3, H226; ♦ Asp. Tox. 1, H304; ♦ Aquatic Chronic 2, H411; ♦ Acute Tox. 4, H302		

[·] Additional information: For the wording of the listed hazard phrases refer to section 16.

SECTION 4: First aid measures

- · 4.1 Description of first aid measures
- · General information: Immediately remove any clothing soiled by the product.
- \cdot After inhalation:

Supply fresh air and to be sure call for a doctor.

In case of unconsciousness place patient stably in side position for transportation.

- · After skin contact: Immediately wash with water and soap and rinse thoroughly.
- · After eye contact: Rinse opened eye for several minutes under running water.
- · After swallowing: If symptoms persist consult doctor.
- 4.2 Most important symptoms and effects, both acute and delayed No further relevant information available.
- · 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.
- · For safety reasons unsuitable extinguishing agents: Water with full jet
- 5.2 Special hazards arising from the substance or mixture No further relevant information available.
- 5.3 Advice for firefighters
- · Protective equipment: No special measures required.

- Gl

Printing date 26.02.2019 Revision: 26.02.2019

Trade name: Clinker oil No. 114

(Contd. of page 2)

SECTION 6: Accidental release measures

· 6.1 Personal precautions, protective equipment and emergency procedures

Wear protective equipment. Keep unprotected persons away.

· 6.2 Environmental precautions:

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

Use only in well ventilated areas.

Ensure good ventilation/exhaustion at the workplace.

Prevent formation of aerosols.

· 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.
- $\cdot \textit{Information about storage in one common storage facility:} \ \text{Not required.}$
- · Further information about storage conditions: Keep container tightly sealed.
- · 7.3 Specific end use(s) No further relevant information available.

SECTION 8: Exposure controls/personal protection

· Additional information about design of technical facilities: No further data; see item 7.

· 8.1 Control parameters

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

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

· Additional information: The lists valid during the making were used as basis.

· 8.2 Exposure controls

- · Personal protective equipment:
- $\cdot \ General \ protective \ and \ hygienic \ measures:$

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing

Wash hands before breaks and at the end of work.

Avoid contact with the skin.

Avoid contact with the eyes and skin.

· Respiratory protection:

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.

· Protection of hands:

Solvent resistant gloves

(Contd. on page 4)

Printing date 26.02.2019 Revision: 26.02.2019

Trade name: Clinker oil No. 114

(Contd. of page 3)

Check the permeability prior to each anewed use of the glove.



Protective gloves

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

Nitrile rubber, NBR

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

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

· Eye protection:



Tightly sealed goggles

SECTION 9: Physical and chemical properties

	* *			
· 9.1 Information on basic physical and chemical properties				
· General Information				
· Appearance:				
Form:	Fluid			
Colour:	Dark yellow			
· Odour:	Characteristic			
· Odour threshold:	Not determined.			
· pH-value:	Not determined.			
· Change in condition				
Melting point/freezing point:	Undetermined.			
Initial boiling point and boiling range.	: 177.6 °C			
· Flash point:	42 °C			
· Flammability (solid, gas):	Not applicable.			
· Ignition temperature:	255 °C			
· Decomposition temperature:	Not determined.			
· 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:	0.7 Vol %			
Upper:	6.1 Vol %			
· Vapour pressure at 20 °C:	2.1 hPa			
· Density at 20 °C:	0.91 g/cm ³			
· Relative density	Not determined.			
· Vapour density	Not determined.			

(Contd. on page 5)

Printing date 26.02.2019 Revision: 26.02.2019

Trade name: Clinker oil No. 114

	(Contd. of page 4
· Evaporation rate	Not determined.
· Solubility in / Miscibility with water:	Not miscible or difficult to mix.
· Partition coefficient: n-octanol/water:	Not determined.
· Viscosity:	
Dynamic:	Not determined.
Kinematic at 20 °C:	14 s (ISO 4 mm)
VOC(EC)	497.7 g/l
9.2 Other information	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.
- · 10.4 Conditions to avoid No further relevant information available.
- · 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
- · Acute toxicity Based on available data, the classification criteria are not met.
- · Primary irritant effect:
- · Skin corrosion/irritation

Causes skin irritation.

- · Serious eye damage/irritation Based on available data, the classification criteria are not met.
- · Respiratory or skin sensitisation

May cause an allergic skin reaction.

- $\cdot \textit{CMR effects (carcinogenity, mutagenicity and toxicity for reproduction)}$
- · 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.
- \cdot STOT-repeated exposure Based on available data, the classification criteria are not met.
- · Aspiration hazard

May be fatal if swallowed and enters airways.

SECTION 12: Ecological information

- · 12.1 Toxicity
- · Aquatic toxicity: No further relevant information available.
- · 12.2 Persistence and degradability No further relevant information available.
- · 12.3 Bioaccumulative potential No further relevant information available.
- · 12.4 Mobility in soil No further relevant information available.
- · Ecotoxical effects:
- · Remark: Very toxic for fish
- · Additional ecological information:
- · General notes:

Water hazard class 3 (German Regulation) (Self-assessment): extremely hazardous for water

Do not allow product to reach ground water, water course or sewage system, even in small quantities.

Danger to drinking water if even extremely small quantities leak into the ground.

Also poisonous for fish and plankton in water bodies.

(Contd. on page 6)

Printing date 26.02.2019 Revision: 26.02.2019

Trade name: Clinker oil No. 114

(Contd. of page 5)

- Very toxic for aquatic organisms
- · 12.5 Results of PBT and vPvB assessment
- · *PBT*: Not applicable.
- · vPvB: Not applicable.
- · 12.6 Other adverse effects No further relevant information available.

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

08 01 11* waste paint and varnish containing organic solvents or other hazardous substances

20 01 27* paint, inks, adhesives and resins containing hazardous substances

· Uncleaned packaging:

· Danger code (Kemler):

· EMS Number:

· Recommendation: Disposal must be made according to official regulations.

14.1 UN-Number	TD 1/4 (4
ADR, IMDG, IATA	UN1263
14.2 UN proper shipping name	
ADR	1263 PAINT, ENVIRONMENTALLY HAZARDOUS
IMDG	PAINT (DIPENTENE, TERPINOLENE, p-mentha-1,3-die
IATA	MARINE POLLUTANT PAINT
	PAINI
14.3 Transport hazard class(es)	
ADR, IMDG	
1 1 1 1 1 1 1 1 1 1	
Class	3 Flammable liquids.
Label	3
IATA	
Class	3 Flammable liquids.
Label	3
14.4 Packing group	
ADR, IMDG, IATA	III
14.5 Environmental hazards:	Product contains environmentally hazardous substance
-	Orange terpenes
Marine pollutant:	Yes
	Symbol (fish and tree) Symbol (fish and tree)
Special marking (ADR):	

F-E,S-E

(Contd. on page 7)

Printing date 26.02.2019 Revision: 26.02.2019

Trade name: Clinker oil No. 114

	(Contd. of page 6)		
· 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)	5L		
· Excepted quantities (EQ)	Code: E1		
	Maximum net quantity per inner packaging: 30 ml		
	Maximum net quantity per outer packaging: 1000 ml		
· Transport category	3		
· Tunnel restriction code	D/E		
·IMDG			
· Limited quantities (LQ)	5L		
· Excepted quantities (EQ)	Code: E1		
	Maximum net quantity per inner packaging: 30 ml		
	Maximum net quantity per outer packaging: 1000 ml		
· UN "Model Regulation":	UN 1263 PAINT, 3, III, ENVIRONMENTALLY HAZARDOUS		
on mouel regulation.			

SECTION 15: Regulatory information

- · 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
- · Directive 2012/18/EU
- · Named dangerous substances ANNEX I None of the ingredients is listed.
- $\cdot \textit{Seveso category}$
- E1 Hazardous to the Aquatic Environment

P5c FLAMMABLE LIQUIDS

- $\cdot \textit{Qualifying quantity (tonnes) for the application of lower-tier requirements 100\ t}$
- · Qualifying quantity (tonnes) for the application of upper-tier requirements 200 t
- · REGULATION (EC) No 1907/2006 ANNEX XVII Conditions of restriction: 3
- · 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.
- H302 Harmful if swallowed.
- H304 May be fatal if swallowed and enters airways.
- H315 Causes skin irritation.
- H317 May cause an allergic skin reaction.
- H400 Very toxic to aquatic life.
- H410 Very toxic to aquatic life with long lasting effects.
- H411 Toxic to aquatic life with long lasting effects.
- · Department issuing SDS: product safety department
- · Contact: N.N.
- · 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)

IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)

ICAO: International Civil Aviation Organisation

ICAO-TI: Technical Instructions by the "International Civil Aviation Organisation" (ICAO)

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

(Contd. on page 8)

(Contd. of page 7)

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

Printing date 26.02.2019 Revision: 26.02.2019

Trade name: Clinker oil No. 114

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)

VOC: Volatile Organic Compounds (USA, EU) 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 Skin Irrit. 2: Skin corrosion/irritation – Category 2 Skin Sens. 1: Skin sensitisation – Category 1 Skin Sens. 1B: Skin sensitisation - Category 1B Asp. Tox. 1: Aspiration hazard - Category 1

Aquatic Acute 1: Hazardous to the aquatic environment - acute aquatic hazard - Category 1 Aquatic Chronic 1: Hazardous to the aquatic environment - long-term aquatic hazard – Category 1 Aquatic Chronic 2: Hazardous to the aquatic environment - long-term aquatic hazard – Category 2