according to 1907/2006/EC. Article 31

Printing date 09.08.2018 Version number 13 Revision: 09.08.2018

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

· 1.1 Product identifier

· Trade name: **Undercoating and Stoning Protection**

Applicator gun can

· Article number: 90016, 90017, 90018, 90035, 90036

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

 Sector of Use SU3 Industrial uses: Uses of substances as such or in preparations at

industrial sites

SU21 Consumer uses: Private households / general public / consumers

SU22 Professional uses: Public domain (administration, education,

entertainment, services, craftsmen)

PROC7 Industrial spraying Process category

PROC11 Non industrial spraying

· Application of the substance / the

Protective coating mixture

· 1.3 Details of the supplier of the safety data sheet

· Manufacturer/Supplier: AKEMI chemisch technische Spezialfabrik GmbH Tel. +49(0)911-642960

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

· Further information obtainable

from: · 1.4 Emergency telephone

Product Safety Department AKEMI chemisch technische Spezialfabrik GmbH number:

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

Laboratory

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



GHS02 flame

Flam. Liq. 2 H225 Highly flammable liquid and vapour.



GHS09 environment

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



STOT SE 3

H336 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.

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

IF exposed or concerned: Get medical advice/attention.

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Store in a well-ventilated place. Keep cool.

Danger

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

· 2.2 Label elements

· Labelling according to Regulation

(EC) No 1272/2008

· Hazard pictograms

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



GHS02 GHS07 GHS09

· Signal word

· Hazard-determining components

of labelling:

· Hazard statements

Naphtha (petroleum), hydrotreated light

H225 Highly flammable liquid and vapour. H336 May cause drowsiness or dizziness.

H411 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.

P103 Read label before use.

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

ignition sources. No smoking.

P243 Take action to prevent static discharges.

P260 Do not breathe spray.

P271 Use only outdoors or in a well-ventilated area.

P273 Avoid release to the environment.
P280 Wear protective gloves / eye protection.
P302+P352 IF ON SKIN: Wash with plenty of water.

P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for

breathing.

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

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.

| Dangerous components: | | |
|---|---|---------------|
| EC number: 920-750-0 | Naphtha (petroleum), hydrotreated light | 25-50% |
| Reg.nr.: 01-2119473851-33 | ♦ Flam. Liq. 2, H225 ♦ Asp. Tox. 1, H304 ♦ Aquatic Chronic 2, H411 ♦ STOT SE 3, H336 | |
| CAS: 1330-20-7 | xylene | <10% |
| EINECS: 215-535-7 | ♦ Flam. Liq. 3, H226 | |
| Index number: 601-022-00-9 | | |
| Reg.nr.: 01-2119555267-33 | ♠ Acute Tox. 4, H312; Acute Tox. 4, H332; Skin Irrit. 2, H315; Eye Irrit. 2, | |
| 01-2119488216-32 | H319; STOT SE 3, H335 | |
| | Aquatic Chronic 3, H412 | |
| | (Contd | l. on page 3) |

CAS: 64-17-5



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(Contd. of page 2) ethanol <1%

EINECS: 200-578-6 Flam. Liq. 2, H225 Index number: 603-002-00-5 (1) Eye Irrit. 2, H319

Reg.nr.: 01-2119457610-43

 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

Immediately remove any clothing soiled by the product. · General information:

Take affected persons out into the fresh air.

 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:

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

consult a doctor.

 After swallowing: Do not induce vomiting; call for medical help immediately.

· 4.2 Most important symptoms and effects, both acute and

delayed

Breathing difficulty

Headache Dizziness Dizziness Nausea

Danger of impaired breathing. Hazards

· 4.3 Indication of any immediate medical attention and special

treatment needed If swallowed or in case of vomiting, danger of entering the lungs.

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 In case of fire, the following can be released:

Carbon monoxide (CO)

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

· 5.3 Advice for firefighters

Wear self-contained respiratory protective device. · Protective equipment:

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

Do not allow to penetrate the ground/soil.

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

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· 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.

Do not flush with water or aqueous cleansing agents

• 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 Keep away from heat and direct sunlight.

Ensure good ventilation/exhaustion at the workplace.

Prevent formation of aerosols.

· Information about fire - and

explosion protection: Fumes can combine with air to form an explosive mixture.

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:

· Information about storage in one common storage facility:

Store in a cool location.

Store away from foodstuffs.

Do not store together with acids.

· Further information about storage

conditions:

Keep container tightly sealed.

Do not seal receptacle gas tight.

Store in cool, dry conditions in well sealed receptacles.

• 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:

1330-20-7 xylene

WEL Short-term value: 441 mg/m³, 100 ppm Long-term value: 220 mg/m³, 50 ppm

64-17-5 ethanol

WEL Long-term value: 1920 mg/m³, 1000 ppm

· DNELs

Naphtha (petroleum), hydrotreated light

Oral DNEL (Langzeit-wiederholt) 699 mg/kg bw/day (BEV)
Dermal DNEL (Langzeit-wiederholt) 773 mg/kg bw/day (ARB)
699 mg/kg bw/day (BEV)

Inhalative DNEL (Langzeit-wiederholt) 2,035 mg/m³ Air (ARB)

608 mg/m³ Air (BEV)

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· Additional information:

The lists valid during the making were used as basis.

· 8.2 Exposure controls

- · Personal protective equipment:
- · General protective and hygienic measures:

The usual precautionary measures are to be adhered to when handling

chemicals.

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

Clean skin thoroughly immediately after handling the product.

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.

Short term filter device:

Filter A/P2

· Protection of hands:



Protective gloves

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

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

Preventive skin protection by use of skin-protecting agents is recommended.

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

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).

Fluorocarbon rubber (Viton) 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.

· Penetration time of glove material The exact break trough time has to be found out by the manufacturer of the protective gloves and has to be observed.

Value for the permeation: Level ≤ 4, 120 min

· 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)

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Vitoject (KCL, Art_No. 890)

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· Not suitable are gloves made of

the following materials:

Chloroprene rubber, CR

Leather gloves

Strong material gloves

· Eye protection:



Tightly sealed goggles

• <u>Body protection:</u> Use protective suit.

SECTION 9: Physical and chemical properties

| 9.1 | information | on basic | pn | ysıcaı | ana | cnemicai | pro | perties | |
|-----|-------------|----------|----|--------|-----|----------|-----|---------|--|
| | | | | | | | | | |

General Information

Appearance:

Form: Fluid

Colour: According to product specification

· Odour: Specific type

· <u>pH-value:</u> Not applicable

· Change in condition

Melting point/freezing point: Undetermined.

Initial boiling point and boiling range: 98 °C

· Flash point: 2 °C

· <u>Ignition temperature:</u> 500 °C

• <u>Auto-ignition temperature:</u> Product is not selfigniting.

• Explosive properties: Product is not explosive. However, formation of explosive air/vapour

mixtures are possible.

Explosion limits:

<u>Upper:</u> 1.1 Vol % 7 Vol %

· Vapour pressure at 20 °C: 6.7 hPa

Density at 20 °C: 1.05 g/cm³

· Solubility in / Miscibility with

water: Not miscible or difficult to mix.

· Viscosity:

Dynamic at 20 °C: 8,000 mPas Kinematic at 40 °C: 30 mm²/s

· Solvent content:

Organic solvents: 50.8 %

Solids content: 49.0 %

• 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.

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· 10.3 Possibility of hazardous

<u>reactions</u> Develops readily flammable gases/fumes.

Reacts with strong oxidising agents.

No further relevant information available.

• 10.4 Conditions to avoid No further relevant information available. 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.

· LD/LC50 values relevant for classification:

Naphtha (petroleum), hydrotreated light

| Oral | LD50 | >5,000 mg/kg (rat) |
|------------|----------|-----------------------|
| Dermal | LD50 | >2,800 mg/kg (rabbit) |
| | LD50 | >2,000 mg/kg (rat) |
| Inhalative | LC50/4 h | >23.3 mg/l (rat) |

· Primary irritant effect:

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

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

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

• STOT-single exposure May cause drowsiness or dizziness.

• STOT-repeated exposure
• Aspiration hazard

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

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

SECTION 12: Ecological information

· 12.1 Toxicity

| Αq | uatic | toxicity: |
|----|-------|-----------|

Naphtha (petroleum), hydrotreated light

EC50/48h 3 mg/l (daphnia magna)

EL50/72h 10-30 mg/l (Pseudokirchneriella subcapitata)

LL50/96h >13.4 mg/l (Oncorhynchus mykiss)

NOELR/72h 10 mg/l (Pseudokirchneriella subcapitata)

NOEC/21d 0.17 mg/l (daphnia magna) LC50/96h <10 mg/l (daphnia magna)

· 12.2 Persistence and

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

· Ecotoxical effects:

Remark: Toxic for fish

· Additional ecological information:

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

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

Also poisonous for fish and plankton in water bodies.

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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.√PvB: 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.

| reach sewage system. | | | |
|----------------------------|---|--|--|
| · European waste catalogue | | | |
| 08 00 00 | WASTES FROM THE MANUFACTURE, FORMULATION, SUPPLY AND USE (MFSU) OF COATINGS (PAINTS, VARNISHES AND VITREOUS ENAMELS), ADHESIVES, SEALANTS AND PRINTING INKS | | |
| 08 02 00 | wastes from MFSU of other coatings (including ceramic materials) | | |
| 08 02 99 | wastes not otherwise specified | | |
| 20 00 00 | MUNICIPAL WASTES (HOUSEHOLD WASTE AND SIMILAR COMMERCIAL, INDUSTRIAL AND INSTITUTIONAL WASTES) INCLUDING SEPARATELY COLLECTED FRACTIONS | | |
| 20 01 00 | separately collected fractions (except 15 01) | | |
| 20 01 27* | paint, inks, adhesives and resins containing hazardous substances | | |

· Uncleaned packaging:

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

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> | UN1139 |
|---|--|
| · <u>14.2 UN proper shipping name</u> | 1139 COATING SOLUTION, ENVIRONMENTALLY |
| · <u>ADR</u> | HAZARDOUS |
| · <u>IMDG</u> | COATING SOLUTION, MARINE POLLUTANT |
| · <u>IATA</u> | COATING SOLUTION |

· 14.3 Transport hazard class(es)

· ADR



ClassLabel3 (F1) Flammable liquids.3

· IMDG



· Class 3 Flammable liquids.

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|-------------|--|
| | Applicator gun can |

(Contd. of page 8) abel

· Label

IATA



· Class 3 Flammable liquids.

· Label

· 14.4 Packing group · ADR, IMDG, IATA

• 14.5 Environmental hazards: Product contains environmentally hazardous substances:

Ш

Marine pollutant: Symbol (fish and tree)
 Special marking (ADR): Symbol (fish and tree)

• 14.6 Special precautions for user Warning: Flammable liquids.

Danger code (Kemler):
EMS Number:
Stowage Category

33
F-E,S-E
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 categoryTunnel restriction code

· IMDG

- Limited quantities (LQ) 5L

Excepted quantities (EQ) Code: E2

Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 500 ml

· <u>UN "Model Regulation":</u>
UN 1139 COATING SOLUTION, 3, III, ENVIRONMENTALLY HAZARDOUS

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.

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

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AKEMI®

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REGULATION (EC) No 1907/2006

ANNEX XVII Conditions of restriction: 3

· National regulations:

· Information about limitation of use: Employment restrictions concerning juveniles must be observed.

Employment restrictions concerning pregnant and lactating women must be

observed.

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

· VOC EU 533.4 q/l

· 15.2 Chemical safety

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

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 H225 Highly flammable liquid and vapour.

H226 Flammable liquid and vapour.

H304 May be fatal if swallowed and enters airways.

H312 Harmful in contact with skin. H315 Causes skin irritation. H319 Causes serious eye irritation.

H332 Harmful if inhaled.

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

H373 May cause 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

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

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. 2: Flammable liquids - Category 2 Flam. Liq. 3: Flammable liquids - Category 3 Acute Tox. 4: Acute toxicity - Category 4 Skin Irrit. 2: Skin corrosion/irritation - Category 2

Eye Irrit. 2: Serious eye damage/eye irritation - Category 2

STOT SE 3: Specific target organ toxicity (single exposure) - Category 3 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

REACH directive 1907/2006/EC

* Data compared to the previous

Adaptation in accordance with REACH directive 1907/2006/EC version altered.