AKEMI®

according to 1907/2006/EC, Article 31

Printing date 08.02.2021 Version number 15 Revision: 08.02.2021

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

1.1 Product identifier

· Trade name: Mirror Gloss 2K-HS Clearcoat 2:1

· Article number: 72003, 72004

· UFI: SEF0-60QR-S00G-Y0CY

1.2 Relevant identified uses of the substance or mixture and

uses advised against

No further relevant information available.

· Application of the substance / the

<u>mixture</u> Clear coating material, Varnish

· 1.3 Details of the supplier of the safety data sheet

Manufacturer/Supplier: AKEMI chemisch technische Spezialfabrik GmbH

Laboratory

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

· Further information obtainable

from:

1.4 Emergency telephone

number:

+44 (171) 635 91 91

National Poison Inform. Centre Medical Toxicology Unit Avalonley Road

London SE14 5ER

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.

SECTION 2: Hazards identification

· 2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008
 Flam. Liq. 3 H226 Flammable liquid and vapour.
 Skin Sens. 1 H317 May cause an allergic skin reaction.
 STOT SE 3 H336 May cause drowsiness or dizziness.

Aquatic Chronic 3 H412 Harmful to aquatic life with long lasting effects.

· 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

· Signal word Warning

· Hazard-determining components of

labelling: n-butyl acetate

poly(oxy-1,2-ethanediyl), α -[3-[3-(2H-benzotriazol-2-yl)-5-(1,1-dimethylethyl)-4-hydroxyphenyl]-1-oxopropyl]- ω -[3-[3-(2H-benzotriazol-2-yl)-5-(1,1-dimethylethyl)-

4-hydroxyphenyl]-1-oxopropoxy]-

bis(1,2,2,6,6-Pentamethyl-piperidyl)sebacat methyl 1,2,2,6,6-pentamethyl-4-piperidylsebacate

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

H317 May cause an allergic skin reaction. H336 May cause drowsiness or dizziness.

H412 Harmful to aquatic life with long lasting effects.

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| Trade name: Mirror Gloss 2K-HS | Clearcoat 2:1 | |
|-----------------------------------|-----------------|--|
| | | (Contd. of page 1) |
| · <u>Precautionary statements</u> | P101 | If medical advice is needed, have product container or label at hand. |
| | P102 | Keep out of reach of children. |
| | P103 | Read carefully and follow all instructions. |
| | P210 | Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. |
| | P261 | Avoid breathing vapours. |
| | P273 | Avoid release to the environment. |
| | P280 | Wear protective gloves / eye protection. |
| | P303+P361+P3 | 353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower]. |
| | P304+P312 | IF INHALED: Call a POISON CENTER/doctor if you feel unwell. |
| | 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 Repea | ated exposure may cause skin dryness or cracking. |
| · 2.3 Other hazards | • | |
| · Results of PBT and vPvB asses | ssment | |
| · PBT: | Not applicable. | |
| · <u>vPvB:</u> | Not applicable. | |

SECTION 3: Composition/information on ingredients

· 3.2 Chemical characterisation: Mixtures

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

| CAS: 123-86-4 | n-butyl acetate | 12.5-25% |
|--|--|----------|
| EINECS: 204-658-1 Index number: 607-025-00-1 Reg.nr.: 01-2119485493-29 | Flam. Liq. 3, H226 STOT SE 3, H336 | |
| CAS: 108-65-6 EINECS: 203-603-9 Index number: 607-195-00-7 Reg.nr.: 01-211947591-29 | 2-methoxy-1-methylethyl acetate Flam. Liq. 3, H226 STOT SE 3, H336 | <12.5% |
| CAS: 64742-95-6 EC number: 918-668-5 Index number: 649-356-00-4 Reg.nr.: 01-2119455851-35 | Solvent naphtha (petroleum), light arom. Flam. Liq. 3, H226 Asp. Tox. 1, H304 Aquatic Chronic 2, H411 STOT SE 3, H335-H336 | 1-5% |
| CAS: 104810-47-1 ELINCS: 400-830-7 Index number: 607-176-00-3 Reg.nr.: 01-2119396032-43 | poly(oxy-1,2-ethanediyl), α -[3-[3-(2H-benzotriazol-2-yl)-5-(1,1-dimethylethyl)-4-hydroxyphenyl]-1-oxopropyl]- ω -[3-[3-(2H-benzotriazol-2-yl)-5-(1,1-dimethylethyl)-4-hydroxyphenyl]-1-oxopropoxy]-Aquatic Chronic 2, H411 Skin Sens. 1, H317 | 1-5% |
| CAS: 41556-26-7 Reg.nr.: 01-2119491304-40 | bis(1,2,2,6,6-Pentamethyl-piperidyl)sebacat Aquatic Acute 1, H400; Aquatic Chronic 1, H410 Skin Sens. 1, H317 | <1% |
| CAS: 3648-18-8 EINECS: 222-883-3 Reg.nr.: 01-2119979527-19-0000 | Dioctyltin dilaurate Repr. 2, H361; STOT RE 1, H372 Aquatic Chronic 3, H412 | <1% |



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| | | (Contd. of page 2) |
|---------------------------|--|--------------------|
| CAS: 82919-37-7 | methyl 1,2,2,6,6-pentamethyl-4-piperidylsebacate | <1% |
| EINECS: 280-060-4 | Aquatic Acute 1, H400; Aquatic Chronic 1, H410 Skin Sens. 1, H317 | |
| CAS: 64742-82-1 | Hydrocarbons, C9-C12, n-alkanes, cyclics, aromatics (2-25%) | <1% |
| EC number: 919-446-0 | Flam. Liq. 3, H226 | |
| Reg.nr.: 01-2119458049-33 | STOT RE 1, H372; Asp. Tox. 1, H304 | |
| | Aquatic Chronic 2, H411 | |
| | STOT SE 3, H336 | |
| · <u>SVHC</u> | | |

3648-18-8 Dioctyltin dilaurate

· 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: Take affected persons out into the fresh air.

Position and transport stably in side position.

• After inhalation: Supply fresh air; consult doctor in case of complaints.

After skin contact: Immediately rinse with water.

If skin irritation continues, consult a doctor.

· After eye contact: Rinse opened eye for several minutes under running water. Then consult a

doctor.

· After swallowing: Induce vomiting only, if affected person is fully conscious.

If symptoms persist consult doctor.

· <u>Information for doctor:</u> 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.

• 4.2 Most important symptoms and effects, both acute and

delayed

Breathing difficulty

Headache Dizziness Dizziness

· Hazards Danger of impaired breathing.

• 4.3 Indication of any immediate medical attention and special

treatment needed If swallowed, gastric irrigation with added, activated carbon.

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: Wa

Water with full jet

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) Nitrogen oxides (NOx)

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Under certain fire conditions, traces of other toxic gases cannot be excluded.

5.3 Advice for firefighters

· <u>Protective equipment:</u> Wear self-contained respiratory protective device.

Do not inhale explosion gases or combustion gases.

Wear fully protective suit.

Additional information Dispose of fire debris and contaminated fire fighting water in accordance with

official regulations.

Collect contaminated fire fighting water separately. It must not enter the sewage

system.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and

<u>emergency procedures</u> Ensure adequate ventilation

Keep away from ignition sources.

Use respiratory protective device against the effects of fumes/dust/aerosol.

Wear protective equipment. Keep unprotected persons away.

• <u>6.2 Environmental precautions:</u> 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: Dispose of the material collected according to regulations.

Absorb with liquid-binding material (sand, diatomite, acid binders, universal

binders, sawdust).

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 Keep receptacles tightly sealed.

Store in cool, dry place in tightly closed receptacles.

Keep away from heat and direct sunlight.

Ensure good interior ventilation, especially at floor level. (Fumes are heavier than

air).

Use only in well ventilated areas.

Ensure good ventilation/exhaustion at the workplace.

· Information about fire - and

explosion protection: Highly volatile, flammable constituents are released during processing.

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:

Store only in the original receptacle.

Prevent any seepage into the ground.

3

Information about storage in one common storage facility:

Store away from oxidising agents.

· Further information about storage conditions:

: Store receptacle in a well ventilated area.

Store in a cool place.

Keep container tightly sealed.

· Storage class:

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|---------------------------------------|---|--|--------------------|
| nde name: | Mirror Gloss 2K-HS Clearco | oat 2:1 | |
| 7.3 Specif | fic end use(s) No | further relevant information available. | (Contd. of page |
| | | | |
| SECTION | 8: Exposure controls/perso | onal protection | |
| | ol parameters | | |
| | information about design No | further data; see item 7. | |
| | s with limit values that require | | |
| <u>'</u> | n-butyl acetate | monitoring at the workplace. | |
| | rt-term value: 966 mg/m³, 200 | mag (| |
| Long | g-term value: 724 mg/m³, 150 | ppm | |
| 108-65-6 2 | 2-methoxy-1-methylethyl ac | etate | |
| | rt-term value: 548 mg/m³, 100 | | |
| Lon ₍ Sk | g-term value: 274 mg/m³, 50 _l | opm | |
| | 1 Hydrocarbons C9-C12 n | alkanes, cyclics, aromatics (2-25%) | |
| | g-term value: 350 mg/m³ | andiles, cyclics, alollialics (2-20/0) | |
| DNELs | g-term value. 550 mg/m | | |
| | a butul agatata | | |
| Oral | n-butyl acetate DNEL (Kurzzeit-akut) | 2 mg/kg bw/day (BEV) | |
| Orai | DNEL (Kurzzeit-akut) DNEL (Langzeit-wiederholt) | 2 mg/kg bw/day (BEV) | |
| Dermal | DNEL (Kurzzeit-akut) | 11 mg/kg bw/day (BEV) | |
| Deliliai | DIVEL (Kuizzeil-akul) | 6 mg/kg bw/day (BEV) | |
| | DNEL (Langzeit-wiederholt) | | |
| | DIVEE (Langzen-wiedernon) | 6 mg/kg bw/day (BEV) | |
| Inhalative | DNEL (Kurzzeit-akut) | 960 mg/m³ Air (ARB) | |
| i i i i i i i i i i i i i i i i i i i | Divide (realization and) | 860 mg/m³ Air (BEV) | |
| | DNEL (Langzeit-wiederholt) | 480 mg/m³ Air (ARB) | |
| | , | 102.34 mg/m³ Air (BEV) | |
| 108-65-6 2 | 2-methoxy-1-methylethyl ac | etate | |
| Oral | DNEL (Langzeit-wiederholt) | 1.67 mg/kg bw/day (BEV) | |
| Dermal | DNEL (Langzeit-wiederholt) | 153.5 mg/kg bw/day (ARB) | |
| | | 54.8 mg/kg bw/day (BEV) | |
| Inhalative | DNEL (Kurzzeit-akut) | 550 mg/m³ Air (ARB) | |
| | DNEL (Langzeit-wiederholt) | 275 mg/m³ Air (ARB) | |
| | | 33 mg/m³ Air (BEV) | |
| | 6 Solvent naphtha (petroleւ | ,, <u> </u> | |
| Oral | DNEL (Langzeit-wiederholt) | 11 mg/kg bw/day (BEV) | |
| Dermal | DNEL (Langzeit-wiederholt) | | |
| Labat C | DNEL (Lange 16 to L. 1. 10) | 11 mg/kg bw/day (BEV) | |
| ınnalatıve | DNEL (Langzeit-wiederholt) | 150 mg/m³ Air (ARB) | |
| 404040 47 | 7 4 mahulasar 4 0 athana di D | 32 mg/m³ Air (BEV) | |
| 104610-47 | | , α-[3-[3-(2H-benzotriazol-2-yl)-5-(1,1-dim 2H- benzotriazol-2-yl)-5-(1,1-dimethy | |
| Oral | DNEL (Langzeit-wiederholt) | 0.025 mg/kg bw/day (BEV) | |
| O. a. | , - | 0.5 mg/kg bw/day (ARB) | |
| Dermal | DINEL (Langzeit-wiedernoit) | 0.0 mg/ng 5 m/ day (/ n n 2 / | |
| | DINEL (Langzeit-wiedernoit) | 0.25 mg/kg bw/day (BEV) | |



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| de name: | Mirror Gloss 2 | 2K-HS Clearc | oat 2:1 | |
|-------------|-----------------|--|--|--------------------------------|
| | | | | (Contd. of pa |
| | | | 0.085 mg/m³ Air (BEV) | \\\ - |
| 41556-26- | 7 bis(1,2,2,6,6 | -Pentamethy | -piperidyl)sebacat | |
| Oral | DNEL (Langze | eit-wiederholt) | 0.5 mg/kg bw/day (BEV) | |
| Dermal | DNEL (Langz | eit-wiederholt) | 2 mg/kg bw/day (ARB) | |
| | | | 1 mg/kg bw/day (BEV) | |
| Inhalative | DNEL (Langze | eit-wiederholt) | 3.53 mg/m³ Air (ARB) | |
| | | | 0.87 mg/m³ Air (BEV) | |
| 3648-18-8 | Dioctyltin dila | aurate | | |
| Oral | DNEL (Langze | eit-wiederholt) | 0.0005 mg/kg bw/day (BEV) | |
| Inhalative | DNEL (Langze | eit-wiederholt) | 0.0035 mg/m³ Air (ARB) | |
| | | | 0.0009 mg/m³ Air (BEV) | |
| 64742-82- | 1 Hydrocarbo | ns, C9-C12, r | -alkanes, cyclics, aromatics (2-25%) | |
| Oral | DNEL (Langze | eit-wiederholt) | 28 mg/kg bw/day (BEV) | |
| Dermal | DNEL (Langz | eit-wiederholt) | 47 mg/kg bw/day (ARB) | |
| | | | 28 mg/kg bw/day (BEV) | |
| Inhalative | DNEL (Kurzze | it-akut) | 570 mg/m³ Air (ARB) | |
| | | | 570 mg/m³ Air (BEV) | |
| | DNEL (Langze | eit-wiederholt) | 330 mg/m³ Air (ARB) | |
| | | | 71 mg/m³ Air (BEV) | |
| PNECs | | | | |
| | n-butyl acetate | <u> </u> | | |
| | ssrig) 35.6 mg | | | |
| • | • , | ig/l (MW) | | |
| | 0.18 mg | • , , | | |
| | | ı/I (WAS) | | |
| PNEC (fes | | mg/kg Trocke | ngew (BO) | |
| 0 (| * | | • , , | |
| | | 0.0981 mg/kg Trockengew (MWS) 0.981 mg/kg Trockengew (SWS) | | |
| 108-65-6 2 | 2-methoxy-1-n | • • | , | |
| | ssrig) 100 mg | • • | | |
| | ٠, | mg/I (MW) | | |
| | | ıg/l (SW) | | |
| | | ı/I (WAS) | | |
| PNEC (fes | | y/kg Trockeng | ew (BO) | |
| 1 1420 (100 | , | ig/kg Trocken | ` ' | |
| | | ı/kg Trockeng | | |
| 104810-47 | | |), α-[3-[3-(2H-benzotriazol-2-yl)-5-(1,1 | -dimethylethyl)-4-hydroxynheny |
| 104010-47 | | | (2H- benzotriazol-2-yl)-5-(1,1-dime | |
| | oxopropox | | | 3 3, 3 3. |
| PNEC (wä | ssrig) 10 mg/l | (KA) | | |
| | 0.00023 | mg/I (MW) | | |
| | 0.0023 | mg/l (SW) | | |
| | 0.028 m | ıg/l (WAS) | | |
| PNEC (fes | st) 2 mg/kg | Trockengew | (BO) | |
| • | , | ig/kg Trocken | | |
| | | /kg Trockeng | | |
| | | | | (Contd. on pag |



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(Contd. of page 6) 41556-26-7 bis(1,2,2,6,6-Pentamethyl-piperidyl)sebacat PNEC (wässrig) 1 mg/l (KA) 0.00022 mg/l (MW) 0.0022 mg/l (SW) 0.009 mg/I (WAS) 0.21 mg/kg Trockengew (BO) PNEC (fest) 0.11 mg/kg Trockengew (MWS) 1.05 mg/kg Trockengew (SWS) 3648-18-8 Dioctyltin dilaurate PNEC (wässrig) 100 mg/l (KA) 0.0000018 mg/l (MW) 0.0000018 mg/I (SW) PNEC (fest) 0.005593 mg/kg Trockengew (BO) 0.02798 mg/kg Trockengew (MWS)

· Additional information:

The lists valid during the making were used as basis.

· 8.2 Exposure controls

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

measures:

Avoid close or long term contact with the skin. Do not eat, drink, smoke or sniff while working. Use skin protection cream for skin protection.

Clean skin thoroughly immediately after handling the product.

Wash hands before breaks and at the end of work.

Do not inhale gases / fumes / aerosols.

· Respiratory protection:

Short term filter device:

Filter A/P2

0.02798 mg/kg Trockengew (SWS)

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:



Protective gloves

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).

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 Butyl rubber, BR

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.

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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.

Value for the permeation: Level \leq 3, 60 min 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.

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

suitable:

Butyl rubber, BR

Butoject (KCL, Art_No. 897, 898)

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

Butyl rubber, BR

Butoject (KCL, Art_No. 897, 898)

· Not suitable are gloves made of the following materials:

Leather gloves

Strong material gloves

· Eye protection:



Tightly sealed goggles

· Body protection: Protective work clothing

SECTION 9: Physical and chemical properties

| 9.1 Information on b | asic physica | I and chem | ical properties |
|-----------------------|--------------|------------|-----------------|
| · General Information | | | |
| · Appearance: | | | |

Appearance:

Fluid Form: Colour: Colourless · Odour: Specific type

· Change in condition

Melting point/freezing point: Undetermined. Initial boiling point and boiling range: 124-128 °C

· Flash point: 27 °C

315 °C

· Ignition temperature:

Product is not selfigniting.

 Auto-ignition temperature: · Explosive properties:

Product is not explosive. However, formation of explosive air/vapour mixtures are possible.

· Explosion limits: Lower:

1.5 Vol % 10.8 Vol %

· Vapour pressure at 20 °C:

10.7 hPa

· Density at 20 °C:

1 g/cm³

· Solubility in / Miscibility with

water:

Not miscible or difficult to mix.

· Viscosity:

Upper:

Dynamic: Not determined. Kinematic at 20 °C: 35 s (DIN 53211/4)

· Solvent content:

39.8 % Organic solvents:

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Solids content: 58.5 %

• **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 and stored according to specifications.

10.3 Possibility of hazardous

reactions

Reacts with strong acids. Reacts with strong alkali.

Reacts with strong oxidising agents.

· 10.4 Conditions to avoid · 10.5 Incompatible materials:

No further relevant information available. No further relevant information available.

· 10.6 Hazardous decomposition

products:

Carbon monoxide and carbon dioxide

Nitrogen oxides (NOx) Possible in traces.

SECTION 11: Toxicological information

· 11.1 Information on toxicological effects

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

| · <u>LD/LC50</u> ν | /alues relevant f | for classification: |
|--------------------|-------------------|---|
| 123-86-4 ı | n-butyl acetate | |
| Oral | LD50 | 10,800 mg/kg (rat) (OECD 423) |
| Dermal | LD50 | >17,600 mg/kg (rabbit) (OECD 402) |
| Inhalative | LC50/4 h | >21 mg/l (rat) (OECD 403) |
| | LC50 | 390 mg/m3 (rat) |
| | LC50/48h | 64 mg/l (Brachydanio rerio) |
| 108-65-6 2 | 2-methoxy-1-m | ethylethyl acetate |
| Oral | LD50 | 6,190 mg/kg (rat) (OECD 401) |
| | NOAEL-Werte | 1,500 mg/kg (rat) |
| Dermal | LD50 | >5,000 mg/kg (rabbit) (OECD 402) |
| | | >2,000 mg/kg (rat) |
| Inhalative | LC50/4h | >10,000 mg/m3 (rat) |
| | LC50 | >23.8 mg/l (rat) |
| | LC50/4 h | 35.7 mg/l (rat) |
| | LC50/48h | 100 mg/l (Desmodesmus subspicatus) |
| 64742-95- | 6 Solvent naph | tha (petroleum), light arom. |
| Oral | LD50 | 3,592 mg/kg (rat) |
| Dermal | LD50 | >3,160 mg/kg (rabbit) |
| | | >2,000 mg/kg (rat) |
| Inhalative | LC50/4 h | mg/l (rat) |
| 104810-47 | | 2-ethanediyl), α-[3-[3-(2H-benzotriazol-2-yl)-5-(1,1-dimethylethyl)-4-hydroxyphenyl]-yl]-ω-[3-[3-(2H- benzotriazol-2-yl)-5-(1,1-dimethylethyl)-4-hydroxyphenyl]-1-/]- |
| Oral | LD50 | >5,000 mg/kg (rat) |
| | • | (Contd. on page 10) |



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Trade name: Mirror Gloss 2K-HS Clearcoat 2:1

| | | | (Contd. of page 9) |
|------------|-----------------|---|--------------------|
| Dermal | LD50 | >2,000 mg/kg (rat) | |
| 41556-26- | 7 bis(1,2,2,6,6 | -Pentamethyl-piperidyl)sebacat | |
| Oral | LD50 | 3,230 mg/kg (rat) | |
| Dermal | LD50 | >2,000 mg/kg (rat) | |
| 3648-18-8 | Dioctyltin dila | aurate | |
| Oral | LD50 | 6,450 mg/kg (rat) | |
| Dermal | LD50 | >2,000 mg/kg (rat) | |
| 64742-82- | 1 Hydrocarbo | ns, C9-C12, n-alkanes, cyclics, aromatics (2-25%) | |
| Oral | LD50 | >15,000 mg/kg (rat) | |
| | NOAEL | 1,056 mg/kg (rat) | |
| Dermal | LD50 | >3,160 mg/kg (rabbit) | |
| | | >3,400 mg/kg (rat) | |
| Inhalative | LC50/4h | >13,100 mg/m3 (rat) | |
| | LC50/4 h | 13.1 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.

· Respiratory or skin sensitisation May cause an allergic skin reaction.

· Additional toxicological information:

· 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

| · Aquatic toxic | city: |
|-----------------|--|
| 123-86-4 n- | butyl acetate |
| EC50/24h | 72.8 mg/l (daphnia magna) (DIN 38412) |
| EC50/96h | 320 mg/l (green alge) |
| LC50/24h | 205 mg/l (daphnia magna) |
| IC50/72h | 648 mg/l (Desmodesmus subspicatus) |
| EC10/18h | 959 mg/l (pseudomonas putida) |
| EC50/48h | 44 mg/l (daphnia magna) |
| EC50/16h | 959 mg/l (pseudomonas putida) |
| NOEC | 200 mg/kg (Desmodesmus subspicatus) |
| NOEC/21d | 23 mg/l (daphnia magna) |
| EC50/72h | 647.7 mg/l (Desmodesmus subspicatus) (Zellvermehrungshemmtest) |
| | 674 mg/l (Scenedesmus subspicatus) |
| LC50/96h | 62 mg/l (Danio rerio.) |
| | 81 mg/l (piscis) |
| | 100 mg/l (lepomis macrochirus) |
| | 62 mg/l (Leuciscus idus) (DIN 38412) |
| | 18 mg/l (pimephales promelas) (OECD 203) |
| | (Contd. on page 11) |

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|----------------------|---|
| nde name: M | irror Gloss 2K-HS Clearcoat 2:1 |
| | (Contd. of page |
| 108-65-6 2-r | methoxy-1-methylethyl acetate |
| EC50 | >100 mg/l (daphnia magna) |
| LC50 | 63.5 mg/l (Oryzias latipes) |
| EC50/48h | >500 mg/l (daphnia magna) (RL 67/548/EWG. Anhang V, C.2.) |
| ErC50/72h | >1,000 mg/l (Pseudokirchneriella subcapitata) (OECD 201) |
| EC20/0.5h | >1,000 mg/l (BES) (OECD 209) |
| NOEC | 47.5 mg/l (Oryzias latipes) |
| NOEC/21d | ≥100 mg/l (daphnia magna) |
| EC10 | >1,000 mg/l (BES) |
| LC50/96h | 134 mg/l (Oncorhynchus mykiss) |
| | >1,000 mg/l (Oryzias latipes) |
| | 161 mg/l (Pimephales promelas) |
| 64742-95-6 | 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) |
| | l poly(oxy-1,2-ethanediyl), α-[3-[3-(2H-benzotriazol-2-yl)-5-(1,1-dimethylethyl)-4-hydroxypheny 1-oxopropyl]-ω-[3-[3-(2H- benzotriazol-2-yl)-5-(1,1-dimethylethyl)-4-hydroxyphenyl]- oxopropoxy]- |
| EC50 | >1,000 mg/l (BES) |
| EC50/48h | 4 mg/l (daphnia magna) |
| LC 0 | >1,000 mg/l (Eisenia fetida (Regenwürmer)) |
| NOEC | 100 mg/kg (Eisenia fetida (Regenwürmer)) |
| NOEC/21d | 0.78 mg/l (daphnia magna) |
| EC10 | 10 mg/l (Pseudokirchneriella subcapitata) |
| EC50/72h | >100 mg/l (Pseudokirchneriella subcapitata) |
| LC50/96h | 2.8 mg/l (Oncorhynchus mykiss) |
| | bis(1,2,2,6,6-Pentamethyl-piperidyl)sebacat |
| EC50/24h | 20 mg/l (daphnia magna) (OECD 202) |
| EC50 | >100 mg/l (BES) (OECD 209) |
| NOEC/21d | 1 mg/l (daphnia magna) |
| | 1.68 mg/l (Desmodesmus subspicatus) (OECD 201) |
| EC50/72h | |
| EC50/72h LC50/96h | 0.9 mg/l (Brachydanio rerio) |
| | 0.9 mg/l (Brachydanio rerio) 0.97 mg/l (lepomis macrochirus) |
| LC50/96h | 0.9 mg/l (Brachydanio rerio) 0.97 mg/l (lepomis macrochirus) 7.9 mg/l (Oncorhynchus mykiss) (OECD 203: ISO 7346; 92/69/EWG, C.1) |
| LC50/96h | 0.9 mg/l (Brachydanio rerio) 0.97 mg/l (lepomis macrochirus) |



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EC50/48h 43.98 mg/l (bacteria)

4.5 mg/l (daphnia magna)

EL50/48h 10-22 mg/l (daphnia magna)

EL50/72h 3.1 mg/l (Pseudokirchneriella subcapitata)

LL50/96h 10 mg/l (Oncorhynchus mykiss)

8.2 mg/l (Pimephales promelas)

NOEC 0.5 mg/l (daphnia magna)

2.6 mg/l (Pimephales promelas)

0.5 mg/l (Pseudokirchneriella subcapitata)

NOELR/72h 1 mg/l (Pseudokirchneriella subcapitata)

NOEC/21d 0.097 mg/l (daphnia magna) EC50/48h <22 mg/l (daphnia magna) LC50/96h 10-30 mg/l (piscis)

<30 mg/l (Oncorhynchus mykiss)

· 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.

· Additional ecological information:

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

Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous

for water

· 12.5 Results of PBT and vPvB assessment

· <u>PBT:</u> 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.

Uncleaned packaging:

Recommendation: Empty contaminated packagings thoroughly. They may be recycled after

thorough and proper cleaning.

· Recommended cleansing agents: Alcohol

SECTION 14: Transport information

· 14.1 UN-Number

· ADR, IMDG, IATA UN1263

· 14.2 UN proper shipping name

· ADR 1263 PAINT PAINT

· 14.3 Transport hazard class(es)

· ADR



· Class 3 (F1) Flammable liquids.

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<u>Trade name:</u> Mirror Gloss 2K-HS Clearcoat 2:1

(Contd. of page 12)

· <u>Label</u> 3

· IMDG, IATA



· Class 3 Flammable liquids.

· Label

14.4 Packing group

· <u>ADR, IMDG, IATA</u> III

14.5 Environmental hazards:

· Marine pollutant: No

· 14.6 Special precautions for user Warning: Flammable liquids.

Hazard identification number (Kemler code):
EMS Number:
Stowage Category

30
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

· Excepted quantities (EQ) Code: E1

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

· IMDG

· Limited quantities (LQ) 5L

· Excepted quantities (EQ) Code: E²

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

· <u>UN "Model Regulation":</u> UN 1263 PAINT, 3, III

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
Seveso category
P5c FLAMMABLE LIQUIDS

· Qualifying quantity (tonnes) for the

application of lower-tier

requirements 5,000 t

Qualifying quantity (tonnes) for the

application of upper-tier

requirements 50,000 t

National regulations:

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

Employment restrictions concerning pregnant and lactating women must be

observed.

· <u>Waterhazard class:</u> Water hazard class 1 (Self-assessment): slightly hazardous for water.

· Substances of very high concern (SVHC) according to REACH, Article 57

3648-18-8 Dioctyltin dilaurate

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AKEMI®

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Safety data sheet

according to 1907/2006/EC, Article 31

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Trade name: Mirror Gloss 2K-HS Clearcoat 2:1

· VOC EU 398.3 g/l

· DECOPAINT: subject to EU-

regulations 2004/42/EG (ANNEX

EU limit for this product (product-category (Kat. B/d)): 420g/l (2010). The readyto-use product (comprises of clear lacquer and hardener) contains max. 420 g/l

VOC.

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.

H317 May cause an allergic skin reaction. H335 May cause respiratory irritation. H336 May cause drowsiness or dizziness.

H361 Suspected of damaging fertility or the unborn child.

H372 Causes damage to organs through prolonged or repeated exposure.

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. H412 Harmful to aquatic life with long lasting effects.

· Recommended restriction of use

refer to Technical Data Sheet (TDS)

· Department issuing SDS: · Contact:

Laboratory

Elke Hake

Fon ++49 (0)911 64296-59 @mail E.Hake@akemi.de

· 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 relatif au transport international 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)

PNEC: Predicted No-Effect Concentration (REACH)

LC50: Lethal concentration, 50 percent LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic SVHC: Substances of Very High Concern vPvB: very Persistent and very Bioaccumulative Flam. Liq. 3: Flammable liquids – Category 3 Skin Sens. 1: Skin sensitisation - Category 1 Repr. 2: Reproductive toxicity - Category 2

STOT SE 3: Specific target organ toxicity (single exposure) - Category 3 STOT RE 1: Specific target organ toxicity (repeated exposure) – Category 1 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 Aquatic Chronic 3: Hazardous to the aquatic environment - long-term aquatic hazard – Category 3

REACH directive 1907/2006/EC Sources

Data compared to the previous version altered.

Adaptation in accordance with REACH directive 1907/2006/EC