

according to 1907/2006/EC, Article 31

Printing date 08.12.2015 Version number 2 Revision: 08.12.2015

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

- 1.1 Product identifier

- Trade name: COELAN Plastic Boat Coating transparent gloss finish

- 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
 1.3 Details of the supplier of the safety data sheet

- Manufacturer/Supplier: KEMPER SYSTEM GmbH & Co. KG

Holländische Strasse 32-36

34246 Vellmar

Deutschland / Germany Telefon: +49 (0)561 / 8295-0 Telefax: +49 (0)561 / 8295-5110

E-Mail: MSDS@KEMPER-SYSTEM.COM

- Further information obtainable from: Research and Development

- 1.4 Emergency telephone number: Giftinformationszentrum der Länder Rheinland-Pfalz und Hessen

Langenbeckstraße 1; Gebäude 601; 55131 Mainz

Tel. Nr.: +49 (0)6131 / 19 24 0

Universitätsmedizin der Johannes Gutenberg-Universität Mainz

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

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



GHS09 environment

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



GHS07

Eye Irrit. 2 H319 Causes serious eye irritation.
Skin Sens. 1 H317 May cause an allergic skin reaction.

- 2.2 Label elements
- Labelling according to Regulation (EC) No 1272/2008

- Hazard pictograms

- Signal word

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



Warning



GHS07



GHS08



GHS02

- Hazard-determining components of

labelling:

Hazard statements

aliphatic polyisocyanate

Hydrocarbons, C9-C12, n-alkanes, isoalkanes, cyclics, aromatics (2-25%)

Urethane bis Oxazolidine

Isophorondiisocyanate homopolymer H226 Flammable liquid and vapour. H319 Causes serious eye irritation. H317 May cause an allergic skin reaction.

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

H411 Toxic to aquatic life with long lasting effects.

- **Precautionary statements** P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources.

No smoking.

P241 Use explosion-proof electrical/ventilating/lighting/equipment.

P260 Do not breathe dust/fume/gas/mist/vapours/spray.

(Contd. on page 2)



according to 1907/2006/EC, Article 31

Printing date 08.12.2015 Version number 2 Revision: 08.12.2015

Trade name: COELAN Plastic Boat Coating transparent gloss finish

(Contd. of page 1)

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

water/shower

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses,

if present and easy to do. Continue rinsing.

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

regulations.

- Additional information: EUH204 Contains isocyanates. May produce an allergic reaction.

- 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 component | s: | | | |
|-----------------------|--|----------|--|--|
| L | aliphatic polyisocyanate ♦ Skin Sens. 1, H317 | 25-50% | | |
| | EC number: 918-668-5 hydrocarbons, C9, aromatic | | | |
| | 2-methoxy-1-methylethyl acetate ♦ Flam. Liq. 3, H226 | 10-12,5% | | |
| | | | | |
| | lsophorondiisocyanate homopolymer ♦ Skin Sens. 1, H317; STOT SE 3, H335 | 2,5-10% | | |
| | Hydrocarbons, C9-C12, n-alkanes, isoalkanes, cyclics, aromatics (2-25%) Flam. Liq. 3, H226; STOT RE 1, H372; Asp. Tox. 1, H304; Aquatic Chronic 2, H411; STOT SE 3, H336 | 2,5-10% | | |
| | hexahydromethylphthalic anhydride Resp. Sens. 1, H334; Eye Dam. 1, H318; Skin Sens. 1, H317 | < 0,5% | | |
| EINECS: 223-861-6 | 3-isocyanatomethyl-3,5,5-trimethylcyclohexyl isocyanate ♦ Acute Tox. 2, H330; ♦ Resp. Sens. 1, H334; ♦ Aquatic Chronic 2, H411; ♦ Skin Irrit. 2, H315; Eye Irrit. 2, H319; Skin Sens. 1, H317; STOT SE 3, H335 | < 0,5% | | |
| | benzotriazol derivate Aquatic Chronic 2, H411; 🗘 Skin Sens. 1, H317 | < 0,5% | | |

25550-51-0 hexahydromethylphthalic anhydride

- 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.

Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48

hours after the accident.

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

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

Supply fresh air; consult doctor in case of complaints.

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

Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

- After swallowing: If symptoms persist consult doctor.

4.2 Most important symptoms and effects,

both acute and delayed

- After inhalation:

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

No further relevant information available.

No further relevant information available

SECTION 5: Firefighting measures

- 5.1 Extinguishing media

- Suitable extinguishing agents: CO2, sand, extinguishing powder. Do not use water.

Alcohol resistant foam

- For safety reasons unsuitable extinguishing

agents:

Water with full jet

ABC powder

5.2 Special hazards arising from the

substance or mixture

During heating or in case of fire poisonous gases are produced.

(Contd. on page 3)

(Contd. of page 2)



Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 08.12.2015 Version number 2 Revision: 08.12.2015

Trade name: COELAN Plastic Boat Coating transparent gloss finish

- 5.3 Advice for firefighters

- Protective equipment: Mouth respiratory protective device.

Do not inhale explosion gases or combustion gases.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Wear protective equipment. Keep unprotected persons away.

Ensure adequate ventilation Keep away from ignition sources.

- 6.2 Environmental precautions: Inform respective authorities in case of seepage into water course or sewage system.

> Do not allow to enter sewers/ surface or ground water. Prevent from spreading (e.g. by damming-in or oil barriers).

- 6.3 Methods and material for containment

6.4 Reference to other sections

and cleaning up:

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

Ensure adequate ventilation.

Do not flush with water or aqueous cleansing agents 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 Store in cool, dry place in tightly closed receptacles.

Ensure good ventilation/exhaustion at the workplace.

Prevent formation of aerosols. Use only in well ventilated areas.

- 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:

Provide solvent resistant, sealed floor.

Information about storage in one common

storage facility:

Store away from foodstuffs.

Further information about storage

conditions:

Protect from frost.

Store in dry 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:

108-65-6 2-methoxy-1-methylethyl acetate

WEL Short-term value: 548 mg/m³, 100 ppm

Long-term value: 274 mg/m³, 50 ppm

4098-71-9 3-isocyanatomethyl-3,5,5-trimethylcyclohexyl isocyanate

WEL | Short-term value: 0.07 mg/m3

Long-term value: 0.02 mg/m³

Sen; as -NCO

- DNELs

108-65-6 2-methoxy-1-methylethyl acetate

Dermal Long term - systemic effects | 153.5 mg/kg (worker) Inhalative Long term - systemic effects 275 mg/m³ (worker)

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

- 8.2 Exposure controls

- Personal protective equipment:

Keep away from foodstuffs, beverages and feed. - General protective and hygienic measures:

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

Avoid contact with the eyes and skin.

(Contd. on page 4)

(Contd. of page 3)



Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 08.12.2015 Version number 2 Revision: 08.12.2015

Trade name: COELAN Plastic Boat Coating transparent gloss finish

- Respiratory protection: Use suitable respiratory protective device when high concentrations are present.

- Protection of hands:

Not necessary if room is well-ventilated.

Protective gloves

Only use chemical-protective gloves with CE-labelling of category III.

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

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

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.

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.

Recommended thickness of the material: ≥ 0.4 mm

Synthetic rubber gloves

- 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.

The determined penetration times according to EN 374 part III are not performed under practical conditions. Therefore a maximum wearing time, which corresponds to 50% of the penetration time, is recommended.

Value for the permeation: Level ≥ 2

- Eye protection:

Material of gloves



Tightly sealed goggles

- Body protection: Protective work clothing Impervious protective clothing

SECTION 9: Physical and chemical properties

- 9.1 Information on basic physical and chemical properties

- General Information

Appearance:

Form: Fluid

Colour: According to product specification

Odour: Characteristic - Odour threshold: Not determined. pH-value: Not determined.

- Change in condition

Melting point/Melting range: Undetermined. Boiling point/Boiling range: Undetermined. - Flash point: 48 °C

- Flammability (solid, gaseous): Not applicable.

Ignition temperature:

Decomposition temperature: Not determined.

- Self-igniting: Product is not selfigniting

- Danger of explosion: Product is not explosive. However, formation of explosive air/vapour mixtures are possible.

Not determined.

Explosion limits:

Lower:

Upper: Not determined. - Density at 20 °C: 1.03 g/cm³ - Relative density Not determined.

 Vapour density Not determined. Evaporation rate Not determined.

- Solubility in / Miscibility with

Not miscible or difficult to mix. water:

- Partition coefficient (n-octanol/water): Not determined

(Contd. on page 5)



according to 1907/2006/EC, Article 31

Printing date 08.12.2015 Version number 2 Revision: 08.12.2015

Trade name: COELAN Plastic Boat Coating transparent gloss finish

(Contd. of page 4)

- Viscosity:

Dynamic: Not determined. **Kinematic at 20 °C:** 84 s (ISO 6 mm)

- Solvent content:

VOC (EC) 28.60 %

- **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:

avoided:

- 10.3 Possibility of hazardous reactions

- 10.4 Conditions to avoid - 10.5 Incompatible materials:

10.5 Incompatible materials:10.6 Hazardous decomposition products:

No decomposition if used according to specifications.

No dangerous reactions known.

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

ts: No dangerous decomposition products known.

SECTION 11: Toxicological information

| | | n toxicological effects |
|----------|-----------------|---|
| - Acute | | Based on available data, the classification criteria are not met. |
| | | evant for classification: |
| _ | arbons, C9, | |
| Oral | LD50 | >2000 mg/kg (rat) |
| Dermal | | >2000 mg/kg (rabbit) |
| | | r-1-methylethyl acetate |
| Oral | LD50 | 8532 mg/kg (rat) |
| Dermal | LD50 | >5000 mg/kg (rat) |
| | | 35.7 mg/l (rat) |
| 59719- | 67-4 Urethan | e bis Oxazolidine |
| Oral | LD50 | >5000 mg/kg (rat) |
| Dermal | LD50 | >2000 mg/kg (rab) |
| 53880- | 05-0 Isophor | ondiisocyanate homopolymer |
| Oral | LD50 | 2000 mg/kg (rat) |
| Dermal | LD50 | >14000 mg/kg (rat) |
| Hydrod | arbons, C9- | C12, n-alkanes, isoalkanes, cyclics, aromatics (2-25%) |
| Oral | LD50 | >15000 mg/kg (rat) |
| Dermal | LD50 | >3400 mg/kg (rat) |
| 25550- | 51-0 hexahyo | dromethylphthalic anhydride |
| Oral | LD50 | >5000 mg/kg (rat) |
| 4098-7 | - | natomethyl-3,5,5-trimethylcyclohexyl isocyanate |
| Dermal | LD50 | >7000 mg/kg (rat) (OECD- Prüfrichtlinie 402) |
| | | 0.5 mg/l (ATE) |
| benzot | riazol deriva | te |
| Oral | LD50 | >5000 mg/kg (rat) (unbekannt) |
| Dermal | LD50 | >2000 mg/kg (rat) (unbekannt) |
| Inhalati | ve LC50/4 h | >5.8 mg/l (rat) (unbekannt) |
| - Primar | y irritant effe | ect: |

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

Serious eye damage/irritation
 Respiratory or skin sensitisation
 Causes serious eye irritation.
 May cause an allergic skin reaction.

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

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

- **Aspiration hazard** Based on available data, the classification criteria are not met.

(Contd. on page 6)

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according to 1907/2006/EC, Article 31

Printing date 08.12.2015 Version number 2 Revision: 08.12.2015

Trade name: COELAN Plastic Boat Coating transparent gloss finish

(Contd. of page 5)

| SECTION 1 | 2: Ecological inforn | ation | | |
|---|--|--|--|--|
| - 12.1 Toxicity | z. Loologioai illiom | | | |
| - Aquatic toxici | ty: | | | |
| 108-65-6 2-me | thoxy-1-methylethyl ace | ate | | |
| LC50/96 h | >100 mg/l (oryzias lat | pes (Ricefish)) | | |
| | 161 mg/l (fis) | | | |
| 59719-67-4 Ur | ethane bis Oxazolidine | | | |
| EC50/48 h | 87.1 mg/l (Daphnia m | agna) | | |
| EC50 / 72h | 18.6 mg/l (Selenastrum capricornutum) | | | |
| 53880-05-0 Iso | ophorondiisocyanate ho | nopolymer | | |
| LC50/96 h | >1.51 mg/l (Cyprinus Carpio) (Richtlinie 67/548/EWG, Anhang V, C.1.) | | | |
| EC50/48 h | >3.36 mg/l (Daphnia magna) (OECD- Prüfrichtlinie 202) | | | |
| EC50/3h | >10000 mg/l (Belebtschlamm (freshwater)) (OECD- Prüfrichtlinie 209) | | | |
| Hydrocarbons | s, C9-C12, n-alkanes, iso | alkanes, cyclics, aromatics (2-25%) | | |
| LC50 - OECD2 | 203 13100 mg/l (rat) | | | |
| 4098-71-9 3-is | ocyanatomethyl-3,5,5-tri | methylcyclohexyl isocyanate | | |
| EC50/48 h | 27 mg/l (Daphnia magna) (Richtlinie 67/548/EWG, Anhang V, C.2.) | | | |
| | nce and degradability | No further relevant information available. | | |
| | nulative potential | No further relevant information available. | | |
| - 12.4 Mobility | | No further relevant information available. | | |
| Ecotoxical eff Remark: | ects: | Toxic for fish | | |
| - nemark: | | LOXIC IOL IISTI | | |

- 12.5 Results of PBT and vPvB assessment

- Additional ecological information:

- General notes:

- 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.

Also poisonous for fish and plankton in water bodies.

Toxic for aquatic organisms

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

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.

- European waste catalogue

08 04 09* waste adhesives and sealants containing organic solvents or other hazardous substances
08 04 10 waste adhesives and sealants other than those mentioned in 08 04 09

- Uncleaned packaging:

- **Recommendation:** Disposal must be made according to official regulations.

SECTION 14: Transport information

- 14.1 UN-Number

- ADR, IMDG, IATA UN1263

- 14.2 UN proper shipping name

- **ADR** 1263 PAINT, ENVIRONMENTALLY HAZARDOUS

- IMDG PAINT (hydrocarbons, C9, aromatic, Urethane bis Oxazolidine), MARINE

POLLUTÁNT Paint

Р

- 14.3 Transport hazard class(es)

- ADR

- IATA



Class 3 (F1) Flammable liquids.

(Contd. on page 7)



according to 1907/2006/EC, Article 31

Printing date 08.12.2015 Version number 2 Revision: 08.12.2015

Trade name: COELAN Plastic Boat Coating transparent gloss finish

(Contd. of page 6) - Label 3 - IMDG Class 3 Flammable liquids. Label - IATA Class 3 Flammable liquids. - Label 3 - 14.4 Packing group - ADR, IMDG, IATA Ш - 14.5 Environmental hazards: Product contains environmentally hazardous substances: bis(1,2,2,6,6pentamethyl-4-piperidyl) sebacate - 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): 30 - EMS Number: F-E,<u>S-E</u> Stowage Category Α - 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

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

None of the ingredients is listed.

E2 Hazardous to the Aquatic Environment P5c FLAMMABLE LIQUIDS

- Qualifying quantity (tonnes) for the application of lower-tier requirements

r requirements 200 t nes) for the

- Qualifying quantity (tonnes) for the application of upper-tier requirements

500 t

- National regulations:
- Other regulations, limitations and prohibitive regulations
- Substances of very high concern (SVHC) according to REACH, Article 57

25550-51-0 hexahydromethylphthalic anhydride

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

(Contd. on page 8)

— EN



according to 1907/2006/EC, Article 31

Printing date 08.12.2015 Version number 2 Revision: 08.12.2015

Trade name: COELAN Plastic Boat Coating transparent gloss finish

(Contd. of page 7)

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.

H315 Causes skin irritation.

H317 May cause an allergic skin reaction. H318 Causes serious eye damage. H319 Causes serious eye irritation.

H330 Fatal if inhaled.

H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.

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

H372 Causes damage to organs through prolonged or repeated exposure.

H411 Toxic to aquatic life with long lasting effects.

- Department issuing MSDS:

Contact:

research & development research & development

- 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 Avaitation 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)

IMDC: International Registror Conde

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)

DNEL: Derived No-Effect Level (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, Hazard Category 3 Acute Tox. 2: Acute toxicity, Hazard Category 2 Skin Irrit. 2: Skin corrosion/irritation, Hazard Category 2

Eye Dam. 1: Serious eye damage/eye irritation, Hazard Category 1
Eye Irrit. 2: Serious eye damage/eye irritation, Hazard Category 1
Eye Irrit. 2: Serious eye damage/eye irritation, Hazard Category 2
Resp. Sens. 1: Sensitisation - Respirat., Hazard Category 1
Skin Sens. 1: Sensitisation - Skin, Hazard Category 1
Skin Sens. 1B: Sensitisation - Skin, Hazard Category 1B

STOT SE 3: Specific target organ toxicity - Single exposure, Hazard Category 3
STOT RE 1: Specific target organ toxicity - Repeated exposure, Hazard Category 1
STOT RE 2: Specific target organ toxicity - Repeated exposure, Hazard Category 2
Asp. Tox. 1: Aspiration hazard, Hazard Category 1

Aquatic Chronic 2: Hazardous to the aquatic environment - Chronic Hazard, Category 2

- * Data compared to the previous version altered.