

Safety Data Sheet
according to Regulation (EC) No. 1907/2006 (REACH)

WENCON®

Trade name : Wencon Hi-Temp Green - Component A
Revision date : 08.01.2018
Print date : 02-02-2018

Version (Revision) : 5.0.0 (4.1.1)

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

1.1 Product identifier

Wencon Hi-Temp Green - Component A (185000060A)
PR-number (Danish): 1593670

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

Solventfree two component coating based on epoxy

Relevant identified uses

In compliance with the conditions described in the annex to this safety data sheet. See section 16 for a comprehensive list of uses, for which an exposure scenario is provided as an annex.

Sector of uses [SU]

SU22 - Professional uses: Public domain (administration, education, entertainment, services, craftsmen)

Article categories [AC]

AC7 - Metal articles

Process categories [PROC]

PROC10 - Roller application or brushing

PROC19 - Hand-mixing with intimate contact and only PPE available

PROC21 - Low energy manipulation of substances bound in materials and/or articles

PROC24 - High (mechanical) energy work-up of substances bound in materials and/or articles

Environmental release categories [ERC]

ERC8c - Wide dispersive indoor use resulting in inclusion into or onto a matrix

ERC8f - Wide dispersive outdoor use resulting in inclusion into or onto a matrix

ERC10a - Wide dispersive outdoor use of long-life articles and materials with low release

ERC11a - Wide dispersive indoor use of long-life articles and materials with low release

Uses advised against

Do not use for private purposes (household).

Remark

The product is intended for professional use.

1.3 Details of the supplier of the safety data sheet

Supplier (manufacturer) :

Wencon ApS

Street :

Jyllandsvej 15

Postal code/city :

DK-5400 BOGENSE

Telephone :

+45 6481 1010

Information contact :

wencon@wencon.com

1.4 Emergency telephone number

+44 870 600 62 66 (UK National Poisons Emergency Number)

European emergency number: 112. Danmark: (Gifljinjen +45 82 12 12 12), only for the purpose of informing medical personnel in cases of acute intoxications.

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008 [CLP]

Aquatic Chronic 2 ; H411 - Hazardous to the aquatic environment : Chronic 2 ; Toxic to aquatic life with long lasting effects.

Eye Irrit. 2 ; H319 - Serious eye damage/eye irritation : Category 2 ; Causes serious eye irritation.

Skin Irrit. 2 ; H315 - Skin corrosion/irritation : Category 2 ; Causes skin irritation.

Skin Sens. 1 ; H317 - Skin sensitisation : Category 1 ; May cause an allergic skin reaction.

STOT RE 2 ; H373 - STOT-repeated exposure : Category 2 ; May cause damage to organs through prolonged or repeated exposure.

Safety Data Sheet
according to Regulation (EC) No. 1907/2006 (REACH)

WENCON®

Trade name : Wencon Hi-Temp Green - Component A
Revision date : 08.01.2018
Print date : 02-02-2018

Version (Revision) : 5.0.0 (4.1.1)

2.2 Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms



Health hazard (GHS08) · Environment (GHS09) · Exclamation mark (GHS07)

Signal word

Warning

Hazard components for labelling

QUARTZ (SIO₂) ; CAS No. : 14808-60-7

REACTION PRODUCT: BISPHENOL A-(EPICHLORHYDRIN), EPOXY RESIN (NUMBER AVERAGE MOLECULAR WEIGHT <= 700) ; CAS No. : 25068-38-6

BISPHENOL F-(EPICHLORHYDRIN); EPOXY RESIN MW <= 700 ; CAS No. : 9003-36-5

1,6 HEXANDIOL DIGLYCIDYLETHER ; CAS No. : 16096-31-4

PHENOL, METHYL STYRENATED ; CAS No. : 68512-30-1

Hazard statements

H373 May cause damage to organs through prolonged or repeated exposure.
H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H319 Causes serious eye irritation.
H411 Toxic to aquatic life with long lasting effects.

Precautionary statements

P260 Do not breathe dust/fume/gas/mist/vapours/spray.
P264 Wash hands thoroughly after handling.
P272 Contaminated work clothing should not be allowed out of the workplace.
P314 Get medical advice/attention if you feel unwell.
P333+P313 If skin irritation or rash occurs: Get medical advice/attention.
P337+P313 If eye irritation persists: Get medical advice/attention.

Special rules for supplemental label elements for certain mixtures

EUH205 Contains epoxy constituents. May produce an allergic reaction.

2.3 Other hazards

None

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Hazardous ingredients

QUARTZ (SIO₂) ; REACH registration No. : Annex V ; EC No. : 238-878-4; CAS No. : 14808-60-7

Weight fraction : ≥ 25 - < 50 %

Classification 1272/2008 [CLP] : STOT RE 2 ; H373

PHENOL-FORMALDEHYDE POLYMER GLYCIDYL ETHER ; CAS No. : 28064-14-4

Weight fraction : ≥ 10 - < 25 %

Classification 1272/2008 [CLP] : Aquatic Chronic 4 ; H413

REACTION PRODUCT: BISPHENOL A-(EPICHLORHYDRIN), EPOXY RESIN (NUMBER AVERAGE MOLECULAR WEIGHT <= 700) ; REACH registration No. : 01-2119456619-26 ; CAS No. : 25068-38-6

Weight fraction : ≥ 10 - < 25 %

Classification 1272/2008 [CLP] : Skin Irrit. 2 ; H315 Skin Sens. 1 ; H317 Eye Irrit. 2 ; H319 Aquatic Chronic 2 ; H411

BISPHENOL F-(EPICHLORHYDRIN); EPOXY RESIN MW <= 700 ; REACH registration No. : 01-211-454392-40 ; EC No. : 500-

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH)

WENCON®

Trade name : Wencon Hi-Temp Green - Component A
Revision date : 08.01.2018
Print date : 02-02-2018

Version (Revision) : 5.0.0 (4.1.1)

006-8; CAS No. : 9003-36-5

Weight fraction : $\geq 10 - < 25$ %

Classification 1272/2008 [CLP] : Skin Irrit. 2 ; H315 Skin Sens. 1 ; H317 Eye Irrit. 2 ; H319 Aquatic Chronic 2 ; H411

1,6 HEXANDIOL DIGLYCIDYLETHER ; REACH registration No. : 01-2119463471-41 ; EC No. : 240-260-4; CAS No. : 16096-31-4

Weight fraction : $\geq 1 - < 2,5$ %

Classification 1272/2008 [CLP] : Skin Irrit. 2 ; H315 Skin Sens. 1 ; H317 Eye Irrit. 2 ; H319 Aquatic Chronic 3 ; H412

PHENOL, METHYL STYRENATED ; REACH registration No. : 01-2119555274-38 ; EC No. : 270-966-8; CAS No. : 68512-30-1

Weight fraction : $\geq 0,5 - < 1$ %

Classification 1272/2008 [CLP] : Skin Irrit. 2 ; H315 Skin Sens. 1 ; H317 Aquatic Chronic 3 ; H412

Additional information

Full text of H- and EUH-phrases: see section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

General information

When in doubt or if symptoms are observed, get medical advice. Never give anything by mouth to an unconscious person or a person with cramps. In case of allergic symptoms, especially in the breathing area, seek medical advice immediately. If unconscious place in recovery position and seek medical advice.

Following inhalation

Remove casualty to fresh air and keep warm and at rest. If breathing is irregular or stopped, administer artificial respiration. Consult a doctor immediately in the case of inhaling spray mist and show him packing or label.

In case of skin contact

In case of skin reactions, consult a physician. Immediately remove any contaminated clothing, shoes or stockings. After contact with skin, wash immediately with plenty of water and soap. Do not use force or solvents to remove product incrustations from affected skin areas. Do not let product dry on skin.

After eye contact

After contact with the eyes, rinse with water with the eyelids open for a sufficient length of time, then consult an ophthalmologist immediately.

After ingestion

If accidentally swallowed rinse the mouth with plenty of water (only if the person is conscious) and obtain immediate medical attention. Do NOT induce vomiting. Keep at rest.

Self-protection of the first aider

First aider: Pay attention to self-protection!

4.2 Most important symptoms and effects, both acute and delayed

Causes damage to organs through prolonged or repeated exposure.

Effects

After eye contact
Irritating to eyes.

In case of skin contact
Irritating to skin. May cause an allergic skin reaction.

4.3 Indication of any immediate medical attention and special treatment needed

None

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media

Safety Data Sheet
according to Regulation (EC) No. 1907/2006 (REACH)

WENCON®

Trade name : Wencon Hi-Temp Green - Component A
Revision date : 08.01.2018
Print date : 02-02-2018

Version (Revision) : 5.0.0 (4.1.1)

alcohol resistant foam

Unsuitable extinguishing media

Water spray jet

5.2 Special hazards arising from the substance or mixture

Burning produces heavy smoke. Use suitable breathing apparatus.

Hazardous combustion products

Carbon monoxide

5.3 Advice for firefighters

Use water spray jet to protect personnel and to cool endangered containers. Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

Special protective equipment for firefighters

Wear a self-contained breathing apparatus and chemical protective clothing.

5.4 Additional information

Use water spray jet to protect personnel and to cool endangered containers. Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

Do not breathe gas/fumes/vapour/spray. Remove all sources of ignition. Provide adequate ventilation. Remove persons to safety. Use personal protection equipment. See protective measures under point 7 and 8.

For emergency responders

Do not breathe gas/fumes/vapour/spray. Use personal protection equipment. See protective measures under point 7 and 8.

6.2 Environmental precautions

Do not allow to enter into surface water or drains. In case of gas escape or of entry into waterways, soil or drains, inform the responsible authorities. Ensure waste is collected and contained.

6.3 Methods and material for containment and cleaning up

For containment

Ensure waste is collected and contained.

For cleaning up

Clean contaminated articles and floor according to the environmental legislation. Clean with detergents. Avoid solvent cleaners. Treat the recovered material as prescribed in the section on waste disposal.

6.4 Reference to other sections

None

SECTION 7: Handling and storage



7.1 Precautions for safe handling

Protective measures

Persons with a history of skin sensitisation problems should not be employed in any process in which this product is used. It is recommended to design all work processes always so that the following is excluded: Inhalation of vapours or spray/mists Skin contact Eye contact Do not breathe gas/fumes/vapour/spray. When using do not eat, drink, smoke, sniff. Wear personal protection equipment (refer to section 8). Never use pressure to empty container. Use only in well-ventilated areas.

Safety Data Sheet
according to Regulation (EC) No. 1907/2006 (REACH)

WENCON®

Trade name : Wencon Hi-Temp Green - Component A
Revision date : 08.01.2018
Print date : 02-02-2018

Version (Revision) : 5.0.0 (4.1.1)

Measures to prevent fire

Keep away from sources of ignition. - No smoking.

Environmental precautions

Do not allow to enter into surface water or drains.

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Only use containers specifically approved for the substance/product. Keep/Store only in original container. Keep container tightly closed.

Hints on joint storage

Keep away from:

Further information on storage conditions

Keep only in the original container in a cool, well-ventilated place. Store in a place accessible by authorized persons only. Handle and open container with care.

7.3 Specific end use(s)

Observe instructions for use. The regulations of the national employment safety and employment protection commission about the handling for polyurethane/epoxy have to be observed.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

None

8.2 Exposure controls

Personal protection equipment



Eye/face protection

Suitable eye protection

Eye glasses with side protection

Skin protection

Hand protection

The quality of the protective gloves resistant to chemicals must be chosen as a function of the specific working place concentration and quantity of hazardous substances. Wear cotton undermitten if possible.

Suitable gloves type : Disposable gloves.

Suitable material : NBR (Nitrile rubber)

Required properties : liquid-tight.

Breakthrough time (maximum wearing time) : > 60 minutes

Thickness of the glove material : > 0.5 mm

Recommended glove articles : EN 374

Additional hand protection measures : Do not wear gloves near rotary machines and tools. Check leak tightness/impermeability prior to use. Wear cotton undermitten if possible. Use gloves only once. Take recovery periods for skin regeneration.

Remark : For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves. The quality of the protective gloves resistant to chemicals must be chosen as a function of the specific working place concentration and quantity of hazardous substances. Observe the wear time limits as specified by the manufacturer. Breakthrough times and swelling properties of the material must be taken into consideration. In the case of wanting to use the gloves again, clean them before taking off and air them well. When handling with chemical substances, protective gloves must be worn with the CE-label including the four control digits. Barrier creams are not substitutes for body protection.

Body protection

Remark : Body protection: not required.

Trade name : Wencon Hi-Temp Green - Component A
Revision date : 08.01.2018
Print date : 02-02-2018

Version (Revision) : 5.0.0 (4.1.1)

Respiratory protection

Respiratory protection necessary at: exceeding exposure limit values
If technical exhaust or ventilation measures are not possible or insufficient, respiratory protection must be worn.

Suitable respiratory protection apparatus

Combination filtering device (EN 14387). Filtering device (DIN EN 147). Full-/half-/quarter-face masks (DIN EN 136/140). Filtering Half-face mask (DIN EN 149). Particle filter device (DIN EN 143).
Filtering device (full mask or mouthpiece) with filter: A P

Additional measures for respiratory protection

Filter types: A, B, E, K. Class 1: Maximum permitted contaminant concentration in inhaled air = 1000 mL/m³ (0.1 % by vol.); class 2: maximum permitted contaminant concentration in inhaled air = 5000 mL/m³ (0.5 % by vol.); class 3: maximum permitted contaminant concentration in inhaled air = 10000 mL/m³ (1.0 % by vol.) Half-face mask or quarter facepiece: maximum use concentration for substances with exposure limits: P1 filter: up to a max. of 4 times the exposure limit. P2 filter: up to a max. of 10 times the exposure limit. P3 filter: up to a max. of 30 times the exposure limit. Full-face mask or mouthpiece with particulate filter: maximum use concentration for substances with exposure limits: P1 filter: up to a max. of 4 times the exposure limit. P2 filter: up to a max. of 15 times the exposure limit. P3 filter: up to a max. of 400 times the exposure limit.

Remark

The filter class must be suitable for the maximum contaminant concentration (gas/vapour/aerosol/particulates) that may arise when handling the product. If the concentration is exceeded, self-contained breathing apparatus must be used.

General health and safety measures

When using do not eat, drink, smoke, sniff. Avoid contact with skin, eyes and clothes. Wash hands before breaks and after work. Immediately remove any contaminated clothing, shoes or stockings.

Occupational exposure controls

Product related measures to prevent exposure

Further information: see technical data sheet.

Instructional measures to prevent exposure

Further information: see technical data sheet.

Organisational measures to prevent exposure

Further information: see technical data sheet.

Technical measures to prevent exposure

Technical measures and the application of suitable work processes have priority over personal protection equipment. See section 7. No additional measures necessary.

Environmental exposure controls

Do not allow to enter into surface water or drains.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance : Paste

Appearance

Colour : yellow

Odour

characteristic

Safety relevant basis data

| | | |
|--|--------------|--------------------|
| Melting point/melting range : | | not applicable |
| Initial boiling point and boiling range : | (1013 hPa) | No data available |
| Decomposition temperature : | | No data available |
| Flash point : | > | 150 °C DIN 53213-1 |
| Ignition temperature : | | No data available |
| Evaporation rate : | < | 1 |

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH)

WENCON®

Trade name : Wencon Hi-Temp Green - Component A
Revision date : 08.01.2018
Print date : 02-02-2018

Version (Revision) : 5.0.0 (4.1.1)

| | | | | | |
|--|-----------|---------|--|------|-----------------------------|
| Flammable gases : | | | | | Not applicable. |
| Flammable solids : | | | | | Not applicable. |
| Oxidising properties. | | | | | No data available. |
| Lower explosion limit : | | | | | No data available |
| Upper explosion limit : | | | | | No data available |
| Explosive properties : | | | | | No data available. |
| Vapour pressure : | (50 °C) | < | | 1000 | hPa |
| Relative vapour density : | | | | | No data available |
| Relative density : | (20 °C) | approx. | | 1,63 | g/cm ³ DIN 53217 |
| Water solubility : | (20 °C) | | | | insoluble |
| Partition coefficient n-octanol/water : | | | | | No data available |
| pH : | | | | | No data available |
| Viscosity : | (20 °C) | | | | not applicable |
| Cinematic viscosity : | (40 °C) | | | | No data available |
| Odour threshold : | | | | | No data available |

9.2 Other information

None

SECTION 10: Stability and reactivity

10.1 Reactivity

No information available.

10.2 Chemical stability

The product is chemically stable under recommended conditions of storage, use and temperature.

10.3 Possibility of hazardous reactions

No hazardous reaction when handled and stored according to provisions.

10.4 Conditions to avoid

Ignition hazard.

10.5 Incompatible materials

Exothermic reaction with: Amines.

10.6 Hazardous decomposition products

Does not decompose when used for intended uses.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

This mixture is classified as hazardous according to regulation (EC) No. 1272/2008 [CLP].

Acute effects

Acute oral toxicity

| | |
|------------------|--|
| Parameter : | LC50 (REACTION PRODUCT: BISPHENOL A-(EPICHLORHYDRIN), EPOXY RESIN (NUMBER AVERAGE MOLECULAR WEIGHT <= 700) ; CAS No. : 25068-38-6) |
| Exposure route : | Oral |
| Species : | Rat |
| Effective dose : | 30000 mg/kg |
| Parameter : | LD50 (BISPHENOL F-(EPICHLORHYDRIN); EPOXY RESIN MW <= 700 ; CAS No. : 9003-36-5) |
| Exposure route : | Oral |
| Species : | Rat |
| Effective dose : | > 2000 mg/kg |
| Parameter : | LC50 (1,6 HEXANDIOL DIGLYCIDYLETHER ; CAS No. : 16096-31-4) |
| Exposure route : | Oral |
| Species : | Rat |

Safety Data Sheet
according to Regulation (EC) No. 1907/2006 (REACH)

WENCON®

Trade name : Wencon Hi-Temp Green - Component A
Revision date : 08.01.2018
Print date : 02-02-2018

Version (Revision) : 5.0.0 (4.1.1)

Effective dose : > 2000 mg/kg
Parameter : LD50 (N-METHYL-2-PYRROLIDONE ; CAS No. : 872-50-4)
Exposure route : Oral
Species : Rat
Effective dose : 3600 mg/kg
Parameter : LD50 (2-METHOXY-1-METHYLETHYL ACETATE ; CAS No. : 108-65-6)
Exposure route : Oral
Species : Rat
Effective dose : 8500 mg/kg
Parameter : LD50 (MALEIC ANHYDRIDE ; CAS No. : 108-31-6)
Exposure route : Oral
Species : Rat
Effective dose : 850 mg/kg
Parameter : LD50 (MALEIC ANHYDRIDE ; CAS No. : 108-31-6)
Exposure route : Oral
Species : Mouse
Effective dose : 60 mg/kg
Parameter : LD50 (2-METHOXYPROPYL ACETATE ; CAS No. : 70657-70-4)
Exposure route : Oral
Species : Rat
Effective dose : 8500 mg/kg
Parameter : LD50 (EPSILON-CAPROLACTAM ; CAS No. : 105-60-2)
Exposure route : Oral
Species : Rat
Effective dose : 1210 mg/kg

Acute dermal toxicity

Parameter : LC50 (REACTION PRODUCT: BISPHENOL A-(EPICHLORHYDRIN), EPOXY RESIN (NUMBER AVERAGE MOLECULAR WEIGHT <= 700) ; CAS No. : 25068-38-6)
Exposure route : Dermal
Species : Rat
Effective dose : > 2000 mg/kg
Parameter : LD50 (BISPHENOL F-(EPICHLORHYDRIN); EPOXY RESIN MW <= 700 ; CAS No. : 9003-36-5)
Exposure route : Dermal
Species : Rat
Effective dose : > 2000 mg/kg
Parameter : LC50 (1,6 HEXANDIOL DIGLYCIDYLETHER ; CAS No. : 16096-31-4)
Exposure route : Dermal
Species : Rat
Effective dose : > 2000 mg/kg
Parameter : LD50 (EPSILON-CAPROLACTAM ; CAS No. : 105-60-2)
Exposure route : Dermal
Species : Rabbit
Effective dose : 1438 mg/kg

Acute inhalation toxicity

Parameter : LC50 (2-METHOXY-1-METHYLETHYL ACETATE ; CAS No. : 108-65-6)
Exposure route : Inhalation
Species : Rat
Effective dose : 35,7 mg/l
Parameter : LC50 (2-METHOXYPROPYL ACETATE ; CAS No. : 70657-70-4)
Exposure route : Inhalation
Species : Rat
Effective dose : 23,88 mg/l
Parameter : LC50 (EPSILON-CAPROLACTAM ; CAS No. : 105-60-2)
Exposure route : Inhalation
Species : Rat

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH)

WENCON®

Trade name : Wencon Hi-Temp Green - Component A
Revision date : 08.01.2018
Print date : 02-02-2018

Version (Revision) : 5.0.0 (4.1.1)

Effective dose : 300 mg/m³

Irritant and corrosive effects

Primary irritation to the skin

Irritating to skin.

Irritation to eyes

Irritating to eyes.

Sensitisation

EUH205 - Contains epoxy constituents. May produce an allergic reaction. Harmful: possible risk of irreversible effects through inhalation, in contact with skin and if swallowed. Risk of serious damage to eyes. Harmful: danger of serious damage to health by prolonged exposure through inhalation, in contact with skin and if swallowed.

In case of skin contact

Parameter : Skin sensitisation (REACTION PRODUCT: BISPHENOL A-(EPICHLORHYDRIN), EPOXY RESIN (NUMBER AVERAGE MOLECULAR WEIGHT <= 700) ; CAS No. : 25068-38-6)

Species : Guinea pig

Effective dose : 50 %

Result : Strong sensitising.

Method : OECD 406

Parameter : Skin sensitisation (BISPHENOL F-(EPICHLORHYDRIN); EPOXY RESIN MW <= 700 ; CAS No. : 9003-36-5)

Species : Guinea pig

Effective dose : 50 %

Result : Sensitising.

Method : OECD 406

May cause an allergic skin reaction.

Practical experience/human evidence

Causes skin irritation. Causes serious eye irritation.

STOT-repeated exposure

STOT RE 1 and 2

Causes damage to organs through prolonged or repeated exposure.

SECTION 12: Ecological information

12.1 Toxicity

There are no data available on the mixture itself.

Aquatic toxicity

The substance/mixture does not fulfill the criteria of the acute aquatic toxicity according to Regulation (EC) No 1272/2008 [CLP], Annex I. Toxic to aquatic life. May cause long lasting harmful effects to aquatic life.

Acute (short-term) fish toxicity

Parameter : LC50 (REACTION PRODUCT: BISPHENOL A-(EPICHLORHYDRIN), EPOXY RESIN (NUMBER AVERAGE MOLECULAR WEIGHT <= 700) ; CAS No. : 25068-38-6)

Species : Fish

Effective dose : 1,3 mg/l

Exposure time : 96 h

Method : OECD 203

Parameter : Acute (short-term) fish toxicity (BISPHENOL F-(EPICHLORHYDRIN); EPOXY RESIN MW <= 700 ; CAS No. : 9003-36-5)

Species : Acute (short-term) fish toxicity

Effective dose : 2,54 mg/l

Exposure time : 96 h

Sediment toxicity

Toxicity to soil macroorganisms

Acute earthworm toxicity

Chronical earthworm toxicity (reproduction)

Long-term toxicity of organisms living in the sediment

Trade name : Wencon Hi-Temp Green - Component A
Revision date : 08.01.2018
Print date : 02-02-2018

Version (Revision) : 5.0.0 (4.1.1)

12.2 Persistence and degradability

Abiotic degradation

Abiotic degradation in Water

Hydrolysis

Biodegradation

| | |
|------------------|--|
| Parameter : | Biodegradation (REACTION PRODUCT: BISPHENOL A-(EPICHLORHYDRIN), EPOXY RESIN (NUMBER AVERAGE MOLECULAR WEIGHT <= 700) ; CAS No. : 25068-38-6) |
| Inoculum : | Biodegradation |
| Effective dose : | 12 % |
| Exposure time : | 28 |
| Evaluation : | Not readily biodegradable (according to OECD criteria) |
| Method : | OECD 301B/ ISO 9439/ EEC 92/69/V, C.4-C |
| Parameter : | Biodegradation (BISPHENOL F-(EPICHLORHYDRIN); EPOXY RESIN MW <= 700 ; CAS No. : 9003-36-5) |
| Inoculum : | Biodegradation |
| Effective dose : | 16 % |
| Exposure time : | 28 |
| Evaluation : | Not readily biodegradable (according to OECD criteria) |
| Method : | OECD 301B/ ISO 9439/ EEC 92/69/V, C.4-C |

12.3 Bioaccumulative potential

No information available.

12.4 Mobility in soil

No information available.

12.5 Results of PBT and vPvB assessment

No information available.

12.6 Other adverse effects

No information available.

12.7 Additional ecotoxicological information

The ecotoxicological properties of this mixture are determined by the ecotoxicological properties of the single components (see section 3). Do not allow to enter into surface water or drains.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product/Packaging disposal

Do not allow to enter into surface water or drains.

Waste treatment options

Appropriate disposal / Product

Waste disposal according to directive 2008/98/EC, covering waste and dangerous waste. Dispose of waste according to applicable legislation.

Appropriate disposal / Package

Contaminated packages must be completely emptied and can be re-used following proper cleaning. Packing which cannot be properly cleaned must be disposed of. Handle contaminated packages in the same way as the substance itself.

SECTION 14: Transport information

14.1 UN number

UN 3082

14.2 UN proper shipping name

Land transport (ADR/RID)

ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (REACTION PRODUCT: BISPHENOL A-(EPICHLORHYDRIN),

Safety Data Sheet
according to Regulation (EC) No. 1907/2006 (REACH)

WENCON®

Trade name : Wencon Hi-Temp Green - Component A
Revision date : 08.01.2018
Print date : 02-02-2018

Version (Revision) : 5.0.0 (4.1.1)

EPOXY RESIN (NUMBER AVERAGE MOLECULAR WEIGHT <= 700) · BISPHENOL F-(EPICHLORHYDRIN); EPOXY RESIN MW <= 700)

Sea transport (IMDG)

ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (REACTION PRODUCT: BISPHENOL A-(EPICHLORHYDRIN), EPOXY RESIN (NUMBER AVERAGE MOLECULAR WEIGHT <= 700) · BISPHENOL F-(EPICHLORHYDRIN); EPOXY RESIN MW <= 700)

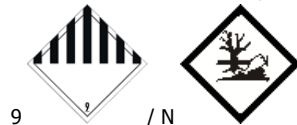
Air transport (ICAO-TI / IATA-DGR)

ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (REACTION PRODUCT: BISPHENOL A-(EPICHLORHYDRIN), EPOXY RESIN (NUMBER AVERAGE MOLECULAR WEIGHT <= 700) · BISPHENOL F-(EPICHLORHYDRIN); EPOXY RESIN MW <= 700)

14.3 Transport hazard class(es)

Land transport (ADR/RID)

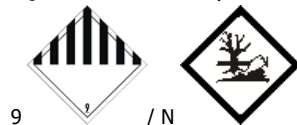
Class(es) : 9
Classification code : M6
Hazard identification number (Kemler No.) : 90
Tunnel restriction code : -
Special provisions : LQ 5 I · E 1 · 375 · ADR : - (SP 375 <= 5 l/kg)
Hazard label(s) :



9 / N

Sea transport (IMDG)

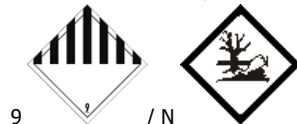
Class(es) : 9
EmS-No. : F-A / S-F
Special provisions : LQ 5 I · E 1 · IMDG : - (SP 2.10.2.7 <= 5 l/kg)
Hazard label(s) :



9 / N

Air transport (ICAO-TI / IATA-DGR)

Class(es) : 9
Special provisions : E 1 · A197 · IATA : - (SP A197 <= 5 l/kg)
Hazard label(s) :



9 / N

14.4 Packing group

III

14.5 Environmental hazards

Land transport (ADR/RID) : Yes
Sea transport (IMDG) : Yes (P)
Air transport (ICAO-TI / IATA-DGR) : Yes

14.6 Special precautions for user

None

SECTION 15: Regulatory information

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

National regulations

MAL code number according to Executive Order no. 301 from 13 May 1993 on the determination of code

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH)

WENCON®

Trade name : Wencon Hi-Temp Green - Component A
Revision date : 08.01.2018
Print date : 02-02-2018

Version (Revision) : 5.0.0 (4.1.1)

numbers (The Danish Working Environment Service)

MAL code number 5-5

Additional information

Substance/product listed in the following inventories

Substance/product listed in the following inventories TSCA • EINECS/ELINCS • REACH

15.2 Chemical safety assessment

Chemical safety assessments for substances in this mixture were not carried out.

SECTION 16: Other information

16.1 Indication of changes

03. Hazardous ingredients

16.2 Abbreviations and acronyms

ADR = European Agreement concerning the International Carriage of Dangerous Goods by Road

ASTM = American Society of Testing and Materials (US)

CAS No = Chemical Abstracts Service Number (see ACS - American Chemical Society)

DNEL = Derived No-Effect Level

DT50 = Time for 50% loss; half-life

EbC50 = Median effective concentration (biomass, e.g. of algae)

EC50 = Median effective concentration

EINECS = European Inventory of Existing Commercial Chemical Substances

ELINCS = European List of Notified (New) Chemicals (see Tab 7, Background - Guide)

ErC50 = Median effective concentration (growth rate, e.g. of algae)

EWC = European Waste Catalogue

IATA = International Air Transport Association

IC50 = Concentration that produces 50% inhibition

IMDG = International Maritime Dangerous Goods Code

IMO = International Maritime Organization

LC50 = Concentration required to kill 50% of test organisms

LD50 = Dose required to kill 50% of test organisms

LEL = Lower Explosive Limit/Lower Explosion Limit

LOAEL = Lowest observed adverse effect level

MRL = Maximum Residue Limit

NOAEL = No Observed Adverse Effect Level

NOEC = No observed effect concentration

NOEL = No Observable Effect Level

OEL = Occupational Exposure Limits

PBT = Persistent, Bioaccumulative or Toxic

PNEC = Predictable Non Effect Concentration

STEL = Short-Term Exposure Limit

TWA = Time-Weighted Average

vPvB = Very Persistent and Very Bioaccumulative

16.3 Key literature references and sources for data

None

16.4 Classification for mixtures and used evaluation method according to regulation (EC) No 1272/2008 [CLP]

No information available.

16.5 Relevant H- and EUH-phrases (Number and full text)

| | |
|------|--|
| H315 | Causes skin irritation. |
| H317 | May cause an allergic skin reaction. |
| H319 | Causes serious eye irritation. |
| 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. |

Safety Data Sheet
according to Regulation (EC) No. 1907/2006 (REACH)

WENCON®

Trade name : Wencon Hi-Temp Green - Component A
Revision date : 08.01.2018
Print date : 02-02-2018

Version (Revision) : 5.0.0 (4.1.1)

H413 May cause long lasting harmful effects to aquatic life.

16.6 Training advice

The regulations of the national employment safety and employment protection commission about the handling for polyurethane/epoxy have to be observed.

16.7 Additional information

This safety data sheet contains more than one ES in an integrated form. Contents of the exposure scenarios have been included into sections 1.2, 8, 9, 12, 15 and 16 of this safety data sheet.

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.

Safety Data Sheet
according to Regulation (EC) No. 1907/2006 (REACH)

WENCON®

Trade name : Wencon Hi-Temp Green - Component B
Revision date : 17.05.2019
Print date : 03-06-2019

Version (Revision) : 10.0.0 (9.0.0)
Vouch-No. : 12-0112190501

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

1.1 Product identifier

Wencon Hi-Temp Green - Component B (185000060B)
PR-number (Danish): 1593646

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

Solventfree two component coating based on epoxy

Relevant identified uses

In compliance with the conditions described in the annex to this safety data sheet. See section 16 for a comprehensive list of uses, for which an exposure scenarion is provided as an annex.

Sector of uses [SU]

SU22 - Professional uses: Public domain (administration, education, entertainment, services, craftsmen)

Article categories [AC]

AC7 - AC 7 - Metal articles

Process categories [PROC]

PROC10 - PROC 10 - Roller application or brushing

PROC19 - PROC 19 - Manual activities involving hand contact

PROC21 - PROC 21 - Low energy manipulation of substances bound in materials and/or articles

PROC24 - PROC 24 - High (mechanical) energy work-up of substances bound in/on materials and/or articles

Environmental release categories [ERC]

ERC8c - ERC 8c - Widespread use leading to inclusion into/onto article (indoor)

ERC8f - ERC 8f - Widespread use leading to inclusion into/onto article (outdoor)

ERC10a - ERC 10a - Widespread use of articles with low release (outdoor)

ERC11a - ERC 11a - Widespread use of articles with low release (indoor)

Uses advised against

Do not use for private purposes (household).

Remark

The product is intended for professional use.

1.3 Details of the supplier of the safety data sheet

Supplier (manufacturer) :

Wencon ApS

Street :

Jyllandsvej 15

Postal code/city :

DK-5400 BOGENSE

Telephone :

+45 6481 1010

Information contact :

wencon@wencon.com

1.4 Emergency telephone number

+44 870 600 62 66 (UK National Poisons Emergency Number)

European emergency number: 112. Danmark: (Giftlinjen +45 82 12 12 12), only for the purpose of informing medical personnel in cases of acute intoxications.

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008 [CLP]

Aquatic Chronic 2 ; H411 - Hazardous to the aquatic environment : Chronic 2 ; Toxic to aquatic life with long lasting effects.

Acute Tox. 4 ; H302 - Acute toxicity (oral) : Category 4 ; Harmful if swallowed.

Eye Dam. 1 ; H318 - Serious eye damage/eye irritation : Category 1 ; Causes serious eye damage.

Skin Irrit. 2 ; H315 - Skin corrosion/irritation : Category 2 ; Causes skin irritation.

Repr. 1B ; H360Fd - Reproductive toxicity : Category 1B ; May damage fertility. Suspected of damaging the unborn

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH)

WENCON®

Trade name : Wencon Hi-Temp Green - Component B
Revision date : 17.05.2019
Print date : 03-06-2019

Version (Revision) : 10.0.0 (9.0.0)
Vouch-No. : 12-0112190501

child.

Skin Sens. 1 ; H317 - Skin sensitisation : Category 1 ; May cause an allergic skin reaction.

Additional information

This preparation is classified as UN packing group (GHS subcategory) non-corrosive in accordance with OECD 435 (In vitro membrane barrier test method for skin corrosion) and Part III, Section 37 of the UN Testing Manual (Classification procedures, test methods and criteria relating to substances of class 8).

2.2 Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms



Health hazard (GHS08) · Corrosion (GHS05) · Environment (GHS09) · Exclamation mark (GHS07)

Signal word

Danger

Hazard components for labelling

2-PIPERAZIN-1-YLETHYLAMINE ; CAS No. : 140-31-8
M-PHENYLENEBIS(METHYLAMINE) ; CAS No. : 1477-55-0
4,4'-ISOPROPYLIDENEDIPHENOL ; CAS No. : 80-05-7
NONYLPHENOLE ; CAS No. : 84852-15-3
3-AMINOMETHYL-3,5,5-TRIMETHYLCYCLOHEXYLAMINE ; CAS No. : 2855-13-2
PHENOL, STERYNATED ; CAS No. : 61788-44-1

Hazard statements

H360Fd May damage fertility. Suspected of damaging the unborn child.
H318 Causes serious eye damage.
H302 Harmful if swallowed.
H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H411 Toxic to aquatic life with long lasting effects.

Precautionary statements

P201 Obtain special instructions before use.
P202 Do not handle until all safety precautions have been read and understood.
P261 Avoid breathing dust/fume/gas/mist/vapours/spray.
P310 Immediately call a POISON CENTER.
P330 Rinse mouth.
P405 Store locked up.

Special rules for supplemental label elements for certain mixtures

O220 For professional use only

Remark

This preparation is classified as UN packing group (GHS subcategory) non-corrosive in accordance with OECD 435 (In vitro membrane barrier test method for skin corrosion) and Part III, Section 37 of the UN Testing Manual (Classification procedures, test methods and criteria relating to substances of class 8).

2.3 Other hazards

None

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Hazardous ingredients

BENZYL ALCOHOL ; REACH registration No. : 001-2119492630-38 ; EC No. : 202-859-9 ; CAS No. : 100-51-6

Safety Data Sheet
according to Regulation (EC) No. 1907/2006 (REACH)

WENCON®

Trade name : Wencon Hi-Temp Green - Component B
Revision date : 17.05.2019
Print date : 03-06-2019

Version (Revision) : 10.0.0 (9.0.0)
Vouch-No. : 12-0112190501

Weight fraction : $\geq 10 - < 25$ %
Classification 1272/2008 [CLP] : Acute Tox. 4 ; H302 Acute Tox. 4 ; H332 Eye Irrit. 2 ; H319
2-PIPERAZIN-1-YLETHYLAMINE ; REACH registration No. : 01-2119471486-30 ; EC No. : 205-411-0 ; CAS No. : 140-31-8
Weight fraction : $\geq 10 - < 25$ %
Classification 1272/2008 [CLP] : Acute Tox. 3 ; H311 Skin Corr. 1B ; H314 Eye Dam. 1 ; H318 Acute Tox. 4 ; H302 Skin Sens. 1 ; H317 Aquatic Chronic 3 ; H412
M-PHENYLENEBIS(METHYLAMINE) ; REACH registration No. : 01-2119480150-50 ; EC No. : 216-032-5 ; CAS No. : 1477-55-0
Weight fraction : $\geq 2,5 - < 10$ %
Classification 1272/2008 [CLP] : Skin Corr. 1B ; H314 Acute Tox. 4 ; H302 Acute Tox. 4 ; H332 Skin Sens. 1 ; H317 Aquatic Chronic 3 ; H412
4,4'-ISOPROPYLIDENEDIPHENOL ; REACH registration No. : 01-211945756-23 ; EC No. : 201-245-8 ; CAS No. : 80-05-7
Weight fraction : $\geq 2,5 - < 10$ %
Classification 1272/2008 [CLP] : Repr. 1B ; H360F Eye Dam. 1 ; H318 Skin Sens. 1 ; H317 STOT SE 3 ; H335 Aquatic Chronic 2 ; H411
NONYLPHENOLE ; REACH registration No. : 01-2119510715-45 ; EC No. : 284-325-5 ; CAS No. : 84852-15-3
Weight fraction : $\geq 2,5 - < 10$ %
Classification 1272/2008 [CLP] : Repr. 2 ; H361fd Skin Corr. 1B ; H314 Eye Dam. 1 ; H318 Acute Tox. 4 ; H302 Aquatic Acute 1 ; H400 Aquatic Chronic 1 ; H410
3-AMINOMETHYL-3,5,5-TRIMETHYLCYCLOHEXYLAMINE ; REACH registration No. : 01-2119514687-32 ; EC No. : 220-666-8 ; CAS No. : 2855-13-2
Weight fraction : $\geq 2,5 - < 10$ %
Classification 1272/2008 [CLP] : Skin Corr. 1B ; H314 Eye Dam. 1 ; H318 Acute Tox. 4 ; H302 Acute Tox. 4 ; H312 Skin Sens. 1 ; H317 Aquatic Chronic 3 ; H412
QUARTZ (SiO₂) ; REACH registration No. : Annex V ; EC No. : 238-878-4 ; CAS No. : 14808-60-7
Weight fraction : $\geq 2,5 - < 10$ %
Classification 1272/2008 [CLP] : STOT RE 2 ; H373
M-PHENYLENEBIS(METHYLAMINE) ; REACH registration No. : 01-219480150-50 ; EC No. : 216-032-5 ; CAS No. : 1477-55-0
Weight fraction : $\geq 0,5 - < 1$ %
Classification 1272/2008 [CLP] : Skin Corr. 1B ; H314 Eye Dam. 1 ; H318 Acute Tox. 4 ; H302 Acute Tox. 4 ; H312 Acute Tox. 4 ; H332
PHENOL, STERYNATED ; REACH registration No. : 01-2119980970-27 ; EC No. : 262-975-0 ; CAS No. : 61788-44-1
Weight fraction : $\geq 0,5 - < 1$ %
Classification 1272/2008 [CLP] : Skin Irrit. 2 ; H315 Skin Sens. 1 ; H317 Aquatic Chronic 2 ; H411

This mixture contains the following substances of very high concern (SVHC) which are included in the Candidate List according to Article 59 of REACH

4,4'-ISOPROPYLIDENEDIPHENOL ; REACH registration No. : 01-211945756-23 ; EC No. : 201-245-8 ; CAS No. : 80-05-7
NONYLPHENOLE ; REACH registration No. : 01-2119510715-45 ; EC No. : 284-325-5 ; CAS No. : 84852-15-3

Additional information

Full text of H- and EUH-phrases: see section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

General information

When in doubt or if symptoms are observed, get medical advice. Never give anything by mouth to an unconscious person or a person with cramps. In case of allergic symptoms, especially in the breathing area, seek medical advice immediately. If unconscious place in recovery position and seek medical advice.

Following inhalation

Remove casualty to fresh air and keep warm and at rest. If breathing is irregular or stopped, administer artificial respiration. Consult a doctor immediately in the case of inhaling spray mist and show him packing or label.

In case of skin contact

In case of skin reactions, consult a physician. Immediately remove any contaminated clothing, shoes or stockings.

Safety Data Sheet
according to Regulation (EC) No. 1907/2006 (REACH)

WENCON®

Trade name : Wencon Hi-Temp Green - Component B
Revision date : 17.05.2019
Print date : 03-06-2019

Version (Revision) : 10.0.0 (9.0.0)
Vouch-No. : 12-0112190501

After contact with skin, wash immediately with plenty of water and soap. Do not use force or solvents to remove product incrustations from affected skin areas. Do not let product dry on skin.

After eye contact

After contact with the eyes, rinse with water with the eyelids open for a sufficient length of time, then consult an ophthalmologist immediately.

After ingestion

If accidentally swallowed rinse the mouth with plenty of water (only if the person is conscious) and obtain immediate medical attention. Do NOT induce vomiting. Keep at rest.

Self-protection of the first aider

First aider: Pay attention to self-protection!

4.2 Most important symptoms and effects, both acute and delayed

Effects

After eye contact
Causes serious eye damage.

In case of skin contact
Causes severe burns. Irritating to skin. May cause an allergic skin reaction.

4.3 Indication of any immediate medical attention and special treatment needed

None

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media

alcohol resistant foam

Unsuitable extinguishing media

Water spray jet

5.2 Special hazards arising from the substance or mixture

Burning produces heavy smoke. Use suitable breathing apparatus.

Hazardous combustion products

Carbon monoxide

5.3 Advice for firefighters

Use water spray jet to protect personnel and to cool endangered containers. Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

Special protective equipment for firefighters

Wear a self-contained breathing apparatus and chemical protective clothing.

5.4 Additional information

Use water spray jet to protect personnel and to cool endangered containers. Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

Do not breathe gas/fumes/vapour/spray. Remove all sources of ignition. Provide adequate ventilation. Remove persons to safety. Use personal protection equipment. See protective measures under point 7 and 8.

For emergency responders

Do not breathe gas/fumes/vapour/spray. Use personal protection equipment. See protective measures under point 7 and 8.

6.2 Environmental precautions

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH)

WENCON®

Trade name : Wencon Hi-Temp Green - Component B
Revision date : 17.05.2019
Print date : 03-06-2019

Version (Revision) : 10.0.0 (9.0.0)
Vouch-No. : 12-0112190501

Do not allow to enter into surface water or drains. In case of gas escape or of entry into waterways, soil or drains, inform the responsible authorities. Ensure waste is collected and contained.

6.3 Methods and material for containment and cleaning up

For containment

Ensure waste is collected and contained.

For cleaning up

Clean contaminated articles and floor according to the environmental legislation. Clean with detergents. Avoid solvent cleaners. Treat the recovered material as prescribed in the section on waste disposal.

6.4 Reference to other sections

None

SECTION 7: Handling and storage



7.1 Precautions for safe handling

Protective measures

Persons with a history of skin sensitisation problems should not be employed in any process in which this product is used. It is recommended to design all work processes always so that the following is excluded: Inhalation of vapours or spray/mists Skin contact Eye contact Do not breathe gas/fumes/vapour/spray. When using do not eat, drink, smoke, sniff. Wear personal protection equipment (refer to section 8). Never use pressure to empty container. Use only in well-ventilated areas.

Measures to prevent fire

Keep away from sources of ignition - No smoking.

Environmental precautions

Do not allow to enter into surface water or drains.

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Only use containers specifically approved for the substance/product. Keep/Store only in original container. Keep container tightly closed.

Hints on joint storage

Keep away from:

Further information on storage conditions

Keep only in the original container in a cool, well-ventilated place. Store in a place accessible by authorized persons only. Handle and open container with care.

7.3 Specific end use(s)

Observe instructions for use. The regulations of the national employment safety and employment protection commission about the handling for polyurethane/epoxy have to be observed.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational exposure limit values

4,4'-ISOPROPYLIDENEDIPHENOL ; CAS No. : 80-05-7

Limit value type (country of origin) : TWA (EC)

Parameter : E: inhalable fraction

Limit value : 2 mg/m³

Version : 31-01-2018

Trade name : Wencon Hi-Temp Green - Component B
Revision date : 17.05.2019
Print date : 03-06-2019

Version (Revision) : 10.0.0 (9.0.0)
Vouch-No. : 12-0112190501

8.2 Exposure controls

Personal protection equipment



Eye/face protection

Suitable eye protection

Eye glasses with side protection

Skin protection

Hand protection

The quality of the protective gloves resistant to chemicals must be chosen as a function of the specific working place concentration and quantity of hazardous substances. Wear cotton undermitten if possible.

Suitable gloves type : Disposable gloves.

Suitable material : NBR (Nitrile rubber)

Required properties : liquid-tight.

Breakthrough time (maximum wearing time) : > 60 minutes

Thickness of the glove material : > 0.5 mm

Recommended glove articles : EN 374

Additional hand protection measures : Do not wear gloves near rotary machines and tools. Check leak tightness/impermeability prior to use. Wear cotton undermitten if possible. Use gloves only once. Take recovery periods for skin regeneration.

Remark : For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves. The quality of the protective gloves resistant to chemicals must be chosen as a function of the specific working place concentration and quantity of hazardous substances. Observe the wear time limits as specified by the manufacturer. Breakthrough times and swelling properties of the material must be taken into consideration. In the case of wanting to use the gloves again, clean them before taking off and air them well. When handling with chemical substances, protective gloves must be worn with the CE-label including the four control digits. Barrier creams are not substitutes for body protection.

Body protection

Remark : Body protection: not required.

Respiratory protection

Respiratory protection necessary at: exceeding exposure limit values

If technical exhaust or ventilation measures are not possible or insufficient, respiratory protection must be worn.

Suitable respiratory protection apparatus

Combination filtering device (EN 14387) Filtering device (DIN EN 147) Full-/half-/quarter-face masks (DIN EN 136/140) Filtering Half-face mask (DIN EN 149) Particle filter device (DIN EN 143).

Filtering device (full mask or mouthpiece) with filter: A P

Additional measures for respiratory protection

Filter types: A, B, E, K. Class 1: Maximum permitted contaminant concentration in inhaled air = 1000 mL/m³ (0.1 % by vol.); class 2: maximum permitted contaminant concentration in inhaled air = 5000 mL/m³ (0.5 % by vol.); class 3: maximum permitted contaminant concentration in inhaled air = 10000 mL/m³ (1.0 % by vol.) Half-face mask or quarter facepiece: maximum use concentration for substances with exposure limits: P1 filter: up to a max. of 4 times the exposure limit. P2 filter: up to a max. of 10 times the exposure limit. P3 filter: up to a max. of 30 times the expo. Full-face mask or mouthpiece with particulate filter: maximum use concentration for substances with exposure limits: P1 filter: up to a max. of 4 times the exposure limit. P2 filter: up to a max. of 15 times the exposure limit. P3 filter: up to a max. of

Remark

The filter class must be suitable for the maximum contaminant concentration (gas/vapour/aerosol/particulates) that may arise when handling the product. If the concentration is exceeded, self-contained breathing apparatus must be used.

General health and safety measures

When using do not eat, drink, smoke, sniff. Avoid contact with skin, eyes and clothes. Wash hands before breaks and after work. Immediately remove any contaminated clothing, shoes or stockings.

Trade name : Wencon Hi-Temp Green - Component B
Revision date : 17.05.2019
Print date : 03-06-2019

Version (Revision) : 10.0.0 (9.0.0)
Vouch-No. : 12-0112190501

Occupational exposure controls

Product related measures to prevent exposure

Further information: see technical data sheet.

Instructional measures to prevent exposure

Further information: see technical data sheet.

Organisational measures to prevent exposure

Further information: see technical data sheet.

Technical measures to prevent exposure

Technical measures and the application of suitable work processes have priority over personal protection equipment. See section 7. No additional measures necessary.

Environmental exposure controls

Do not allow to enter into surface water or drains.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance : Paste

Appearance

Colour : yellow

Odour

Amines

Safety relevant basis data

| | | | | | |
|--|--------------|---------|--|------------------------|--------------------|
| Melting point/melting range : | | | | | not applicable |
| Initial boiling point and boiling range : | (1013 hPa) | | | | No data available |
| Decomposition temperature : | | | | | No data available |
| Flash point : | | > | | 100 °C | DIN 53213-1 |
| Ignition temperature : | | | | | No data available |
| Evaporation rate : | | < | | 1 | |
| Flammable gases : | | | | | Not applicable. |
| Flammable solids : | | | | | Not applicable. |
| Oxidising properties. | | | | | No data available. |
| Lower explosion limit : | | | | | No data available |
| Upper explosion limit : | | | | | No data available |
| Explosive properties : | | | | | No data available. |
| Vapour pressure : | (50 °C) | < | | 1000 hPa | |
| Relative vapour density : | | | | | No data available |
| Relative density : | (20 °C) | approx. | | 1,12 g/cm ³ | DIN 53217 |
| Water solubility : | (20 °C) | | | insoluble | |
| Partition coefficient n-octanol/water : | | | | | No data available |
| pH : | | | | 6 - 8 | |
| Viscosity : | (20 °C) | | | | not applicable |
| Cinematic viscosity : | (40 °C) | | | | No data available |
| Odour threshold : | | | | | No data available |

9.2 Other information

None

SECTION 10: Stability and reactivity

10.1 Reactivity

No information available.

Safety Data Sheet
according to Regulation (EC) No. 1907/2006 (REACH)

WENCON®

Trade name : Wencon Hi-Temp Green - Component B
Revision date : 17.05.2019
Print date : 03-06-2019

Version (Revision) : 10.0.0 (9.0.0)
Vouch-No. : 12-0112190501

10.2 Chemical stability

The product is chemically stable under recommended conditions of storage, use and temperature.

10.3 Possibility of hazardous reactions

No hazardous reaction when handled and stored according to provisions.

10.4 Conditions to avoid

Ignition hazard.

10.5 Incompatible materials

No information available.

10.6 Hazardous decomposition products

Does not decompose when used for intended uses.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

This mixture is classified as hazardous according to regulation (EC) No. 1272/2008 [CLP].

Acute effects

Acute oral toxicity

| | |
|------------------|--|
| Parameter : | LD50 (BENZYL ALCOHOL ; CAS No. : 100-51-6) |
| Exposure route : | Oral |
| Species : | Rat |
| Effective dose : | 1230 mg/kg |
| Parameter : | LD50 (BENZYL ALCOHOL ; CAS No. : 100-51-6) |
| Exposure route : | Oral |
| Species : | Mouse |
| Effective dose : | 1600 mg/kg |
| Parameter : | LD50 (2-PIPERAZIN-1-YLETHYLAMINE ; CAS No. : 140-31-8) |
| Exposure route : | Oral |
| Species : | Rat |
| Effective dose : | 1470 mg/kg |
| Parameter : | LD50 (M-PHENYLENEBIS(METHYLAMINE) ; CAS No. : 1477-55-0) |
| Exposure route : | Oral |
| Species : | Rat |
| Effective dose : | 1200 mg/kg |
| Parameter : | LD50 (NONYLPHENOLE ; CAS No. : 84852-15-3) |
| Exposure route : | Oral |
| Species : | Rat |
| Effective dose : | 1900 mg/kg |
| Parameter : | LD50 (M-PHENYLENEBIS(METHYLAMINE) ; CAS No. : 1477-55-0) |
| Exposure route : | Oral |
| Species : | Rat |
| Effective dose : | 1200 mg/kg |

Harmful by inhalation and if swallowed.

Acute dermal toxicity

| | |
|------------------|--|
| Parameter : | LD50 (2-PIPERAZIN-1-YLETHYLAMINE ; CAS No. : 140-31-8) |
| Exposure route : | Dermal |
| Species : | Rabbit |
| Effective dose : | 880 mg/kg |
| Parameter : | LD50 (M-PHENYLENEBIS(METHYLAMINE) ; CAS No. : 1477-55-0) |
| Exposure route : | Dermal |
| Species : | Rat |
| Effective dose : | 2000 mg/kg |
| Parameter : | LD50 (NONYLPHENOLE ; CAS No. : 84852-15-3) |
| Exposure route : | Dermal |

Safety Data Sheet
according to Regulation (EC) No. 1907/2006 (REACH)

WENCON®

Trade name : Wencon Hi-Temp Green - Component B
Revision date : 17.05.2019
Print date : 03-06-2019

Version (Revision) : 10.0.0 (9.0.0)
Vouch-No. : 12-0112190501

Species : Rabbit
Effective dose : 2140 mg/kg
Parameter : LD50 (M-PHENYLENEBIS(METHYLAMINE) ; CAS No. : 1477-55-0)
Exposure route : Dermal
Species : Rat
Effective dose : 2000 mg/kg

Acute inhalation toxicity

Parameter : LC50 (BENZYL ALCOHOL ; CAS No. : 100-51-6)
Exposure route : Inhalation
Species : Rat
Effective dose : 1000 ppm
Exposure time : 8 h

Irritant and corrosive effects

Primary irritation to the skin

Causes severe burns. Irritating to skin.

Irritation to eyes

Causes serious eye damage.

Sensitisation

Harmful: possible risk of irreversible effects through inhalation, in contact with skin and if swallowed. Harmful: danger of serious damage to health by prolonged exposure through inhalation, in contact with skin and if swallowed.

In case of skin contact

May cause an allergic skin reaction.

Practical experience/human evidence

Prolonged or repeated contact with skin or mucous membrane result in irritation symptoms such as redness, blistering, dermatitis, etc. Causes burns. Causes serious eye damage.

CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)

Reproductive toxicity

Assessment/classification

May damage fertility or the unborn child. Repr. 1A Repr. 2

SECTION 12: Ecological information

12.1 Toxicity

There are no data available on the mixture itself.

Aquatic toxicity

The substance/mixture does not fulfill the criteria of the acute aquatic toxicity according to Regulation (EC) No 1272/2008 [CLP], Annex I. Toxic to aquatic life. May cause long lasting harmful effects to aquatic life.

Sediment toxicity

Toxicity to soil macroorganisms

Acute earthworm toxicity

Chronical earthworm toxicity (reproduction)

Long-term toxicity of organisms living in the sediment

12.2 Persistence and degradability

No information available.

12.3 Bioaccumulative potential

No information available.

12.4 Mobility in soil

No information available.

12.5 Results of PBT and vPvB assessment

No information available.

12.6 Other adverse effects

Safety Data Sheet
according to Regulation (EC) No. 1907/2006 (REACH)

WENCON®

Trade name : Wencon Hi-Temp Green - Component B
Revision date : 17.05.2019
Print date : 03-06-2019

Version (Revision) : 10.0.0 (9.0.0)
Vouch-No. : 12-0112190501

No information available.

12.7 Additional ecotoxicological information

The ecotoxicological properties of this mixture are determined by the ecotoxicological properties of the single components (see section 3). Do not allow to enter into surface water or drains.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product/Packaging disposal

Do not allow to enter into surface water or drains.

Waste treatment options

Appropriate disposal / Product

Waste disposal according to directive 2008/98/EC, covering waste and dangerous waste. Dispose of waste according to applicable legislation.

Appropriate disposal / Package

Contaminated packages must be completely emptied and can be re-used following proper cleaning. Packing which cannot be properly cleaned must be disposed of. Handle contaminated packages in the same way as the substance itself.

SECTION 14: Transport information

14.1 UN number

UN 3082

14.2 UN proper shipping name

Land transport (ADR/RID)

ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (4,4'-ISOPROPYLIDENEDIPHENOL · NONYLPHENOLE)

Sea transport (IMDG)

ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (4,4'-ISOPROPYLIDENEDIPHENOL · NONYLPHENOLE)

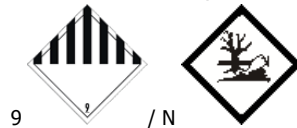
Air transport (ICAO-TI / IATA-DGR)

ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (4,4'-ISOPROPYLIDENEDIPHENOL · NONYLPHENOLE)

14.3 Transport hazard class(es)

Land transport (ADR/RID)

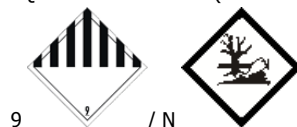
Class(es) : 9
Classification code : M6
Hazard identification number (Kemler No.) : 90
Tunnel restriction code : -
Special provisions : LQ 5 I · E 1 · ADR : - (SP 375 <= 5 l/kg)
Hazard label(s) :



9 / N

Sea transport (IMDG)

Class(es) : 9
EmS-No. : F-A / S-F
Special provisions : LQ 5 I · E 1 · IMDG : - (SP 2.10.2.7 <= 5 l/kg)
Hazard label(s) :



9 / N

Air transport (ICAO-TI / IATA-DGR)

Safety Data Sheet
according to Regulation (EC) No. 1907/2006 (REACH)


WENCON®

Trade name : Wencon Hi-Temp Green - Component B
Revision date : 17.05.2019
Print date : 03-06-2019

Version (Revision) : 10.0.0 (9.0.0)
Vouch-No. : 12-0112190501

Class(es) : 9
Special provisions : E 1 · IATA : - (SP A197 <= 5 l/kg)
Hazard label(s) :

9 / N



14.4 Packing group

III

14.5 Environmental hazards

Land transport (ADR/RID) : Yes

Sea transport (IMDG) : Yes (P)

Air transport (ICAO-TI / IATA-DGR) : Yes

14.6 Special precautions for user

None

14.8 Additional information

This preparation is classified as UN packing group (GHS subcategory) non-corrosive in accordance with OECD 435 (In vitro membrane barrier test method for skin corrosion) and Part III, Section 37 of the UN Testing Manual (Classification procedures, test methods and criteria relating to substances of class 8).

SECTION 15: Regulatory information

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

National regulations

MAL code number according to Executive Order no. 301 from 13 May 1993 on the determination of code numbers (The Danish Working Environment Service)

MAL code number 3-5

Additional information

Substance/product listed in the following inventories

Substance/product listed in the following inventories TSCA • EINECS/ELINCS • REACH

15.2 Chemical safety assessment

Chemical safety assessments for substances in this mixture were not carried out.

SECTION 16: Other information

16.1 Indication of changes

02. Label elements · 02. Labelling according to Regulation (EC) No. 1272/2008 [CLP] · 03. Hazardous ingredients · 08. Occupational exposure limit values · 14. UN proper shipping name - Land transport (ADR/RID) · 14. UN proper shipping name - Sea transport (IMDG) · 14. UN proper shipping name - Air transport (ICAO-TI / IATA-DGR) · 15. Restrictions on use

16.2 Abbreviations and acronyms

ADR = European Agreement concerning the International Carriage of Dangerous Goods by Road

ASTM = American Society of Testing and Materials (US)

CAS No = Chemical Abstracts Service Number (see ACS - American Chemical Society)

DNEL = Derived No-Effect Level

DT50 = Time for 50% loss; half-life

EbC50 = Median effective concentration (biomass, e.g. of algae)

EC50 = Median effective concentration

EINECS = European Inventory of Existing Commercial Chemical Substances

ELINCS = European List of Notified (New) Chemicals (see Tab 7, Background - Guide)

ErC50 = Median effective concentration (growth rate, e.g. of algae)

EWG = European Waste Catalogue

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH)

WENCON®

Trade name : Wencon Hi-Temp Green - Component B
Revision date : 17.05.2019
Print date : 03-06-2019

Version (Revision) : 10.0.0 (9.0.0)
Vouch-No. : 12-0112190501

IATA = International Air Transport Association
IC50 = Concentration that produces 50% inhibition
IMDG = International Maritime Dangerous Goods Code
IMO = International Maritime Organization
LC50 = Concentration required to kill 50% of test organisms
LD50 = Dose required to kill 50% of test organisms
LEL = Lower Explosive Limit/Lower Explosion Limit
LOAEL = Lowest observed adverse effect level
MRL = Maximum Residue Limit
NOAEL = No Observed Adverse Effect Level
NOEC = No observed effect concentration
NOEL = No Observable Effect Level
OEL = Occupational Exposure Limits
PBT = Persistent, Bioaccumulative or Toxic
PNEC = Previsible Non Effect Concentration
STEL = Short-Term Exposure Limit
TWA = Time-Weighted Average
vPvB = Very Persistent and Very Bioaccumulative

16.3 Key literature references and sources for data

None

16.4 Classification for mixtures and used evaluation method according to regulation (EC) No 1272/2008 [CLP]

No information available.

16.5 Relevant H- and EUH-phrases (Number and full text)

| | |
|----------------|--|
| H302 | Harmful if swallowed. |
| H302+H312 | Harmful if swallowed or in contact with skin. |
| H302+H312+H332 | Harmful if swallowed, in contact with skin or if inhaled. |
| H302+H332 | Harmful if swallowed or if inhaled. |
| H311 | Toxic in contact with skin. |
| H314 | Causes severe skin burns and eye damage. |
| H315 | Causes skin irritation. |
| H317 | May cause an allergic skin reaction. |
| H318 | Causes serious eye damage. |
| H319 | Causes serious eye irritation. |
| H332 | Harmful if inhaled. |
| H335 | May cause respiratory irritation. |
| H360F | May damage fertility. |
| H360Fd | May damage fertility. Suspected of damaging the unborn child. |
| H361fd | Suspected of damaging fertility. Suspected of damaging the unborn child. |
| H373 | May cause damage to organs through prolonged or repeated exposure. |
| 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. |

16.6 Training advice

The regulations of the national employment safety and employment protection commission about the handling for polyurethane/epoxy have to be observed.

16.7 Additional information

This safety data sheet contains more than one ES in an integrated form. Contents of the exposure scenarios have been included into sections 1.2, 8, 9, 12, 15 and 16 of this safety data sheet.

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily

Safety Data Sheet
according to Regulation (EC) No. 1907/2006 (REACH)

WENCON®

Trade name : Wencon Hi-Temp Green - Component B
Revision date : 17.05.2019
Print date : 03-06-2019

Version (Revision) : 10.0.0 (9.0.0)
Vouch-No. : 12-0112190501

valid for the new made-up material.

Safety Data Sheet
according to Regulation (EC) No. 1907/2006 (REACH)

WENCON®

Trade name : Wencon Hi-Temp Yellow - Component A
Revision date : 08.01.2018
Print date : 02-02-2018

Version (Revision) : 5.0.0 (4.1.1)

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

1.1 Product identifier

Wencon Hi-Temp Yellow - Component A (185000050A)
PR-number (Danish): 1593670

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

Solventfree two component coating based on epoxy

Relevant identified uses

In compliance with the conditions described in the annex to this safety data sheet. See section 16 for a comprehensive list of uses, for which an exposure scenario is provided as an annex.

Sector of uses [SU]

SU22 - Professional uses: Public domain (administration, education, entertainment, services, craftsmen)

Article categories [AC]

AC7 - Metal articles

Process categories [PROC]

PROC10 - Roller application or brushing

PROC19 - Hand-mixing with intimate contact and only PPE available

PROC21 - Low energy manipulation of substances bound in materials and/or articles

PROC24 - High (mechanical) energy work-up of substances bound in materials and/or articles

Environmental release categories [ERC]

ERC8c - Wide dispersive indoor use resulting in inclusion into or onto a matrix

ERC8f - Wide dispersive outdoor use resulting in inclusion into or onto a matrix

ERC10a - Wide dispersive outdoor use of long-life articles and materials with low release

ERC11a - Wide dispersive indoor use of long-life articles and materials with low release

Uses advised against

Do not use for private purposes (household).

Remark

The product is intended for professional use.

1.3 Details of the supplier of the safety data sheet

Supplier (manufacturer) :

Wencon ApS

Street :

Jyllandsvej 15

Postal code/city :

DK-5400 BOGENSE

Telephone :

+45 6481 1010

Information contact :

wencon@wencon.com

1.4 Emergency telephone number

+44 870 600 62 66 (UK National Poisons Emergency Number)

European emergency number: 112. Danmark: (Gifljinjen +45 82 12 12 12), only for the purpose of informing medical personnel in cases of acute intoxications.

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008 [CLP]

Aquatic Chronic 2 ; H411 - Hazardous to the aquatic environment : Chronic 2 ; Toxic to aquatic life with long lasting effects.

Eye Irrit. 2 ; H319 - Serious eye damage/eye irritation : Category 2 ; Causes serious eye irritation.

Skin Irrit. 2 ; H315 - Skin corrosion/irritation : Category 2 ; Causes skin irritation.

Skin Sens. 1 ; H317 - Skin sensitisation : Category 1 ; May cause an allergic skin reaction.

STOT RE 2 ; H373 - STOT-repeated exposure : Category 2 ; May cause damage to organs through prolonged or repeated exposure.

Safety Data Sheet
according to Regulation (EC) No. 1907/2006 (REACH)

WENCON®

Trade name : Wencon Hi-Temp Yellow - Component A
Revision date : 08.01.2018
Print date : 02-02-2018

Version (Revision) : 5.0.0 (4.1.1)

2.2 Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms



Health hazard (GHS08) · Environment (GHS09) · Exclamation mark (GHS07)

Signal word

Warning

Hazard components for labelling

QUARTZ (SIO₂) ; CAS No. : 14808-60-7

REACTION PRODUCT: BISPHENOL A-(EPICHLORHYDRIN), EPOXY RESIN (NUMBER AVERAGE MOLECULAR WEIGHT <= 700) ; CAS No. : 25068-38-6

BISPHENOL F-(EPICHLORHYDRIN); EPOXY RESIN MW <= 700 ; CAS No. : 9003-36-5

1,6 HEXANDIOL DIGLYCIDYLETHER ; CAS No. : 16096-31-4

PHENOL, METHYL STYRENATED ; CAS No. : 68512-30-1

Hazard statements

H373 May cause damage to organs through prolonged or repeated exposure.
H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H319 Causes serious eye irritation.
H411 Toxic to aquatic life with long lasting effects.

Precautionary statements

P260 Do not breathe dust/fume/gas/mist/vapours/spray.
P264 Wash hands thoroughly after handling.
P272 Contaminated work clothing should not be allowed out of the workplace.
P314 Get medical advice/attention if you feel unwell.
P333+P313 If skin irritation or rash occurs: Get medical advice/attention.
P337+P313 If eye irritation persists: Get medical advice/attention.

Special rules for supplemental label elements for certain mixtures

EUH205 Contains epoxy constituents. May produce an allergic reaction.

2.3 Other hazards

None

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Hazardous ingredients

QUARTZ (SIO₂) ; REACH registration No. : Annex V ; EC No. : 238-878-4; CAS No. : 14808-60-7

Weight fraction : ≥ 25 - < 50 %

Classification 1272/2008 [CLP] : STOT RE 2 ; H373

PHENOL-FORMALDEHYDE POLYMER GLYCIDYL ETHER ; CAS No. : 28064-14-4

Weight fraction : ≥ 10 - < 25 %

Classification 1272/2008 [CLP] : Aquatic Chronic 4 ; H413

REACTION PRODUCT: BISPHENOL A-(EPICHLORHYDRIN), EPOXY RESIN (NUMBER AVERAGE MOLECULAR WEIGHT <= 700) ; REACH registration No. : 01-2119456619-26 ; CAS No. : 25068-38-6

Weight fraction : ≥ 10 - < 25 %

Classification 1272/2008 [CLP] : Skin Irrit. 2 ; H315 Skin Sens. 1 ; H317 Eye Irrit. 2 ; H319 Aquatic Chronic 2 ; H411

BISPHENOL F-(EPICHLORHYDRIN); EPOXY RESIN MW <= 700 ; REACH registration No. : 01-211-454392-40 ; EC No. : 500-

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH)

WENCON®

Trade name : Wencon Hi-Temp Yellow - Component A
Revision date : 08.01.2018
Print date : 02-02-2018

Version (Revision) : 5.0.0 (4.1.1)

006-8; CAS No. : 9003-36-5

Weight fraction : $\geq 10 - < 25$ %

Classification 1272/2008 [CLP] : Skin Irrit. 2 ; H315 Skin Sens. 1 ; H317 Eye Irrit. 2 ; H319 Aquatic Chronic 2 ; H411

1,6 HEXANDIOL DIGLYCIDYLETHER ; REACH registration No. : 01-2119463471-41 ; EC No. : 240-260-4; CAS No. : 16096-31-4

Weight fraction : $\geq 1 - < 2,5$ %

Classification 1272/2008 [CLP] : Skin Irrit. 2 ; H315 Skin Sens. 1 ; H317 Eye Irrit. 2 ; H319 Aquatic Chronic 3 ; H412

PHENOL, METHYL STYRENATED ; REACH registration No. : 01-2119555274-38 ; EC No. : 270-966-8; CAS No. : 68512-30-1

Weight fraction : $\geq 0,5 - < 1$ %

Classification 1272/2008 [CLP] : Skin Irrit. 2 ; H315 Skin Sens. 1 ; H317 Aquatic Chronic 3 ; H412

Additional information

Full text of H- and EUH-phrases: see section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

General information

When in doubt or if symptoms are observed, get medical advice. Never give anything by mouth to an unconscious person or a person with cramps. In case of allergic symptoms, especially in the breathing area, seek medical advice immediately. If unconscious place in recovery position and seek medical advice.

Following inhalation

Remove casualty to fresh air and keep warm and at rest. If breathing is irregular or stopped, administer artificial respiration. Consult a doctor immediately in the case of inhaling spray mist and show him packing or label.

In case of skin contact

In case of skin reactions, consult a physician. Immediately remove any contaminated clothing, shoes or stockings. After contact with skin, wash immediately with plenty of water and soap. Do not use force or solvents to remove product incrustations from affected skin areas. Do not let product dry on skin.

After eye contact

After contact with the eyes, rinse with water with the eyelids open for a sufficient length of time, then consult an ophthalmologist immediately.

After ingestion

If accidentally swallowed rinse the mouth with plenty of water (only if the person is conscious) and obtain immediate medical attention. Do NOT induce vomiting. Keep at rest.

Self-protection of the first aider

First aider: Pay attention to self-protection!

4.2 Most important symptoms and effects, both acute and delayed

Causes damage to organs through prolonged or repeated exposure.

Effects

After eye contact
Irritating to eyes.

In case of skin contact
Irritating to skin. May cause an allergic skin reaction.

4.3 Indication of any immediate medical attention and special treatment needed

None

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media

Safety Data Sheet
according to Regulation (EC) No. 1907/2006 (REACH)

WENCON®

Trade name : Wencon Hi-Temp Yellow - Component A
Revision date : 08.01.2018
Print date : 02-02-2018

Version (Revision) : 5.0.0 (4.1.1)

alcohol resistant foam

Unsuitable extinguishing media

Water spray jet

5.2 Special hazards arising from the substance or mixture

Burning produces heavy smoke. Use suitable breathing apparatus.

Hazardous combustion products

Carbon monoxide

5.3 Advice for firefighters

Use water spray jet to protect personnel and to cool endangered containers. Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

Special protective equipment for firefighters

Wear a self-contained breathing apparatus and chemical protective clothing.

5.4 Additional information

Use water spray jet to protect personnel and to cool endangered containers. Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

Do not breathe gas/fumes/vapour/spray. Remove all sources of ignition. Provide adequate ventilation. Remove persons to safety. Use personal protection equipment. See protective measures under point 7 and 8.

For emergency responders

Do not breathe gas/fumes/vapour/spray. Use personal protection equipment. See protective measures under point 7 and 8.

6.2 Environmental precautions

Do not allow to enter into surface water or drains. In case of gas escape or of entry into waterways, soil or drains, inform the responsible authorities. Ensure waste is collected and contained.

6.3 Methods and material for containment and cleaning up

For containment

Ensure waste is collected and contained.

For cleaning up

Clean contaminated articles and floor according to the environmental legislation. Clean with detergents. Avoid solvent cleaners. Treat the recovered material as prescribed in the section on waste disposal.

6.4 Reference to other sections

None

SECTION 7: Handling and storage



7.1 Precautions for safe handling

Protective measures

Persons with a history of skin sensitisation problems should not be employed in any process in which this product is used. It is recommended to design all work processes always so that the following is excluded: Inhalation of vapours or spray/mists Skin contact Eye contact Do not breathe gas/fumes/vapour/spray. When using do not eat, drink, smoke, sniff. Wear personal protection equipment (refer to section 8). Never use pressure to empty container. Use only in well-ventilated areas.

Safety Data Sheet
according to Regulation (EC) No. 1907/2006 (REACH)

WENCON®

Trade name : Wencon Hi-Temp Yellow - Component A
Revision date : 08.01.2018
Print date : 02-02-2018

Version (Revision) : 5.0.0 (4.1.1)

Measures to prevent fire

Keep away from sources of ignition. - No smoking.

Environmental precautions

Do not allow to enter into surface water or drains.

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Only use containers specifically approved for the substance/product. Keep/Store only in original container. Keep container tightly closed.

Hints on joint storage

Keep away from:

Further information on storage conditions

Keep only in the original container in a cool, well-ventilated place. Store in a place accessible by authorized persons only. Handle and open container with care.

7.3 Specific end use(s)

Observe instructions for use. The regulations of the national employment safety and employment protection commission about the handling for polyurethane/epoxy have to be observed.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

None

8.2 Exposure controls

Personal protection equipment



Eye/face protection

Suitable eye protection

Eye glasses with side protection

Skin protection

Hand protection

The quality of the protective gloves resistant to chemicals must be chosen as a function of the specific working place concentration and quantity of hazardous substances. Wear cotton undermitten if possible.

Suitable gloves type : Disposable gloves.

Suitable material : NBR (Nitrile rubber)

Required properties : liquid-tight.

Breakthrough time (maximum wearing time) : > 60 minutes

Thickness of the glove material : > 0.5 mm

Recommended glove articles : EN 374

Additional hand protection measures : Do not wear gloves near rotary machines and tools. Check leak tightness/impermeability prior to use. Wear cotton undermitten if possible. Use gloves only once. Take recovery periods for skin regeneration.

Remark : For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves. The quality of the protective gloves resistant to chemicals must be chosen as a function of the specific working place concentration and quantity of hazardous substances. Observe the wear time limits as specified by the manufacturer. Breakthrough times and swelling properties of the material must be taken into consideration. In the case of wanting to use the gloves again, clean them before taking off and air them well. When handling with chemical substances, protective gloves must be worn with the CE-label including the four control digits. Barrier creams are not substitutes for body protection.

Body protection

Remark : Body protection: not required.

Trade name : Wencon Hi-Temp Yellow - Component A
Revision date : 08.01.2018
Print date : 02-02-2018

Version (Revision) : 5.0.0 (4.1.1)

Respiratory protection

Respiratory protection necessary at: exceeding exposure limit values
If technical exhaust or ventilation measures are not possible or insufficient, respiratory protection must be worn.

Suitable respiratory protection apparatus

Combination filtering device (EN 14387). Filtering device (DIN EN 147). Full-/half-/quarter-face masks (DIN EN 136/140). Filtering Half-face mask (DIN EN 149). Particle filter device (DIN EN 143).
Filtering device (full mask or mouthpiece) with filter: A P

Additional measures for respiratory protection

Filter types: A, B, E, K. Class 1: Maximum permitted contaminant concentration in inhaled air = 1000 mL/m³ (0.1 % by vol.); class 2: maximum permitted contaminant concentration in inhaled air = 5000 mL/m³ (0.5 % by vol.); class 3: maximum permitted contaminant concentration in inhaled air = 10000 mL/m³ (1.0 % by vol.) Half-face mask or quarter facepiece: maximum use concentration for substances with exposure limits: P1 filter: up to a max. of 4 times the exposure limit. P2 filter: up to a max. of 10 times the exposure limit. P3 filter: up to a max. of 30 times the exposure limit. Full-face mask or mouthpiece with particulate filter: maximum use concentration for substances with exposure limits: P1 filter: up to a max. of 4 times the exposure limit. P2 filter: up to a max. of 15 times the exposure limit. P3 filter: up to a max. of 400 times the exposure limit.

Remark

The filter class must be suitable for the maximum contaminant concentration (gas/vapour/aerosol/particulates) that may arise when handling the product. If the concentration is exceeded, self-contained breathing apparatus must be used.

General health and safety measures

When using do not eat, drink, smoke, sniff. Avoid contact with skin, eyes and clothes. Wash hands before breaks and after work. Immediately remove any contaminated clothing, shoes or stockings.

Occupational exposure controls

Product related measures to prevent exposure

Further information: see technical data sheet.

Instructional measures to prevent exposure

Further information: see technical data sheet.

Organisational measures to prevent exposure

Further information: see technical data sheet.

Technical measures to prevent exposure

Technical measures and the application of suitable work processes have priority over personal protection equipment. See section 7. No additional measures necessary.

Environmental exposure controls

Do not allow to enter into surface water or drains.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance : Paste

Appearance

Colour : yellow

Odour

characteristic

Safety relevant basis data

| | | |
|--|--------------|--------------------|
| Melting point/melting range : | | not applicable |
| Initial boiling point and boiling range : | (1013 hPa) | No data available |
| Decomposition temperature : | | No data available |
| Flash point : | > | 150 °C DIN 53213-1 |
| Ignition temperature : | | No data available |
| Evaporation rate : | < | 1 |

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH)

WENCON®

Trade name : Wencon Hi-Temp Yellow - Component A
Revision date : 08.01.2018
Print date : 02-02-2018

Version (Revision) : 5.0.0 (4.1.1)

| | | | | | | |
|--|-----------|---------|--|------|-------------------|--------------------|
| Flammable gases : | | | | | | Not applicable. |
| Flammable solids : | | | | | | Not applicable. |
| Oxidising properties. | | | | | | No data available. |
| Lower explosion limit : | | | | | | No data available |
| Upper explosion limit : | | | | | | No data available |
| Explosive properties : | | | | | | No data available. |
| Vapour pressure : | (50 °C) | < | | 1000 | hPa | |
| Relative vapour density : | | | | | | No data available |
| Relative density : | (20 °C) | approx. | | 1,63 | g/cm ³ | DIN 53217 |
| Water solubility : | (20 °C) | | | | | insoluble |
| Partition coefficient n-octanol/water : | | | | | | No data available |
| pH : | | | | | | No data available |
| Viscosity : | (20 °C) | | | | | not applicable |
| Cinematic viscosity : | (40 °C) | | | | | No data available |
| Odour threshold : | | | | | | No data available |

9.2 Other information

None

SECTION 10: Stability and reactivity

10.1 Reactivity

No information available.

10.2 Chemical stability

The product is chemically stable under recommended conditions of storage, use and temperature.

10.3 Possibility of hazardous reactions

No hazardous reaction when handled and stored according to provisions.

10.4 Conditions to avoid

Ignition hazard.

10.5 Incompatible materials

Exothermic reaction with: Amines.

10.6 Hazardous decomposition products

Does not decompose when used for intended uses.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

This mixture is classified as hazardous according to regulation (EC) No. 1272/2008 [CLP].

Acute effects

Acute oral toxicity

| | |
|------------------|--|
| Parameter : | LC50 (REACTION PRODUCT: BISPHENOL A-(EPICHLORHYDRIN), EPOXY RESIN (NUMBER AVERAGE MOLECULAR WEIGHT <= 700) ; CAS No. : 25068-38-6) |
| Exposure route : | Oral |
| Species : | Rat |
| Effective dose : | 30000 mg/kg |
| Parameter : | LD50 (BISPHENOL F-(EPICHLORHYDRIN); EPOXY RESIN MW <= 700 ; CAS No. : 9003-36-5) |
| Exposure route : | Oral |
| Species : | Rat |
| Effective dose : | > 2000 mg/kg |
| Parameter : | LC50 (1,6 HEXANDIOL DIGLYCIDYLETHER ; CAS No. : 16096-31-4) |
| Exposure route : | Oral |
| Species : | Rat |

Safety Data Sheet
according to Regulation (EC) No. 1907/2006 (REACH)

WENCON®

Trade name : Wencon Hi-Temp Yellow - Component A
Revision date : 08.01.2018
Print date : 02-02-2018

Version (Revision) : 5.0.0 (4.1.1)

Effective dose : > 2000 mg/kg
Parameter : LD50 (N-METHYL-2-PYRROLIDONE ; CAS No. : 872-50-4)
Exposure route : Oral
Species : Rat
Effective dose : 3600 mg/kg
Parameter : LD50 (2-METHOXY-1-METHYLETHYL ACETATE ; CAS No. : 108-65-6)
Exposure route : Oral
Species : Rat
Effective dose : 8500 mg/kg
Parameter : LD50 (MALEIC ANHYDRIDE ; CAS No. : 108-31-6)
Exposure route : Oral
Species : Rat
Effective dose : 850 mg/kg
Parameter : LD50 (MALEIC ANHYDRIDE ; CAS No. : 108-31-6)
Exposure route : Oral
Species : Mouse
Effective dose : 60 mg/kg
Parameter : LD50 (2-METHOXYPROPYL ACETATE ; CAS No. : 70657-70-4)
Exposure route : Oral
Species : Rat
Effective dose : 8500 mg/kg
Parameter : LD50 (EPSILON-CAPROLACTAM ; CAS No. : 105-60-2)
Exposure route : Oral
Species : Rat
Effective dose : 1210 mg/kg

Acute dermal toxicity

Parameter : LC50 (REACTION PRODUCT: BISPHENOL A-(EPICHLORHYDRIN), EPOXY RESIN (NUMBER AVERAGE MOLECULAR WEIGHT <= 700) ; CAS No. : 25068-38-6)
Exposure route : Dermal
Species : Rat
Effective dose : > 2000 mg/kg
Parameter : LD50 (BISPHENOL F-(EPICHLORHYDRIN); EPOXY RESIN MW <= 700 ; CAS No. : 9003-36-5)
Exposure route : Dermal
Species : Rat
Effective dose : > 2000 mg/kg
Parameter : LC50 (1,6 HEXANDIOL DIGLYCIDYLETHER ; CAS No. : 16096-31-4)
Exposure route : Dermal
Species : Rat
Effective dose : > 2000 mg/kg
Parameter : LD50 (EPSILON-CAPROLACTAM ; CAS No. : 105-60-2)
Exposure route : Dermal
Species : Rabbit
Effective dose : 1438 mg/kg

Acute inhalation toxicity

Parameter : LC50 (2-METHOXY-1-METHYLETHYL ACETATE ; CAS No. : 108-65-6)
Exposure route : Inhalation
Species : Rat
Effective dose : 35,7 mg/l
Parameter : LC50 (2-METHOXYPROPYL ACETATE ; CAS No. : 70657-70-4)
Exposure route : Inhalation
Species : Rat
Effective dose : 23,88 mg/l
Parameter : LC50 (EPSILON-CAPROLACTAM ; CAS No. : 105-60-2)
Exposure route : Inhalation
Species : Rat

Safety Data Sheet
according to Regulation (EC) No. 1907/2006 (REACH)

WENCON®

Trade name : Wencon Hi-Temp Yellow - Component A
Revision date : 08.01.2018
Print date : 02-02-2018

Version (Revision) : 5.0.0 (4.1.1)

Effective dose : 300 mg/m³

Irritant and corrosive effects

Primary irritation to the skin

Irritating to skin.

Irritation to eyes

Irritating to eyes.

Sensitisation

EUH205 - Contains epoxy constituents. May produce an allergic reaction. Harmful: possible risk of irreversible effects through inhalation, in contact with skin and if swallowed. Risk of serious damage to eyes. Harmful: danger of serious damage to health by prolonged exposure through inhalation, in contact with skin and if swallowed.

In case of skin contact

Parameter : Skin sensitisation (REACTION PRODUCT: BISPHENOL A-(EPICHLORHYDRIN), EPOXY RESIN (NUMBER AVERAGE MOLECULAR WEIGHT <= 700) ; CAS No. : 25068-38-6)

Species : Guinea pig

Effective dose : 50 %

Result : Strong sensitising.

Method : OECD 406

Parameter : Skin sensitisation (BISPHENOL F-(EPICHLORHYDRIN); EPOXY RESIN MW <= 700 ; CAS No. : 9003-36-5)

Species : Guinea pig

Effective dose : 50 %

Result : Sensitising.

Method : OECD 406

May cause an allergic skin reaction.

Practical experience/human evidence

Causes skin irritation. Causes serious eye irritation.

STOT-repeated exposure

STOT RE 1 and 2

Causes damage to organs through prolonged or repeated exposure.

SECTION 12: Ecological information

12.1 Toxicity

There are no data available on the mixture itself.

Aquatic toxicity

The substance/mixture does not fulfill the criteria of the acute aquatic toxicity according to Regulation (EC) No 1272/2008 [CLP], Annex I. Toxic to aquatic life. May cause long lasting harmful effects to aquatic life.

Acute (short-term) fish toxicity

Parameter : LC50 (REACTION PRODUCT: BISPHENOL A-(EPICHLORHYDRIN), EPOXY RESIN (NUMBER AVERAGE MOLECULAR WEIGHT <= 700) ; CAS No. : 25068-38-6)

Species : Fish

Effective dose : 1,3 mg/l

Exposure time : 96 h

Method : OECD 203

Parameter : Acute (short-term) fish toxicity (BISPHENOL F-(EPICHLORHYDRIN); EPOXY RESIN MW <= 700 ; CAS No. : 9003-36-5)

Species : Acute (short-term) fish toxicity

Effective dose : 2,54 mg/l

Exposure time : 96 h

Sediment toxicity

Toxicity to soil macroorganisms

Acute earthworm toxicity

Chronical earthworm toxicity (reproduction)

Long-term toxicity of organisms living in the sediment

Trade name : Wencon Hi-Temp Yellow - Component A
Revision date : 08.01.2018
Print date : 02-02-2018

Version (Revision) : 5.0.0 (4.1.1)

12.2 Persistence and degradability

Abiotic degradation

Abiotic degradation in Water

Hydrolysis

Biodegradation

| | |
|------------------|--|
| Parameter : | Biodegradation (REACTION PRODUCT: BISPHENOL A-(EPICHLORHYDRIN), EPOXY RESIN (NUMBER AVERAGE MOLECULAR WEIGHT <= 700) ; CAS No. : 25068-38-6) |
| Inoculum : | Biodegradation |
| Effective dose : | 12 % |
| Exposure time : | 28 |
| Evaluation : | Not readily biodegradable (according to OECD criteria) |
| Method : | OECD 301B/ ISO 9439/ EEC 92/69/V, C.4-C |
| Parameter : | Biodegradation (BISPHENOL F-(EPICHLORHYDRIN); EPOXY RESIN MW <= 700 ; CAS No. : 9003-36-5) |
| Inoculum : | Biodegradation |
| Effective dose : | 16 % |
| Exposure time : | 28 |
| Evaluation : | Not readily biodegradable (according to OECD criteria) |
| Method : | OECD 301B/ ISO 9439/ EEC 92/69/V, C.4-C |

12.3 Bioaccumulative potential

No information available.

12.4 Mobility in soil

No information available.

12.5 Results of PBT and vPvB assessment

No information available.

12.6 Other adverse effects

No information available.

12.7 Additional ecotoxicological information

The ecotoxicological properties of this mixture are determined by the ecotoxicological properties of the single components (see section 3). Do not allow to enter into surface water or drains.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product/Packaging disposal

Do not allow to enter into surface water or drains.

Waste treatment options

Appropriate disposal / Product

Waste disposal according to directive 2008/98/EC, covering waste and dangerous waste. Dispose of waste according to applicable legislation.

Appropriate disposal / Package

Contaminated packages must be completely emptied and can be re-used following proper cleaning. Packing which cannot be properly cleaned must be disposed of. Handle contaminated packages in the same way as the substance itself.

SECTION 14: Transport information

14.1 UN number

UN 3082

14.2 UN proper shipping name

Land transport (ADR/RID)

ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (REACTION PRODUCT: BISPHENOL A-(EPICHLORHYDRIN),

Safety Data Sheet
according to Regulation (EC) No. 1907/2006 (REACH)

WENCON®

Trade name : Wencon Hi-Temp Yellow - Component A
Revision date : 08.01.2018
Print date : 02-02-2018

Version (Revision) : 5.0.0 (4.1.1)

EPOXY RESIN (NUMBER AVERAGE MOLECULAR WEIGHT <= 700) · BISPHENOL F-(EPICHLORHYDRIN); EPOXY RESIN MW <= 700)

Sea transport (IMDG)

ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (REACTION PRODUCT: BISPHENOL A-(EPICHLORHYDRIN), EPOXY RESIN (NUMBER AVERAGE MOLECULAR WEIGHT <= 700) · BISPHENOL F-(EPICHLORHYDRIN); EPOXY RESIN MW <= 700)

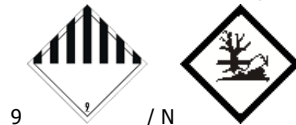
Air transport (ICAO-TI / IATA-DGR)

ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (REACTION PRODUCT: BISPHENOL A-(EPICHLORHYDRIN), EPOXY RESIN (NUMBER AVERAGE MOLECULAR WEIGHT <= 700) · BISPHENOL F-(EPICHLORHYDRIN); EPOXY RESIN MW <= 700)

14.3 Transport hazard class(es)

Land transport (ADR/RID)

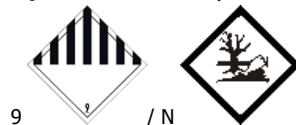
Class(es) : 9
Classification code : M6
Hazard identification number (Kemler No.) : 90
Tunnel restriction code : -
Special provisions : LQ 5 I · E 1 · 375 · ADR : - (SP 375 <= 5 l/kg)
Hazard label(s) :



9 / N

Sea transport (IMDG)

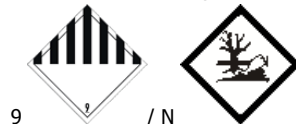
Class(es) : 9
EmS-No. : F-A / S-F
Special provisions : LQ 5 I · E 1 · IMDG : - (SP 2.10.2.7 <= 5 l/kg)
Hazard label(s) :



9 / N

Air transport (ICAO-TI / IATA-DGR)

Class(es) : 9
Special provisions : E 1 · A197 · IATA : - (SP A197 <= 5 l/kg)
Hazard label(s) :



9 / N

14.4 Packing group

III

14.5 Environmental hazards

Land transport (ADR/RID) : Yes
Sea transport (IMDG) : Yes (P)
Air transport (ICAO-TI / IATA-DGR) : Yes

14.6 Special precautions for user

None

SECTION 15: Regulatory information

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

National regulations

MAL code number according to Executive Order no. 301 from 13 May 1993 on the determination of code

Safety Data Sheet
according to Regulation (EC) No. 1907/2006 (REACH)

WENCON®

Trade name : Wencon Hi-Temp Yellow - Component A
Revision date : 08.01.2018
Print date : 02-02-2018

Version (Revision) : 5.0.0 (4.1.1)

numbers (The Danish Working Environment Service)

MAL code number 5-5

Additional information

Substance/product listed in the following inventories

Substance/product listed in the following inventories TSCA • EINECS/ELINCS • REACH

15.2 Chemical safety assessment

Chemical safety assessments for substances in this mixture were not carried out.

SECTION 16: Other information

16.1 Indication of changes

03. Hazardous ingredients

16.2 Abbreviations and acronyms

ADR = European Agreement concerning the International Carriage of Dangerous Goods by Road

ASTM = American Society of Testing and Materials (US)

CAS No = Chemical Abstracts Service Number (see ACS - American Chemical Society)

DNEL = Derived No-Effect Level

DT50 = Time for 50% loss; half-life

EbC50 = Median effective concentration (biomass, e.g. of algae)

EC50 = Median effective concentration

EINECS = European Inventory of Existing Commercial Chemical Substances

ELINCS = European List of Notified (New) Chemicals (see Tab 7, Background - Guide)

ErC50 = Median effective concentration (growth rate, e.g. of algae)

EWC = European Waste Catalogue

IATA = International Air Transport Association

IC50 = Concentration that produces 50% inhibition

IMDG = International Maritime Dangerous Goods Code

IMO = International Maritime Organization

LC50 = Concentration required to kill 50% of test organisms

LD50 = Dose required to kill 50% of test organisms

LEL = Lower Explosive Limit/Lower Explosion Limit

LOAEL = Lowest observed adverse effect level

MRL = Maximum Residue Limit

NOAEL = No Observed Adverse Effect Level

NOEC = No observed effect concentration

NOEL = No Observable Effect Level

OEL = Occupational Exposure Limits

PBT = Persistent, Bioaccumulative or Toxic

PNEC = Predictable Non Effect Concentration

STEL = Short-Term Exposure Limit

TWA = Time-Weighted Average

vPvB = Very Persistent and Very Bioaccumulative

16.3 Key literature references and sources for data

None

16.4 Classification for mixtures and used evaluation method according to regulation (EC) No 1272/2008 [CLP]

No information available.

16.5 Relevant H- and EUH-phrases (Number and full text)

| | |
|------|--|
| H315 | Causes skin irritation. |
| H317 | May cause an allergic skin reaction. |
| H319 | Causes serious eye irritation. |
| 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. |

Safety Data Sheet
according to Regulation (EC) No. 1907/2006 (REACH)

WENCON®

Trade name : Wencon Hi-Temp Yellow - Component A
Revision date : 08.01.2018
Print date : 02-02-2018

Version (Revision) : 5.0.0 (4.1.1)

H413 May cause long lasting harmful effects to aquatic life.

16.6 Training advice

The regulations of the national employment safety and employment protection commission about the handling for polyurethane/epoxy have to be observed.

16.7 Additional information

This safety data sheet contains more than one ES in an integrated form. Contents of the exposure scenarios have been included into sections 1.2, 8, 9, 12, 15 and 16 of this safety data sheet.

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.

Safety Data Sheet
according to Regulation (EC) No. 1907/2006 (REACH)

WENCON®

Trade name : Wencon Hi-Temp Yellow - Component B
Revision date : 17.05.2019
Print date : 03-06-2019

Version (Revision) : 10.0.0 (9.0.0)
Vouch-No. : 12-0112190501

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

1.1 Product identifier

Wencon Hi-Temp Yellow - Component B (185000050B)
PR-number (Danish): 1593646

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

Solventfree two component coating based on epoxy

Relevant identified uses

In compliance with the conditions described in the annex to this safety data sheet. See section 16 for a comprehensive list of uses, for which an exposure scenarion is provided as an annex.

Sector of uses [SU]

SU22 - Professional uses: Public domain (administration, education, entertainment, services, craftsmen)

Article categories [AC]

AC7 - AC 7 - Metal articles

Process categories [PROC]

PROC10 - PROC 10 - Roller application or brushing

PROC19 - PROC 19 - Manual activities involving hand contact

PROC21 - PROC 21 - Low energy manipulation of substances bound in materials and/or articles

PROC24 - PROC 24 - High (mechanical) energy work-up of substances bound in/on materials and/or articles

Environmental release categories [ERC]

ERC8c - ERC 8c - Widespread use leading to inclusion into/onto article (indoor)

ERC8f - ERC 8f - Widespread use leading to inclusion into/onto article (outdoor)

ERC10a - ERC 10a - Widespread use of articles with low release (outdoor)

ERC11a - ERC 11a - Widespread use of articles with low release (indoor)

Uses advised against

Do not use for private purposes (household).

Remark

The product is intended for professional use.

1.3 Details of the supplier of the safety data sheet

Supplier (manufacturer) :

Wencon ApS

Street :

Jyllandsvej 15

Postal code/city :

DK-5400 BOGENSE

Telephone :

+45 6481 1010

Information contact :

wencon@wencon.com

1.4 Emergency telephone number

+44 870 600 62 66 (UK National Poisons Emergency Number)

European emergency number: 112. Danmark: (Giftlinjen +45 82 12 12 12), only for the purpose of informing medical personnel in cases of acute intoxications.

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008 [CLP]

Aquatic Chronic 2 ; H411 - Hazardous to the aquatic environment : Chronic 2 ; Toxic to aquatic life with long lasting effects.

Acute Tox. 4 ; H302 - Acute toxicity (oral) : Category 4 ; Harmful if swallowed.

Eye Dam. 1 ; H318 - Serious eye damage/eye irritation : Category 1 ; Causes serious eye damage.

Skin Irrit. 2 ; H315 - Skin corrosion/irritation : Category 2 ; Causes skin irritation.

Repr. 1B ; H360Fd - Reproductive toxicity : Category 1B ; May damage fertility. Suspected of damaging the unborn

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH)

WENCON®

Trade name : Wencon Hi-Temp Yellow - Component B
Revision date : 17.05.2019
Print date : 03-06-2019

Version (Revision) : 10.0.0 (9.0.0)
Vouch-No. : 12-0112190501

child.

Skin Sens. 1 ; H317 - Skin sensitisation : Category 1 ; May cause an allergic skin reaction.

Additional information

This preparation is classified as UN packing group (GHS subcategory) non-corrosive in accordance with OECD 435 (In vitro membrane barrier test method for skin corrosion) and Part III, Section 37 of the UN Testing Manual (Classification procedures, test methods and criteria relating to substances of class 8).

2.2 Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms



Health hazard (GHS08) · Corrosion (GHS05) · Environment (GHS09) · Exclamation mark (GHS07)

Signal word

Danger

Hazard components for labelling

2-PIPERAZIN-1-YLETHYLAMINE ; CAS No. : 140-31-8
M-PHENYLENEBIS(METHYLAMINE) ; CAS No. : 1477-55-0
4,4'-ISOPROPYLIDENEDIPHENOL ; CAS No. : 80-05-7
NONYLPHENOLE ; CAS No. : 84852-15-3
3-AMINOMETHYL-3,5,5-TRIMETHYLCYCLOHEXYLAMINE ; CAS No. : 2855-13-2
PHENOL, STERYNATED ; CAS No. : 61788-44-1

Hazard statements

H360Fd May damage fertility. Suspected of damaging the unborn child.
H318 Causes serious eye damage.
H302 Harmful if swallowed.
H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H411 Toxic to aquatic life with long lasting effects.

Precautionary statements

P201 Obtain special instructions before use.
P202 Do not handle until all safety precautions have been read and understood.
P261 Avoid breathing dust/fume/gas/mist/vapours/spray.
P310 Immediately call a POISON CENTER.
P330 Rinse mouth.
P405 Store locked up.

Special rules for supplemental label elements for certain mixtures

O220 For professional use only

Remark

This preparation is classified as UN packing group (GHS subcategory) non-corrosive in accordance with OECD 435 (In vitro membrane barrier test method for skin corrosion) and Part III, Section 37 of the UN Testing Manual (Classification procedures, test methods and criteria relating to substances of class 8).

2.3 Other hazards

None

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Hazardous ingredients

BENZYL ALCOHOL ; REACH registration No. : 001-2119492630-38 ; EC No. : 202-859-9 ; CAS No. : 100-51-6

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH)

WENCON®

Trade name : Wencon Hi-Temp Yellow - Component B
Revision date : 17.05.2019
Print date : 03-06-2019

Version (Revision) : 10.0.0 (9.0.0)
Vouch-No. : 12-0112190501

Weight fraction : $\geq 10 - < 25$ %
Classification 1272/2008 [CLP] : Acute Tox. 4 ; H302 Acute Tox. 4 ; H332 Eye Irrit. 2 ; H319
2-PIPERAZIN-1-YLETHYLAMINE ; REACH registration No. : 01-2119471486-30 ; EC No. : 205-411-0 ; CAS No. : 140-31-8
Weight fraction : $\geq 10 - < 25$ %
Classification 1272/2008 [CLP] : Acute Tox. 3 ; H311 Skin Corr. 1B ; H314 Eye Dam. 1 ; H318 Acute Tox. 4 ; H302 Skin Sens. 1 ; H317 Aquatic Chronic 3 ; H412
M-PHENYLENEBIS(METHYLAMINE) ; REACH registration No. : 01-2119480150-50 ; EC No. : 216-032-5 ; CAS No. : 1477-55-0
Weight fraction : $\geq 2,5 - < 10$ %
Classification 1272/2008 [CLP] : Skin Corr. 1B ; H314 Acute Tox. 4 ; H302 Acute Tox. 4 ; H332 Skin Sens. 1 ; H317 Aquatic Chronic 3 ; H412
4,4'-ISOPROPYLIDENEDIPHENOL ; REACH registration No. : 01-211945756-23 ; EC No. : 201-245-8 ; CAS No. : 80-05-7
Weight fraction : $\geq 2,5 - < 10$ %
Classification 1272/2008 [CLP] : Repr. 1B ; H360F Eye Dam. 1 ; H318 Skin Sens. 1 ; H317 STOT SE 3 ; H335 Aquatic Chronic 2 ; H411
NONYLPHENOLE ; REACH registration No. : 01-2119510715-45 ; EC No. : 284-325-5 ; CAS No. : 84852-15-3
Weight fraction : $\geq 2,5 - < 10$ %
Classification 1272/2008 [CLP] : Repr. 2 ; H361fd Skin Corr. 1B ; H314 Eye Dam. 1 ; H318 Acute Tox. 4 ; H302 Aquatic Acute 1 ; H400 Aquatic Chronic 1 ; H410
3-AMINOMETHYL-3,5,5-TRIMETHYLCYCLOHEXYLAMINE ; REACH registration No. : 01-2119514687-32 ; EC No. : 220-666-8 ; CAS No. : 2855-13-2
Weight fraction : $\geq 2,5 - < 10$ %
Classification 1272/2008 [CLP] : Skin Corr. 1B ; H314 Eye Dam. 1 ; H318 Acute Tox. 4 ; H302 Acute Tox. 4 ; H312 Skin Sens. 1 ; H317 Aquatic Chronic 3 ; H412
QUARTZ (SiO₂) ; REACH registration No. : Annex V ; EC No. : 238-878-4 ; CAS No. : 14808-60-7
Weight fraction : $\geq 2,5 - < 10$ %
Classification 1272/2008 [CLP] : STOT RE 2 ; H373
M-PHENYLENEBIS(METHYLAMINE) ; REACH registration No. : 01-219480150-50 ; EC No. : 216-032-5 ; CAS No. : 1477-55-0
Weight fraction : $\geq 0,5 - < 1$ %
Classification 1272/2008 [CLP] : Skin Corr. 1B ; H314 Eye Dam. 1 ; H318 Acute Tox. 4 ; H302 Acute Tox. 4 ; H312 Acute Tox. 4 ; H332
PHENOL, STERYNATED ; REACH registration No. : 01-2119980970-27 ; EC No. : 262-975-0 ; CAS No. : 61788-44-1
Weight fraction : $\geq 0,5 - < 1$ %
Classification 1272/2008 [CLP] : Skin Irrit. 2 ; H315 Skin Sens. 1 ; H317 Aquatic Chronic 2 ; H411

This mixture contains the following substances of very high concern (SVHC) which are included in the Candidate List according to Article 59 of REACH

4,4'-ISOPROPYLIDENEDIPHENOL ; REACH registration No. : 01-211945756-23 ; EC No. : 201-245-8 ; CAS No. : 80-05-7
NONYLPHENOLE ; REACH registration No. : 01-2119510715-45 ; EC No. : 284-325-5 ; CAS No. : 84852-15-3

Additional information

Full text of H- and EUH-phrases: see section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

General information

When in doubt or if symptoms are observed, get medical advice. Never give anything by mouth to an unconscious person or a person with cramps. In case of allergic symptoms, especially in the breathing area, seek medical advice immediately. If unconscious place in recovery position and seek medical advice.

Following inhalation

Remove casualty to fresh air and keep warm and at rest. If breathing is irregular or stopped, administer artificial respiration. Consult a doctor immediately in the case of inhaling spray mist and show him packing or label.

In case of skin contact

In case of skin reactions, consult a physician. Immediately remove any contaminated clothing, shoes or stockings.

Safety Data Sheet
according to Regulation (EC) No. 1907/2006 (REACH)

WENCON®

Trade name : Wencon Hi-Temp Yellow - Component B
Revision date : 17.05.2019
Print date : 03-06-2019

Version (Revision) : 10.0.0 (9.0.0)
Vouch-No. : 12-0112190501

After contact with skin, wash immediately with plenty of water and soap. Do not use force or solvents to remove product incrustations from affected skin areas. Do not let product dry on skin.

After eye contact

After contact with the eyes, rinse with water with the eyelids open for a sufficient length of time, then consult an ophthalmologist immediately.

After ingestion

If accidentally swallowed rinse the mouth with plenty of water (only if the person is conscious) and obtain immediate medical attention. Do NOT induce vomiting. Keep at rest.

Self-protection of the first aider

First aider: Pay attention to self-protection!

4.2 Most important symptoms and effects, both acute and delayed

Effects

After eye contact
Causes serious eye damage.

In case of skin contact
Causes severe burns. Irritating to skin. May cause an allergic skin reaction.

4.3 Indication of any immediate medical attention and special treatment needed

None

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media

alcohol resistant foam

Unsuitable extinguishing media

Water spray jet

5.2 Special hazards arising from the substance or mixture

Burning produces heavy smoke. Use suitable breathing apparatus.

Hazardous combustion products

Carbon monoxide

5.3 Advice for firefighters

Use water spray jet to protect personnel and to cool endangered containers. Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

Special protective equipment for firefighters

Wear a self-contained breathing apparatus and chemical protective clothing.

5.4 Additional information

Use water spray jet to protect personnel and to cool endangered containers. Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

Do not breathe gas/fumes/vapour/spray. Remove all sources of ignition. Provide adequate ventilation. Remove persons to safety. Use personal protection equipment. See protective measures under point 7 and 8.

For emergency responders

Do not breathe gas/fumes/vapour/spray. Use personal protection equipment. See protective measures under point 7 and 8.

6.2 Environmental precautions

Safety Data Sheet
according to Regulation (EC) No. 1907/2006 (REACH)

WENCON®

Trade name : Wencon Hi-Temp Yellow - Component B
Revision date : 17.05.2019
Print date : 03-06-2019

Version (Revision) : 10.0.0 (9.0.0)
Vouch-No. : 12-0112190501

Do not allow to enter into surface water or drains. In case of gas escape or of entry into waterways, soil or drains, inform the responsible authorities. Ensure waste is collected and contained.

6.3 Methods and material for containment and cleaning up

For containment

Ensure waste is collected and contained.

For cleaning up

Clean contaminated articles and floor according to the environmental legislation. Clean with detergents. Avoid solvent cleaners. Treat the recovered material as prescribed in the section on waste disposal.

6.4 Reference to other sections

None

SECTION 7: Handling and storage



7.1 Precautions for safe handling

Protective measures

Persons with a history of skin sensitisation problems should not be employed in any process in which this product is used. It is recommended to design all work processes always so that the following is excluded: Inhalation of vapours or spray/mists Skin contact Eye contact Do not breathe gas/fumes/vapour/spray. When using do not eat, drink, smoke, sniff. Wear personal protection equipment (refer to section 8). Never use pressure to empty container. Use only in well-ventilated areas.

Measures to prevent fire

Keep away from sources of ignition - No smoking.

Environmental precautions

Do not allow to enter into surface water or drains.

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Only use containers specifically approved for the substance/product. Keep/Store only in original container. Keep container tightly closed.

Hints on joint storage

Keep away from:

Further information on storage conditions

Keep only in the original container in a cool, well-ventilated place. Store in a place accessible by authorized persons only. Handle and open container with care.

7.3 Specific end use(s)

Observe instructions for use. The regulations of the national employment safety and employment protection commission about the handling for polyurethane/epoxy have to be observed.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational exposure limit values

4,4'-ISOPROPYLIDENEDIPHENOL ; CAS No. : 80-05-7

Limit value type (country of origin) : TWA (EC)

Parameter : E: inhalable fraction

Limit value : 2 mg/m³

Version : 31-01-2018

Trade name : Wencon Hi-Temp Yellow - Component B
Revision date : 17.05.2019
Print date : 03-06-2019

Version (Revision) : 10.0.0 (9.0.0)
Vouch-No. : 12-0112190501

8.2 Exposure controls

Personal protection equipment



Eye/face protection

Suitable eye protection

Eye glasses with side protection

Skin protection

Hand protection

The quality of the protective gloves resistant to chemicals must be chosen as a function of the specific working place concentration and quantity of hazardous substances. Wear cotton undermitten if possible.

Suitable gloves type : Disposable gloves.

Suitable material : NBR (Nitrile rubber)

Required properties : liquid-tight.

Breakthrough time (maximum wearing time) : > 60 minutes

Thickness of the glove material : > 0.5 mm

Recommended glove articles : EN 374

Additional hand protection measures : Do not wear gloves near rotary machines and tools. Check leak tightness/impermeability prior to use. Wear cotton undermitten if possible. Use gloves only once. Take recovery periods for skin regeneration.

Remark : For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves. The quality of the protective gloves resistant to chemicals must be chosen as a function of the specific working place concentration and quantity of hazardous substances. Observe the wear time limits as specified by the manufacturer. Breakthrough times and swelling properties of the material must be taken into consideration. In the case of wanting to use the gloves again, clean them before taking off and air them well. When handling with chemical substances, protective gloves must be worn with the CE-label including the four control digits. Barrier creams are not substitutes for body protection.

Body protection

Remark : Body protection: not required.

Respiratory protection

Respiratory protection necessary at: exceeding exposure limit values

If technical exhaust or ventilation measures are not possible or insufficient, respiratory protection must be worn.

Suitable respiratory protection apparatus

Combination filtering device (EN 14387) Filtering device (DIN EN 147) Full-/half-/quarter-face masks (DIN EN 136/140) Filtering Half-face mask (DIN EN 149) Particle filter device (DIN EN 143).

Filtering device (full mask or mouthpiece) with filter: A P

Additional measures for respiratory protection

Filter types: A, B, E, K. Class 1: Maximum permitted contaminant concentration in inhaled air = 1000 mL/m³ (0.1 % by vol.); class 2: maximum permitted contaminant concentration in inhaled air = 5000 mL/m³ (0.5 % by vol.); class 3: maximum permitted contaminant concentration in inhaled air = 10000 mL/m³ (1.0 % by vol.) Half-face mask or quarter facepiece: maximum use concentration for substances with exposure limits: P1 filter: up to a max. of 4 times the exposure limit. P2 filter: up to a max. of 10 times the exposure limit. P3 filter: up to a max. of 30 times the expo. Full-face mask or mouthpiece with particulate filter: maximum use concentration for substances with exposure limits: P1 filter: up to a max. of 4 times the exposure limit. P2 filter: up to a max. of 15 times the exposure limit. P3 filter: up to a max. of

Remark

The filter class must be suitable for the maximum contaminant concentration (gas/vapour/aerosol/particulates) that may arise when handling the product. If the concentration is exceeded, self-contained breathing apparatus must be used.

General health and safety measures

When using do not eat, drink, smoke, sniff. Avoid contact with skin, eyes and clothes. Wash hands before breaks and after work. Immediately remove any contaminated clothing, shoes or stockings.

Trade name : Wencon Hi-Temp Yellow - Component B
Revision date : 17.05.2019
Print date : 03-06-2019

Version (Revision) : 10.0.0 (9.0.0)
Vouch-No. : 12-0112190501

Occupational exposure controls

Product related measures to prevent exposure

Further information: see technical data sheet.

Instructional measures to prevent exposure

Further information: see technical data sheet.

Organisational measures to prevent exposure

Further information: see technical data sheet.

Technical measures to prevent exposure

Technical measures and the application of suitable work processes have priority over personal protection equipment. See section 7. No additional measures necessary.

Environmental exposure controls

Do not allow to enter into surface water or drains.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance : Paste

Appearance

Colour : white

Odour

Amines

Safety relevant basis data

| | | | | | |
|--|--------------|---------|--|------------------------|--------------------|
| Melting point/melting range : | | | | | not applicable |
| Initial boiling point and boiling range : | (1013 hPa) | | | | No data available |
| Decomposition temperature : | | | | | No data available |
| Flash point : | | > | | 100 °C | DIN 53213-1 |
| Ignition temperature : | | | | | No data available |
| Evaporation rate : | | < | | 1 | |
| Flammable gases : | | | | | Not applicable. |
| Flammable solids : | | | | | Not applicable. |
| Oxidising properties. | | | | | No data available. |
| Lower explosion limit : | | | | | No data available |
| Upper explosion limit : | | | | | No data available |
| Explosive properties : | | | | | No data available. |
| Vapour pressure : | (50 °C) | < | | 1000 hPa | |
| Relative vapour density : | | | | | No data available |
| Relative density : | (20 °C) | approx. | | 1,12 g/cm ³ | DIN 53217 |
| Water solubility : | (20 °C) | | | insoluble | |
| Partition coefficient n-octanol/water : | | | | | No data available |
| pH : | | | | 6 - 8 | |
| Viscosity : | (20 °C) | | | | not applicable |
| Cinematic viscosity : | (40 °C) | | | | No data available |
| Odour threshold : | | | | | No data available |

9.2 Other information

None

SECTION 10: Stability and reactivity

10.1 Reactivity

No information available.

Safety Data Sheet
according to Regulation (EC) No. 1907/2006 (REACH)

WENCON®

Trade name : Wencon Hi-Temp Yellow - Component B
Revision date : 17.05.2019
Print date : 03-06-2019

Version (Revision) : 10.0.0 (9.0.0)
Vouch-No. : 12-0112190501

10.2 Chemical stability

The product is chemically stable under recommended conditions of storage, use and temperature.

10.3 Possibility of hazardous reactions

No hazardous reaction when handled and stored according to provisions.

10.4 Conditions to avoid

Ignition hazard.

10.5 Incompatible materials

No information available.

10.6 Hazardous decomposition products

Does not decompose when used for intended uses.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

This mixture is classified as hazardous according to regulation (EC) No. 1272/2008 [CLP].

Acute effects

Acute oral toxicity

| | |
|------------------|--|
| Parameter : | LD50 (BENZYL ALCOHOL ; CAS No. : 100-51-6) |
| Exposure route : | Oral |
| Species : | Rat |
| Effective dose : | 1230 mg/kg |
| Parameter : | LD50 (BENZYL ALCOHOL ; CAS No. : 100-51-6) |
| Exposure route : | Oral |
| Species : | Mouse |
| Effective dose : | 1600 mg/kg |
| Parameter : | LD50 (2-PIPERAZIN-1-YLETHYLAMINE ; CAS No. : 140-31-8) |
| Exposure route : | Oral |
| Species : | Rat |
| Effective dose : | 1470 mg/kg |
| Parameter : | LD50 (M-PHENYLENEBIS(METHYLAMINE) ; CAS No. : 1477-55-0) |
| Exposure route : | Oral |
| Species : | Rat |
| Effective dose : | 1200 mg/kg |
| Parameter : | LD50 (NONYLPHENOLE ; CAS No. : 84852-15-3) |
| Exposure route : | Oral |
| Species : | Rat |
| Effective dose : | 1900 mg/kg |
| Parameter : | LD50 (M-PHENYLENEBIS(METHYLAMINE) ; CAS No. : 1477-55-0) |
| Exposure route : | Oral |
| Species : | Rat |
| Effective dose : | 1200 mg/kg |

Harmful by inhalation and if swallowed.

Acute dermal toxicity

| | |
|------------------|--|
| Parameter : | LD50 (2-PIPERAZIN-1-YLETHYLAMINE ; CAS No. : 140-31-8) |
| Exposure route : | Dermal |
| Species : | Rabbit |
| Effective dose : | 880 mg/kg |
| Parameter : | LD50 (M-PHENYLENEBIS(METHYLAMINE) ; CAS No. : 1477-55-0) |
| Exposure route : | Dermal |
| Species : | Rat |
| Effective dose : | 2000 mg/kg |
| Parameter : | LD50 (NONYLPHENOLE ; CAS No. : 84852-15-3) |
| Exposure route : | Dermal |

Safety Data Sheet
according to Regulation (EC) No. 1907/2006 (REACH)

WENCON®

Trade name : Wencon Hi-Temp Yellow - Component B
Revision date : 17.05.2019
Print date : 03-06-2019

Version (Revision) : 10.0.0 (9.0.0)
Vouch-No. : 12-0112190501

Species : Rabbit
Effective dose : 2140 mg/kg
Parameter : LD50 (M-PHENYLENEBIS(METHYLAMINE) ; CAS No. : 1477-55-0)
Exposure route : Dermal
Species : Rat
Effective dose : 2000 mg/kg

Acute inhalation toxicity

Parameter : LC50 (BENZYL ALCOHOL ; CAS No. : 100-51-6)
Exposure route : Inhalation
Species : Rat
Effective dose : 1000 ppm
Exposure time : 8 h

Irritant and corrosive effects

Primary irritation to the skin

Causes severe burns. Irritating to skin.

Irritation to eyes

Causes serious eye damage.

Sensitisation

Harmful: possible risk of irreversible effects through inhalation, in contact with skin and if swallowed. Harmful: danger of serious damage to health by prolonged exposure through inhalation, in contact with skin and if swallowed.

In case of skin contact

May cause an allergic skin reaction.

Practical experience/human evidence

Prolonged or repeated contact with skin or mucous membrane result in irritation symptoms such as redness, blistering, dermatitis, etc. Causes burns. Causes serious eye damage.

CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)

Reproductive toxicity

Assessment/classification

May damage fertility or the unborn child. Repr. 1A Repr. 2

SECTION 12: Ecological information

12.1 Toxicity

There are no data available on the mixture itself.

Aquatic toxicity

The substance/mixture does not fulfill the criteria of the acute aquatic toxicity according to Regulation (EC) No 1272/2008 [CLP], Annex I. Toxic to aquatic life. May cause long lasting harmful effects to aquatic life.

Sediment toxicity

Toxicity to soil macroorganisms

Acute earthworm toxicity

Chronical earthworm toxicity (reproduction)

Long-term toxicity of organisms living in the sediment

12.2 Persistence and degradability

No information available.

12.3 Bioaccumulative potential

No information available.

12.4 Mobility in soil

No information available.

12.5 Results of PBT and vPvB assessment

No information available.

12.6 Other adverse effects

Safety Data Sheet
according to Regulation (EC) No. 1907/2006 (REACH)

WENCON®

Trade name : Wencon Hi-Temp Yellow - Component B
Revision date : 17.05.2019
Print date : 03-06-2019

Version (Revision) : 10.0.0 (9.0.0)
Vouch-No. : 12-0112190501

No information available.

12.7 Additional ecotoxicological information

The ecotoxicological properties of this mixture are determined by the ecotoxicological properties of the single components (see section 3). Do not allow to enter into surface water or drains.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product/Packaging disposal

Do not allow to enter into surface water or drains.

Waste treatment options

Appropriate disposal / Product

Waste disposal according to directive 2008/98/EC, covering waste and dangerous waste. Dispose of waste according to applicable legislation.

Appropriate disposal / Package

Contaminated packages must be completely emptied and can be re-used following proper cleaning. Packing which cannot be properly cleaned must be disposed of. Handle contaminated packages in the same way as the substance itself.

SECTION 14: Transport information

14.1 UN number

UN 3082

14.2 UN proper shipping name

Land transport (ADR/RID)

ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (4,4'-ISOPROPYLIDENEDIPHENOL · NONYLPHENOLE)

Sea transport (IMDG)

ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (4,4'-ISOPROPYLIDENEDIPHENOL · NONYLPHENOLE)

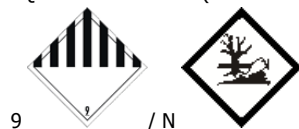
Air transport (ICAO-TI / IATA-DGR)

ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (4,4'-ISOPROPYLIDENEDIPHENOL · NONYLPHENOLE)

14.3 Transport hazard class(es)

Land transport (ADR/RID)

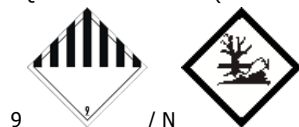
Class(es) : 9
Classification code : M6
Hazard identification number (Kemler No.) : 90
Tunnel restriction code : -
Special provisions : LQ 5 I · E 1 · ADR : - (SP 375 <= 5 l/kg)
Hazard label(s) :



9 / N

Sea transport (IMDG)

Class(es) : 9
EmS-No. : F-A / S-F
Special provisions : LQ 5 I · E 1 · IMDG : - (SP 2.10.2.7 <= 5 l/kg)
Hazard label(s) :



9 / N

Air transport (ICAO-TI / IATA-DGR)



Safety Data Sheet
according to Regulation (EC) No. 1907/2006 (REACH)

WENCON®

Trade name : Wencon Hi-Temp Yellow - Component B
Revision date : 17.05.2019
Print date : 03-06-2019

Version (Revision) : 10.0.0 (9.0.0)
Vouch-No. : 12-0112190501

Class(es) : 9
Special provisions : E 1 · IATA : - (SP A197 <= 5 l/kg)
Hazard label(s) :

9  / N 

14.4 Packing group

III

14.5 Environmental hazards

Land transport (ADR/RID) : Yes

Sea transport (IMDG) : Yes (P)

Air transport (ICAO-TI / IATA-DGR) : Yes

14.6 Special precautions for user

None

14.8 Additional information

This preparation is classified as UN packing group (GHS subcategory) non-corrosive in accordance with OECD 435 (In vitro membrane barrier test method for skin corrosion) and Part III, Section 37 of the UN Testing Manual (Classification procedures, test methods and criteria relating to substances of class 8).

SECTION 15: Regulatory information

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

National regulations

MAL code number according to Executive Order no. 301 from 13 May 1993 on the determination of code numbers (The Danish Working Environment Service)

MAL code number 3-5

Additional information

Substance/product listed in the following inventories

Substance/product listed in the following inventories TSCA • EINECS/ELINCS • REACH

15.2 Chemical safety assessment

Chemical safety assessments for substances in this mixture were not carried out.

SECTION 16: Other information

16.1 Indication of changes

02. Label elements · 02. Labelling according to Regulation (EC) No. 1272/2008 [CLP] · 03. Hazardous ingredients · 08. Occupational exposure limit values · 14. UN proper shipping name - Land transport (ADR/RID) · 14. UN proper shipping name - Sea transport (IMDG) · 14. UN proper shipping name - Air transport (ICAO-TI / IATA-DGR) · 15. Restrictions on use

16.2 Abbreviations and acronyms

ADR = European Agreement concerning the International Carriage of Dangerous Goods by Road

ASTM = American Society of Testing and Materials (US)

CAS No = Chemical Abstracts Service Number (see ACS - American Chemical Society)

DNEL = Derived No-Effect Level

DT50 = Time for 50% loss; half-life

EbC50 = Median effective concentration (biomass, e.g. of algae)

EC50 = Median effective concentration

EINECS = European Inventory of Existing Commercial Chemical Substances

ELINCS = European List of Notified (New) Chemicals (see Tab 7, Background - Guide)

ErC50 = Median effective concentration (growth rate, e.g. of algae)

EWC = European Waste Catalogue

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH)

WENCON®

Trade name : Wencon Hi-Temp Yellow - Component B
Revision date : 17.05.2019
Print date : 03-06-2019

Version (Revision) : 10.0.0 (9.0.0)
Vouch-No. : 12-0112190501

IATA = International Air Transport Association
IC50 = Concentration that produces 50% inhibition
IMDG = International Maritime Dangerous Goods Code
IMO = International Maritime Organization
LC50 = Concentration required to kill 50% of test organisms
LD50 = Dose required to kill 50% of test organisms
LEL = Lower Explosive Limit/Lower Explosion Limit
LOAEL = Lowest observed adverse effect level
MRL = Maximum Residue Limit
NOAEL = No Observed Adverse Effect Level
NOEC = No observed effect concentration
NOEL = No Observable Effect Level
OEL = Occupational Exposure Limits
PBT = Persistent, Bioaccumulative or Toxic
PNEC = Previsible Non Effect Concentration
STEL = Short-Term Exposure Limit
TWA = Time-Weighted Average
vPvB = Very Persistent and Very Bioaccumulative

16.3 Key literature references and sources for data

None

16.4 Classification for mixtures and used evaluation method according to regulation (EC) No 1272/2008 [CLP]

No information available.

16.5 Relevant H- and EUH-phrases (Number and full text)

| | |
|----------------|--|
| H302 | Harmful if swallowed. |
| H302+H312 | Harmful if swallowed or in contact with skin. |
| H302+H312+H332 | Harmful if swallowed, in contact with skin or if inhaled. |
| H302+H332 | Harmful if swallowed or if inhaled. |
| H311 | Toxic in contact with skin. |
| H314 | Causes severe skin burns and eye damage. |
| H315 | Causes skin irritation. |
| H317 | May cause an allergic skin reaction. |
| H318 | Causes serious eye damage. |
| H319 | Causes serious eye irritation. |
| H332 | Harmful if inhaled. |
| H335 | May cause respiratory irritation. |
| H360F | May damage fertility. |
| H360Fd | May damage fertility. Suspected of damaging the unborn child. |
| H361fd | Suspected of damaging fertility. Suspected of damaging the unborn child. |
| H373 | May cause damage to organs through prolonged or repeated exposure. |
| 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. |

16.6 Training advice

The regulations of the national employment safety and employment protection commission about the handling for polyurethane/epoxy have to be observed.

16.7 Additional information

This safety data sheet contains more than one ES in an integrated form. Contents of the exposure scenarios have been included into sections 1.2, 8, 9, 12, 15 and 16 of this safety data sheet.

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily

Safety Data Sheet
according to Regulation (EC) No. 1907/2006 (REACH)

WENCON®

Trade name : Wencon Hi-Temp Yellow - Component B
Revision date : 17.05.2019
Print date : 03-06-2019

Version (Revision) : 10.0.0 (9.0.0)
Vouch-No. : 12-0112190501

valid for the new made-up material.
