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



Trade name : Wencon UW Coating Orange - Component A

Revision date: 09.01.2018 **Version (Revision):** 5.0.0 (4.1.1)

Print date: 02-02-2018

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

1.1 Product identifier

Wencon UW Coating Orange - Component A (285000030A)

PR-number (Danish): 2348933

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 - Metal articles

Process categories [PROC]

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):

Street:

Postal code/city:

Telephone:

Information contact:

Wencon ApS

Jyllandsvej 15

DK-5400 BOGENSE

+45 6481 1010

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.

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.

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

Page: 1 / 12

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



Trade name : Wencon UW Coating Orange - Component A

Revision date: 09.01.2018 **Version (Revision):** 5.0.0 (4.1.1)

Print date: 02-02-2018

(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





Environment (GHS09) · Exclamation mark (GHS07)

Signal word

Warning

Hazard components for labelling

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

REACTION PRODUCT: BISPHENOL A-(EPICHLORHYDRIN), EPOXY RESIN (NUMBER AVERAGE MOLECULAR WEIGHT <=

700); CAS No.: 25068-38-6

[[(2-ETHYLHEXYL)OXY]METHYL]OXIRANE; CAS No.: 2461-15-6 PHENOL, METHYL STYRENATED; CAS No.: 68512-30-1 1,6 HEXANDIOL DIGLYCIDYLETHER; CAS No.: 16096-31-4

Hazard statements

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

P261 Avoid breathing dust/fume/gas/mist/vapours/spray.

P264 Wash hands thoroughly after handling.

P272 Contaminated work clothing should not be allowed out of the workplace.

P333+P313 If skin irritation or rash occurs: Get medical advice/attention.
P337+P313 If eye irritation persists: Get medical advice/attention.

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

and easy to do. Continue rinsing.

Special rules for supplemental label elements for certain mixtures

EUH205 Contains epoxy constituents. May produce an allergic reaction.

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

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

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

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 : \geq 10 - < 25 %

Page: 2 / 12

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



Trade name : Wencon UW Coating Orange - Component A

Revision date: 09.01.2018 **Version (Revision):** 5.0.0 (4.1.1)

Print date : 02-02-2018

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

[[(2-ETHYLHEXYL)OXY]METHYL]OXIRANE; REACH registration No.: 01-2119962196-31; EC No.: 219-553-6; CAS No.:

2461-15-6

Weight fraction : $\geq 2.5 - < 10 \%$

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

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

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

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

3-GLYCIDYLOXYPROPYL-TRIMETHOXYSILANE; REACH registration No.: 01-2119513212-58; EC No.: 219-784-2; CAS No.:

2530-83-8

Weight fraction : \geq 1 - < 2,5 % Classification 1272/2008 [CLP] : Eye Dam. 1 ; H318

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

4

Weight fraction: < 0.5 %

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

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

Page: 3 / 12

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



Trade name : Wencon UW Coating Orange - Component A

Revision date: 09.01.2018 **Version (Revision):** 5.0.0 (4.1.1)

Print date: 02-02-2018

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

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

Page: 4 / 12

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



Trade name : Wencon UW Coating Orange - Component A

Revision date: 09.01.2018 **Version (Revision):** 5.0.0 (4.1.1)

Print date: 02-02-2018

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

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 mmRecommended 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

Page: 5 / 12

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



Trade name : Wencon UW Coating Orange - Component A

Revision date: 09.01.2018 **Version (Revision):** 5.0.0 (4.1.1)

Print date: 02-02-2018

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 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: liquid

Appearance
Colour : orange
Odour

characteristic

Safety relevant basis data

Melting point/melting range : not applicable

Initial boiling point and boiling (1013 hPa) No data available

Page: 6 / 12

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



Trade name : Wencon UW Coating Orange - Component A

Revision date: 09.01.2018 **Version (Revision):** 5.0.0 (4.1.1)

Print date : 02-02-2018

range:

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.

Not applicable.

Not applicable.

No data available.

Lower explosion limit:

No data available

Upper explosion limit:

No data available

Explosive properties:

No data available.

Vapour pressure : $(50 \, ^{\circ}\text{C})$ < $1000 \, \text{hPa}$

Relative vapour density:

No data available

Relative density: (20 °C) approx. 1,88 g/cm³ DIN 53217

Water solubility: (20 °C) insoluble
Partition coefficient n-

octanol/water:

pH:

No data available

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: 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 (REACTION PRODUCT: BISPHENOL A-(EPICHLORHYDRIN), EPOXY RESIN

(NUMBER AVERAGE MOLECULAR WEIGHT <=700); CAS No. : 25068-38-6)

Exposure route : Oral

Page: 7 / 12





Trade name : Wencon UW Coating Orange - Component A

Revision date: 09.01.2018 **Version (Revision):** 5.0.0 (4.1.1)

Print date: 02-02-2018

Species: Rat
Effective dose: 30000 mg/kg

Parameter: LC50 (1,6 HEXANDIOL DIGLYCIDYLETHER ; CAS No.: 16096-31-4)

Exposure route : Oral Species : Rat

Effective dose: > 2000 mg/kg

Acute dermal toxicity

Parameter: LD50 (BISPHENOL F-(EPICHLORHYDRIN); EPOXY RESIN MW <= 700 ; CAS No. :

9003-36-5)

Exposure route: Dermal
Species: Rat

Effective docs: > 2000 m

Effective dose : > 2000 mg/kg

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: LC50 (1,6 HEXANDIOL DIGLYCIDYLETHER; CAS No.: 16096-31-4)

Exposure route : Dermal Species : Rat

Effective dose : > 2000 mg/kg

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 (BISPHENOL F-(EPICHLORHYDRIN); EPOXY RESIN MW <= 700;

CAS No.: 9003-36-5)

Species: Guinea pig
Effective dose: 50 %
Result: Sensitising.
Method: OECD 406

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

May cause an allergic skin reaction.

Practical experience/human evidence

Causes skin irritation. Causes serious eye irritation.

SECTION 12: Ecological information

12.1 Toxicity

There are no data available on the mixture itself.

Aquatic toxicity

The substance/mixture does not fullfill 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.

Page: 8 / 12

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



Trade name : Wencon UW Coating Orange - Component A

Revision date: 09.01.2018 **Version (Revision):** 5.0.0 (4.1.1)

Print date : 02-02-2018

Acute (short-term) fish toxicity

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

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

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

Abiotic degradation

Abiotic degradation in Water

Hydrolysis

Biodegradation

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

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

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

Page: 9 / 12

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



Trade name : Wencon UW Coating Orange - Component A

Revision date: 09.01.2018 **Version (Revision):** 5.0.0 (4.1.1)

Print date: 02-02-2018

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. (BISPHENOL F-(EPICHLORHYDRIN); EPOXY RESIN MW <= 700 · REACTION PRODUCT: BISPHENOL A-(EPICHLORHYDRIN), EPOXY RESIN (NUMBER AVERAGE MOLECULAR WEIGHT <= 700))

Sea transport (IMDG)

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

Air transport (ICAO-TI / IATA-DGR)

ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (BISPHENOL F-(EPICHLORHYDRIN); EPOXY RESIN MW <= 700 · REACTION PRODUCT: BISPHENOL A-(EPICHLORHYDRIN), EPOXY RESIN (NUMBER AVERAGE MOLECULAR WEIGHT <= 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 $5 \cdot E1 \cdot 375 \cdot ADR : -(SP 375 <= 5 \cdot 1/kg)$

Hazard label(s):

Sea transport (IMDG)

Class(es): 9 **EmS-No.:** F-A / S-F

Special provisions : LQ $5 \cdot E1 \cdot IMDG : -(SP 2.10.2.7 \le 5 \cdot 1/kg)$

Hazard label(s):

Air transport (ICAO-TI / IATA-DGR)

Class(es):

Special provisions : E 1 · A197 · IATA : - (SP A197 <= 5 l/kg)

Page: 10 / 12

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

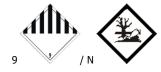


Trade name : Wencon UW Coating Orange - Component A

Revision date: 09.01.2018 **Version (Revision):** 5.0.0 (4.1.1)

Print date: 02-02-2018

Hazard label(s):



14.4 Packing group

TTT

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

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 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 Substan

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

Page: 11 / 12

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



Trade name : Wencon UW Coating Orange - Component A

Revision date: 09.01.2018 **Version (Revision):** 5.0.0 (4.1.1)

Print date : 02-02-2018

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 Bioacccumulative

16.3 Key literature references and sources for data

None

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.
H318 Causes serious eye damage.
H319 Causes serious eye irritation.

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 valid for the new made-up material.

Page: 12 / 12

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



Trade name : Wencon UW Coating Orange - Component B

Revision date: 09.01.2018 **Version (Revision):** 6.0.0 (5.1.1)

Print date: 02-02-2018

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

1.1 Product identifier

Wencon UW Coating Orange - Component B (285000030B)

PR-number (Danish): 2348941

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 - Metal articles

Process categories [PROC]

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):

Street:

Postal code/city:

Telephone:

Information contact:

Wencon ApS

Jyllandsvej 15

DK-5400 BOGENSE

+45 6481 1010

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]

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.

Muta. 2; H341 - Germ cell mutagenicity: Category 2; Suspected of causing genetic defects.

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).

Page: 1 / 11

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



Trade name : Wencon UW Coating Orange - Component B

Revision date: 09.01.2018 **Version (Revision):** 6.0.0 (5.1.1)

Print date: 02-02-2018

2.2 Label elements

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

Hazard pictograms







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

Signal word

Danger

Hazard components for labelling

FORMALDEHYDE; POLYMER WITH 1,3-BENZENEDIMETHANAMINE AND PHENOL; CAS No.: 57214-10-5

M-PHENYLENEBIS(METHYLAMINE); CAS No.: 1477-55-0

PHENOL; CAS No.: 108-95-2

Hazard statements

H341 Suspected of causing genetic defects.

H318 Causes serious eye damage. H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

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.

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

and easy to do. Continue rinsing.

P405 Store locked up.

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

FORMALDEHYDE; POLYMER WITH 1,3-BENZENEDIMETHANAMINE AND PHENOL; REACH registration No.: 01-2119966906-

20 ; EC No. : 500-137-0; CAS No. : 57214-10-5

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

Classification 1272/2008 [CLP]: Skin Corr. 1B; H314 Skin Sens. 1; H317 Aquatic Chronic 3; H412

 $\hbox{M-PHENYLENEBIS}(\hbox{METHYLAMINE}) \ ; \ \hbox{REACH registration No.} : 01-219480150-50 \ ; \ \hbox{EC No.} : 216-032-5; \ \hbox{CAS No.} : 1477-55-0 \ ; \ \hbox{CAS No.} : 1$

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

Acute Tox. 4; H332

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

Weight fraction : \geq 2,5 - < 10 %

Classification 1272/2008 [CLP] : Acute Tox. 4 ; H302 Acute Tox. 4 ; H332 Eye Irrit. 2 ; H319 PHENOL ; REACH registration No. : 01-2119471329-32 ; EC No. : 203-632-7; CAS No. : 108-95-2

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

Page: 2 / 11

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



Trade name : Wencon UW Coating Orange - Component B

Revision date: 09.01.2018 **Version (Revision):** 6.0.0 (5.1.1)

Print date: 02-02-2018

Classification 1272/2008 [CLP]: Acute Tox. 3; H301 Acute Tox. 3; H311 Acute Tox. 3; H331 Muta. 2; H341 STOT

RE 2; H373 Skin Corr. 1B; H314 Eye Dam. 1; H318

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

Effects

After eye contact

Causes serious eye damage.

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

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.

Page: 3 / 11

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



Trade name : Wencon UW Coating Orange - Component B

Revision date: 09.01.2018 **Version (Revision):** 6.0.0 (5.1.1)

Print date : 02-02-2018

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.

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:

Page: 4 / 11

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



Trade name : Wencon UW Coating Orange - Component B

Revision date: 09.01.2018 **Version (Revision):** 6.0.0 (5.1.1)

Print date : 02-02-2018

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

PHENOL; CAS No.: 108-95-2

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

Limit value: 4 ppm / 16 mg/m³

Peak limitation: H
Version: 17-12-2009
Limit value type (country of origin): TWA (EC)

Limit value: 2 ppm / 8 mg/m³

Remark:

Version: 17-12-2009

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

Page: 5 / 11

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



Trade name : Wencon UW Coating Orange - Component B

Revision date: 09.01.2018 **Version (Revision):** 6.0.0 (5.1.1)

Print date: 02-02-2018

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. 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: liquid

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 : > 150 °C DIN 53213-1

 Ignition temperature :
 No data available

 Evaporation rate :
 1

 Flammable gases :
 Not applicable.

 Flammable solids :
 Not applicable.

Page: 6 / 11

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



Trade name : Wencon UW Coating Orange - Component B

Revision date: 09.01.2018 **Version (Revision):** 6.0.0 (5.1.1)

Print date : 02-02-2018

Oxidising properties.

Lower explosion limit:
Upper explosion limit:
No data available

No data available

Explosive properties:
No data available.

Vapour pressure:

(50 °C)

No data available.

hPa

Relative vapour density:

No data available

Relative density: (20 °C) approx. 1,84 g/cm³ DIN 53217

Water solubility: (20 °C) insoluble
Partition coefficient noctanol/water:

No data available

pH: 6-8 Viscosity: $(20 \, ^{\circ}\text{C})$ not applicable Cinematic viscosity: $(40 \, ^{\circ}\text{C})$ 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

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 (M-PHENYLENEBIS(METHYLAMINE) ; CAS No. : 1477-55-0)

Exposure route: Oral
Species: Rat
Effective dose: 1200 mg/kg

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 (PHENOL ; CAS No. : 108-95-2)

Exposure route : Oral

Page: 7 / 11

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



Trade name : Wencon UW Coating Orange - Component B

Revision date: 09.01.2018 **Version (Revision):** 6.0.0 (5.1.1)

Print date: 02-02-2018

Species: Rat Effective dose: 317 mg/kg

Acute dermal toxicity

Parameter: LD50 (M-PHENYLENEBIS(METHYLAMINE); CAS No.: 1477-55-0)

Exposure route: Dermal
Species: Rat
Effective dose: 2000 mg/kg

Parameter: LD50 (PHENOL ; CAS No. : 108-95-2)

Exposure route: Dermal
Species: Rat
Effective dose: 670 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

Parameter: LC50 (PHENOL ; CAS No. : 108-95-2)

Exposure route: Inhalation
Species: Rat
Effective dose: 316 mg/m³

Irritant and corrosive effects

Primary irritation to the skin

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)

Germ cell mutagenicity

Assessment/classification

Suspected of causing genetic defects. Muta. 2, H341

SECTION 12: Ecological information

12.1 Toxicity

There are no data available on the mixture itself.

Aquatic toxicity

The substance/mixture does not fullfill the criteria of the acute aquatic toxicity according to Regulation (EC) No 1272/2008 [CLP], Annex I.

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.

Page: 8 / 11

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



Trade name : Wencon UW Coating Orange - Component B

Revision date: 09.01.2018 **Version (Revision):** 6.0.0 (5.1.1)

Print date: 02-02-2018

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

No dangerous good in sense of these transport regulations.

14.2 UN proper shipping name

No dangerous good in sense of these transport regulations.

14.3 Transport hazard class(es)

No dangerous good in sense of these transport regulations.

14.4 Packing group

No dangerous good in sense of these transport regulations.

14.5 Environmental hazards

No dangerous good in sense of these transport regulations.

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

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

National regulations

Page: 9 / 11





Trade name : Wencon UW Coating Orange - Component B

Revision date: 09.01.2018 **Version (Revision):** 6.0.0 (5.1.1)

Print date: 02-02-2018

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

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 Substan

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 = Previsible Non Effect Concentration

STEL = Short-Term Exposure Limit

TWA = Time-Weighted Average

vPvB = Very Persistent and Very Bioacccumulative

16.3 Key literature references and sources for data

None

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)

H301+H311+H331 Toxic if swallowed, in contact with skin or if inhaled. H302+H312+H332 Harmful if swallowed, in contact with skin or if inhaled.

H302+H332 Harmful if swallowed or if inhaled.

H314 Causes severe skin burns and eye damage.

H315 Causes skin irritation.

Page: 10 / 11

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



Wencon UW Coating Orange - Component B Trade name:

Revision date: 09.01.2018 Version (Revision): 6.0.0 (5.1.1)

Print date: 02-02-2018

> H317 May cause an allergic skin reaction. H318 Causes serious eye damage. H319 Causes serious eye irritation. H341 Suspected of causing genetic defects. H373

May cause damage to organs through prolonged or repeated exposure.

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 valid for the new made-up material.

Page: 11 / 11

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



Trade name: Wencon UW Coating Brown - Component A

Revision date: 09.01.2018 **Version (Revision):** 2.0.0 (1.0.1)

Print date: 02-02-2018

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

1.1 Product identifier

Wencon UW Coating Brown - Component A (285000040A)

PR-number (Danish): 4018663

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 - Metal articles

Process categories [PROC]

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):

Street:

Postal code/city:

Telephone:

Information contact:

Wencon ApS

Jyllandsvej 15

DK-5400 BOGENSE

+45 6481 1010

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.

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.

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

Page: 1 / 12

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



Trade name: Wencon UW Coating Brown - Component A

Revision date: 09.01.2018 **Version (Revision):** 2.0.0 (1.0.1)

Print date: 02-02-2018

(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





Environment (GHS09) · Exclamation mark (GHS07)

Signal word

Warning

Hazard components for labelling

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

REACTION PRODUCT: BISPHENOL A-(EPICHLORHYDRIN), EPOXY RESIN (NUMBER AVERAGE MOLECULAR WEIGHT <=

700); CAS No.: 25068-38-6

[[(2-ETHYLHEXYL)OXY]METHYL]OXIRANE; CAS No.: 2461-15-6 1,6 HEXANDIOL DIGLYCIDYLETHER; CAS No.: 16096-31-4

Hazard statements

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

P261 Avoid breathing dust/fume/gas/mist/vapours/spray.

P264 Wash hands thoroughly after handling.

P272 Contaminated work clothing should not be allowed out of the workplace.

P333+P313 If skin irritation or rash occurs: Get medical advice/attention.
P337+P313 If eye irritation persists: Get medical advice/attention.

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

and easy to do. Continue rinsing.

Special rules for supplemental label elements for certain mixtures

EUH205 Contains epoxy constituents. May produce an allergic reaction.

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

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

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

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 : \geq 10 - < 25 %

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

Page: 2 / 12

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



Trade name : Wencon UW Coating Brown - Component A

Revision date: 09.01.2018 **Version (Revision):** 2.0.0 (1.0.1)

Print date : 02-02-2018

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

[[(2-ETHYLHEXYL)OXY]METHYL]OXIRANE; REACH registration No.: 01-2119962196-31; EC No.: 219-553-6; CAS No.:

2461-15-6

Weight fraction : \geq 2,5 - < 10 %

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

3-GLYCIDYLOXYPROPYL-TRIMETHOXYSILANE; REACH registration No.: 01-2119513212-58; EC No.: 219-784-2; CAS No.:

2530-83-8

Weight fraction : \geq 1 - < 2,5 % Classification 1272/2008 [CLP] : Eye Dam. 1 ; H318

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

4

Weight fraction: < 0,5 %

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

Page: 3 / 12

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



Trade name: Wencon UW Coating Brown - Component A

Revision date: 09.01.2018 **Version (Revision):** 2.0.0 (1.0.1)

Print date: 02-02-2018

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

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

Page: 4 / 12

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



Trade name: Wencon UW Coating Brown - Component A

Revision date: 09.01.2018 **Version (Revision):** 2.0.0 (1.0.1)

Print date: 02-02-2018

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

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

Page: 5 / 12

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



Trade name : Wencon UW Coating Brown - Component A

Revision date: 09.01.2018 **Version (Revision):** 2.0.0 (1.0.1)

Print date: 02-02-2018

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 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: liquid

Appearance
Colour : orange
Odour

characteristic

Safety relevant basis data

Melting point/melting range : not applicable

Initial boiling point and boiling (1013 hPa) No data available

Page: 6 / 12

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



Trade name : Wencon UW Coating Brown - Component A

Revision date: 09.01.2018 **Version (Revision):** 2.0.0 (1.0.1)

Print date : 02-02-2018

range:

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 : $(50 \, ^{\circ}\text{C})$ < $1000 \, \text{hPa}$

Relative vapour density:

No data available

Relative density: (20 °C) approx. 1,88 g/cm³ DIN 53217

Water solubility: (20 °C) insoluble
Partition coefficient n-

octanol/water:

pH:

No data available

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: 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 (REACTION PRODUCT: BISPHENOL A-(EPICHLORHYDRIN), EPOXY RESIN

(NUMBER AVERAGE MOLECULAR WEIGHT <=700); CAS No. : 25068-38-6)

Exposure route : Oral

Page: 7 / 12

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



Trade name: Wencon UW Coating Brown - Component A

Revision date: 09.01.2018 **Version (Revision):** 2.0.0 (1.0.1)

Print date: 02-02-2018

Species: Rat
Effective dose: 30000 mg/kg

Parameter: LC50 (1,6 HEXANDIOL DIGLYCIDYLETHER ; CAS No.: 16096-31-4)

Exposure route : Oral Species : Rat

Effective dose: > 2000 mg/kg

Acute dermal toxicity

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 (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: LC50 (1,6 HEXANDIOL DIGLYCIDYLETHER; CAS No.: 16096-31-4)

Exposure route : Dermal Species : Rat

Effective dose: > 2000 mg/kg

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 (BISPHENOL F-(EPICHLORHYDRIN); EPOXY RESIN MW <= 700;

CAS No.: 9003-36-5)

Species: Guinea pig
Effective dose: 50 %
Result: Sensitising.
Method: OECD 406

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

May cause an allergic skin reaction.

Practical experience/human evidence

Causes skin irritation. Causes serious eye irritation.

SECTION 12: Ecological information

12.1 Toxicity

There are no data available on the mixture itself.

Aquatic toxicity

The substance/mixture does not fullfill 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.

Page: 8 / 12

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



Trade name : Wencon UW Coating Brown - Component A

Revision date: 09.01.2018 **Version (Revision):** 2.0.0 (1.0.1)

Print date : 02-02-2018

Acute (short-term) fish toxicity

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

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

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

Abiotic degradation

Abiotic degradation in Water

Hydrolysis

Biodegradation

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

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

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

Page: 9 / 12





Trade name : Wencon UW Coating Brown - Component A

Revision date: 09.01.2018 **Version (Revision):** 2.0.0 (1.0.1)

Print date : 02-02-2018

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. (BISPHENOL F-(EPICHLORHYDRIN); EPOXY RESIN MW <= 700 · REACTION PRODUCT: BISPHENOL A-(EPICHLORHYDRIN), EPOXY RESIN (NUMBER AVERAGE MOLECULAR WEIGHT <= 700))

Sea transport (IMDG)

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

Air transport (ICAO-TI / IATA-DGR)

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

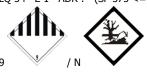
14.3 Transport hazard class(es)

Land transport (ADR/RID)

Class(es): 9
Classification code: M6
Hazard identification number (Kemler
No.): 90
Tunnel restriction code:

Special provisions : LQ $5 \cdot E \cdot 1 \cdot ADR : -(SP \cdot 375 \le 5 \cdot 1/kg)$

Hazard label(s):



Sea transport (IMDG)

Class(es): 9 **EmS-No.:** F-A / S-F

Special provisions : LQ $5 \cdot E1 \cdot IMDG : -(SP 2.10.2.7 \le 5 \cdot 1/kg)$

Hazard label(s):



Air transport (ICAO-TI / IATA-DGR)

Class(es):

Special provisions : E 1 · IATA : - (SP A197 \leq 5 l/kg)

Page: 10 / 12

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



Trade name : Wencon UW Coating Brown - Component A

Revision date: 09.01.2018 **Version (Revision):** 2.0.0 (1.0.1)

Print date: 02-02-2018

Hazard label(s):



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

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 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 Substan

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

Page: 11 / 12

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



Trade name : Wencon UW Coating Brown - Component A

Revision date: 09.01.2018 **Version (Revision):** 2.0.0 (1.0.1)

Print date : 02-02-2018

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 Bioacccumulative

16.3 Key literature references and sources for data

None

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.
H318 Causes serious eye damage.
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.

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.

Page: 12 / 12

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



Trade name : Wencon UW Coating Brown - Component B

Revision date: 09.01.2018 **Version (Revision):** 3.0.0 (2.0.1)

Print date: 02-02-2018

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

1.1 Product identifier

Wencon UW Coating Brown - Component B (285000040B)

PR-number (Danish): 4022291

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 - Metal articles

Process categories [PROC]

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):

Street:

Postal code/city:

Telephone:

Information contact:

Wencon ApS

Jyllandsvej 15

DK-5400 BOGENSE

+45 6481 1010

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]

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.

Muta. 2; H341 - Germ cell mutagenicity: Category 2; Suspected of causing genetic defects.

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).

Page: 1 / 11

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



Trade name: Wencon UW Coating Brown - Component B

Revision date: 09.01.2018 **Version (Revision):** 3.0.0 (2.0.1)

Print date: 02-02-2018

2.2 Label elements

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

Hazard pictograms







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

Signal word

Danger

Hazard components for labelling

FORMALDEHYDE; POLYMER WITH 1,3-BENZENEDIMETHANAMINE AND PHENOL; CAS No.: 57214-10-5

M-PHENYLENEBIS(METHYLAMINE); CAS No.: 1477-55-0

PHENOL; CAS No.: 108-95-2

Hazard statements

H341 Suspected of causing genetic defects.

H318 Causes serious eye damage. H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

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.

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

and easy to do. Continue rinsing.

P405 Store locked up.

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

FORMALDEHYDE; POLYMER WITH 1,3-BENZENEDIMETHANAMINE AND PHENOL; REACH registration No.: 01-2119966906-

20 ; EC No. : 500-137-0; CAS No. : 57214-10-5

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

Classification 1272/2008 [CLP]: Skin Corr. 1B; H314 Skin Sens. 1; H317 Aquatic Chronic 3; H412

 $\hbox{M-PHENYLENEBIS} (\hbox{METHYLAMINE}) \ ; \ \hbox{REACH registration No.} : 01-219480150-50 \ ; \ \hbox{EC No.} : 216-032-5; \ \hbox{CAS No.} : 1477-55-0 \ ; \ \hbox{CAS No.} :$

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

Acute Tox. 4; H332

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

Weight fraction : \geq 2,5 - < 10 %

Classification 1272/2008 [CLP] : Acute Tox. 4 ; H302 Acute Tox. 4 ; H332 Eye Irrit. 2 ; H319 PHENOL ; REACH registration No. : 01-2119471329-32 ; EC No. : 203-632-7; CAS No. : 108-95-2

Weight fraction : $\geq 1 - < 2.5 \%$

Page: 2 / 11

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



Trade name: Wencon UW Coating Brown - Component B

Revision date: 09.01.2018 **Version (Revision):** 3.0.0 (2.0.1)

Print date: 02-02-2018

Classification 1272/2008 [CLP]: Acute Tox. 3; H301 Acute Tox. 3; H311 Acute Tox. 3; H331 Muta. 2; H341 STOT

RE 2; H373 Skin Corr. 1B; H314 Eye Dam. 1; H318

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

Effects

After eye contact

Causes serious eye damage.

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

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.

Page: 3 / 11

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



Trade name: Wencon UW Coating Brown - Component B

Revision date: 09.01.2018 **Version (Revision):** 3.0.0 (2.0.1)

Print date : 02-02-2018

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.

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:

Page: 4 / 11

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



Trade name : Wencon UW Coating Brown - Component B

Revision date: 09.01.2018 **Version (Revision):** 3.0.0 (2.0.1)

Print date: 02-02-2018

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

PHENOL; CAS No.: 108-95-2

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

Limit value: 4 ppm / 16 mg/m³

Peak limitation: H
Version: 17-12-2009
Limit value type (country of origin): TWA (EC)

Limit value : 2 ppm / 8 mg/m³

Remark:

Version: 17-12-2009

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

Page: 5 / 11

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



Trade name: Wencon UW Coating Brown - Component B

Revision date: 09.01.2018 **Version (Revision):** 3.0.0 (2.0.1)

Print date : 02-02-2018

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. 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: liquid

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 : > 150 °C DIN 53213-1

Ignition temperature:

Evaporation rate:

Flammable gases:

Flammable solids:

No data available

1

Not applicable.

Not applicable.

Not applicable.

Page: 6 / 11

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



Trade name: Wencon UW Coating Brown - Component B

Revision date: 09.01.2018 **Version (Revision):** 3.0.0 (2.0.1)

Print date : 02-02-2018

Oxidising properties.

Lower explosion limit:
Upper explosion limit:
No data available

No data available

Explosive properties:
No data available.

Vapour pressure:

(50 °C)

No data available.

hPa

Relative vapour density:

No data available

Relative density: (20 °C) approx. 1,84 g/cm³ DIN 53217

Water solubility: (20 °C) insoluble

Partition coefficient noctanol/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.

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 (M-PHENYLENEBIS(METHYLAMINE) ; CAS No. : 1477-55-0)

Exposure route: Oral
Species: Rat
Effective dose: 1200 mg/kg

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 (PHENOL ; CAS No. : 108-95-2)

Exposure route : Oral

Page: 7 / 11

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



Trade name: Wencon UW Coating Brown - Component B

Revision date: 09.01.2018 **Version (Revision):** 3.0.0 (2.0.1)

Print date: 02-02-2018

Species: Rat Effective dose: 317 mg/kg

Acute dermal toxicity

Parameter: LD50 (M-PHENYLENEBIS(METHYLAMINE); CAS No.: 1477-55-0)

Exposure route: Dermal Species: Rat Effective dose: 2000 mg/kg

Parameter: LD50 (PHENOL ; CAS No. : 108-95-2)

Exposure route: Dermal
Species: Rat
Effective dose: 670 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

Parameter: LC50 (PHENOL ; CAS No. : 108-95-2)

Exposure route: Inhalation
Species: Rat
Effective dose: 316 mg/m³

Irritant and corrosive effects

Primary irritation to the skin

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)

Germ cell mutagenicity

Assessment/classification

Suspected of causing genetic defects. Muta. 2, H341

SECTION 12: Ecological information

12.1 Toxicity

There are no data available on the mixture itself.

Aquatic toxicity

The substance/mixture does not fullfill the criteria of the acute aquatic toxicity according to Regulation (EC) No 1272/2008 [CLP], Annex I.

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.

Page: 8 / 11

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



Trade name: Wencon UW Coating Brown - Component B

Revision date: 09.01.2018 **Version (Revision):** 3.0.0 (2.0.1)

Print date: 02-02-2018

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

No dangerous good in sense of these transport regulations.

14.2 UN proper shipping name

No dangerous good in sense of these transport regulations.

14.3 Transport hazard class(es)

No dangerous good in sense of these transport regulations.

14.4 Packing group

No dangerous good in sense of these transport regulations.

14.5 Environmental hazards

No dangerous good in sense of these transport regulations.

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

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

National regulations

Page: 9 / 11





Trade name: Wencon UW Coating Brown - Component B

Revision date: 09.01.2018 **Version (Revision):** 3.0.0 (2.0.1)

Print date: 02-02-2018

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

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 Substan

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 = Previsible Non Effect Concentration

STEL = Short-Term Exposure Limit

TWA = Time-Weighted Average

vPvB = Very Persistent and Very Bioacccumulative

16.3 Key literature references and sources for data

None

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)

H301+H311+H331 Toxic if swallowed, in contact with skin or if inhaled. H302+H312+H332 Harmful if swallowed, in contact with skin or if inhaled.

H302+H332 Harmful if swallowed or if inhaled.

H314 Causes severe skin burns and eye damage.

H315 Causes skin irritation.

Page: 10 / 11

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



Wencon UW Coating Brown - Component B Trade name:

Revision date: 09.01.2018 Version (Revision): 3.0.0 (2.0.1)

Print date: 02-02-2018

> H317 May cause an allergic skin reaction. H318 Causes serious eye damage. H319 Causes serious eye irritation. H341 Suspected of causing genetic defects. H373

May cause damage to organs through prolonged or repeated exposure.

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 valid for the new made-up material.

Page: 11 / 11