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.

Sectors of use [SU]

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

Process categories [PROC]

PROC 19 - Manual activities involving hand contact
PROC 21 - Low energy manipulation of substances bound in materials and/or articles
PROC 24 - High (mechanical) energy work-up of substances bound in/on materials and/or articles

Environmental release categories [ERC]

ERC 8c - Widespread use leading to inclusion into/onto article (indoor)
ERC 8f - Widespread use leading to inclusion into/onto article (outdoor)
ERC 10a - Widespread use of articles with low release (outdoor)
ERC 11a - Widespread use of articles with low release (indoor)

Article categories [AC]

AC 7 - Metal articles

Uses advised against

Do not use for private purposes (household).

Remark

The product is intended for professional use.

1.3 Details of the supplier of the safety data sheet

Supplier (manufacturer) :	Wencon ApS
Street :	Jyllandsvej 15
Postal code/city :	DK-5400 BOGENSE
Telephone :	+45 6481 1010
Information contact :	wencon@wencon.com

1.4 Emergency telephone number

+44 870 600 62 66 (UK National Poisons Emergency Number)
European emergency number: 112. Danmark: (Giftlinjen +45 82 12 12 12), only for the purpose of informing medical personnel in cases of acute intoxications.

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

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

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

(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
BIS-[4-(2,3-EPOXIPROPOXI)PHENYL]PROPANE ; CAS No. : 1675-54-3
REACTION PRODUCTS OF HEXANE-1,6-DIOL WITH 2-(CHLOROMETHYL)OXIRANE ; CAS No. : 933999-84-9

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 No. : 01-211-454392-40 ; EC No. : 500-006-8; CAS No. : 9003-36-5

Weight fraction : ≥ 10 - < 25 %
Classification 1272/2008 [CLP] : **Skin Irrit. 2 ; H315 Skin Sens. 1 ; H317 Eye Irrit. 2 ; H319 Aquatic Chronic 2 ; H411**

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

Weight fraction : ≥ 2,5 - < 10 %
Classification 1272/2008 [CLP] : **STOT RE 2 ; H373**

REACTION PRODUCT: BISPHENOL A-(EPICHLORHYDRIN), EPOXY RESIN (NUMBER AVERAGE MOLECULAR WEIGHT <= 700) ; REACH No. : 01-2119456619-26 ; EC No. : 500-033-5; CAS No. : 25068-38-6

Weight fraction : ≥ 2,5 - < 10 %

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 No. : 01-2119962196-31 ; EC No. : 219-553-6; CAS No. : 2461-15-6

Weight fraction : ≥ 2,5 - < 10 %

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

[3-(2,3-EPOXYPROPOXY)PROPYL]TRIMETHOXYSILANE ; REACH No. : 01-2119513212-58 ; EC No. : 219-784-2; CAS No. : 2530-83-8

Weight fraction : ≥ 1 - < 2,5 %

Classification 1272/2008 [CLP] : Eye Dam. 1 ; H318 Aquatic Chronic 3 ; H412

BIS-[4-(2,3-EPOXIPROPOXI)PHENYL]PROPANE ; REACH No. : 01-2119456619-26 ; EC No. : 216-823-5; CAS No. : 1675-54-3

Weight fraction : ≥ 0,5 - < 1 %

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

REACTION PRODUCTS OF HEXANE-1,6-DIOL WITH 2-(CHLOROMETHYL)OXIRANE ; REACH No. : 01-2119463471-41 ; EC No. : 618-939-5; CAS No. : 933999-84-9

Weight fraction : ≥ 0,5 - < 1 %

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

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

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 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/m^3 (0.5 % by vol.); class 3: maximum permitted contaminant concentration in inhaled air = 10000 mL/m^3 (1.0 % by vol.) Half-face mask or quarter facepiece: maximum use concentration for substances with exposure limits: P1 filter: up to a max. of 4 times the exposure limit. P2 filter: up to a max. of 10 times the exposure limit. P3 filter: up to a max. of 30 times the expo. Full-face mask or mouthpiece with particulate filter: maximum use concentration for substances with exposure limits: P1 filter: up to a max. of 4 times the exposure limit. P2 filter: up to a max. of 15 times the exposure limit. P3 filter: up to a max. of

Remark

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

General information

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.

Other protection measures

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 characteristics

Melting point/freezing point :			not applicable		
Initial boiling point and boiling range :	(1013 hPa)		No data available		
Decomposition temperature :			No data available		
Flash point :		>	100	°C	DIN 53213-1
Auto-ignition temperature :			No data available		
Evaporation rate :		<	1		
Flammable gases :			Not applicable.		
Flammable solids :			Not applicable.		
Oxidising properties.			No data available.		
Lower explosion limit :			No data available		
Upper explosion limit :			No data available		
Explosive properties :			No data available.		
Vapour pressure :	(50 °C)	<	1000	hPa	
Relative vapour density :			No data available		
Relative density :	(20 °C)	approx.	1,88	g/cm^3	DIN 53217
Water solubility :	(20 °C)		practically insoluble		
Partition coefficient n-octanol/water :			No data available		
pH :			No data available		
Viscosity :	(20 °C)		not applicable		
Cinematic viscosity :	(40 °C)		No data available		
Odour threshold :			No data available		

9.2 Other information

None

SECTION 10: Stability and reactivity

10.1 Reactivity

No information available.

10.2 Chemical stability

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

10.3 Possibility of hazardous reactions

No hazardous reaction when handled and stored according to provisions.

10.4 Conditions to avoid

Ignition hazard.

10.5 Incompatible materials

Exothermic reaction with: Amines.

10.6 Hazardous decomposition products

Does not decompose when used for intended uses.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

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

Acute toxicity

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
Species :	Rat
Effective dose :	30000 mg/kg
Parameter :	LC50 (REACTION PRODUCTS OF HEXANE-1,6-DIOL WITH 2-(CHLOROMETHYL)OXIRANE ; CAS No. : 933999-84-9)
Exposure route :	Oral
Species :	Rat
Effective dose :	2190 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 (REACTION PRODUCTS OF HEXANE-1,6-DIOL WITH 2-(CHLOROMETHYL)OXIRANE ; CAS No. : 933999-84-9)
Exposure route :	Dermal
Species :	Rat
Effective dose :	> 2000 mg/kg

Corrosion

Skin corrosion/irritation

Irritating to skin.

Serious eye damage/eye irritation

Irritating to eyes.

Respiratory or skin 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.

Skin sensitisation

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.

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
Parameter :	LC50 (REACTION PRODUCTS OF HEXANE-1,6-DIOL WITH 2-(CHLOROMETHYL)OXIRANE ; CAS No. : 933999-84-9)
Species :	Leuciscus idus (golden orfe)
Effective dose :	30 mg/l
Exposure time :	96 h
Parameter :	EC50 (REACTION PRODUCTS OF HEXANE-1,6-DIOL WITH 2-(CHLOROMETHYL)OXIRANE ; CAS No. : 933999-84-9)
Species :	Algae
Effective dose :	23,1 mg/l
Exposure time :	48 h
Parameter :	EC50 (REACTION PRODUCTS OF HEXANE-1,6-DIOL WITH 2-(CHLOROMETHYL)OXIRANE ; CAS No. : 933999-84-9)
Species :	Daphnia magna (Big water flea)
Effective dose :	47 mg/l
Exposure time :	48 h

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 (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
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

12.3 Bioaccumulative potential

No information available.

12.4 Mobility in soil

No information available.

12.5 Results of PBT and vPvB assessment

No information available.

12.6 Other adverse effects

No information available.

12.7 Additional ecotoxicological information

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

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product/Packaging disposal

Do not allow to enter into surface water or drains.

Waste treatment options

Appropriate disposal / Product

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

Appropriate disposal / Package

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

SECTION 14: Transport information

14.1 UN number

UN 3082

14.2 UN proper shipping name

Land transport (ADR/RID)

ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (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)

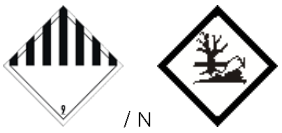
ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (BISPHENOL F-(EPICHLORHYDRIN); EPOXY RESIN MW <= 700 · REACTION PRODUCT: BISPHENOL A-(EPICHLORHYDRIN), EPOXY RESIN (NUMBER AVERAGE MOLECULAR WEIGHT <= 700))

14.3 Transport hazard class(es)

Land transport (ADR/RID)

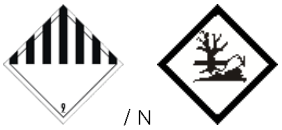
Class(es) :	9
Classification code :	M6
Hazard identification number (Kemler No.) :	90

Tunnel restriction code : -
Special provisions : LQ 5 l · E 1 · ADR : - (SP 375 <= 5 l/kg)
Hazard label(s) :



9 / N

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



9 / N

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

9 / N

14.4 Packing group

III

14.5 Environmental hazards

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

14.6 Special precautions for user

None

14.8 Additional information

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

SECTION 15: Regulatory information

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

EU legislation

Authorisations and/or restrictions on use

Restrictions on use

Use restriction according to REACH annex XVII, no. : 3

National regulations

REACh-Regulation(1907/2006) Annex XVII [RESTRICTIONS ON THE MANUFACTURE, PLACING ON THE MARKET AND USE OF CERTAIN DANGEROUS SUBSTANCES, MIXTURES AND ARTICLES] 3

Directive 2004/42/EC is not applicable.

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

02. Labelling according to Regulation (EC) No. 1272/2008 [CLP] - Hazard components for labelling · 03. Hazardous ingredients · 14. UN proper shipping name - Sea transport (IMDG)

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

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

No information available.

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

H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
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.

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.

Sectors of use [SU]

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

Process categories [PROC]

PROC 19 - Manual activities involving hand contact
PROC 21 - Low energy manipulation of substances bound in materials and/or articles
PROC 24 - High (mechanical) energy work-up of substances bound in/on materials and/or articles

Environmental release categories [ERC]

ERC 8c - Widespread use leading to inclusion into/onto article (indoor)
ERC 8f - Widespread use leading to inclusion into/onto article (outdoor)
ERC 10a - Widespread use of articles with low release (outdoor)
ERC 11a - Widespread use of articles with low release (indoor)

Article categories [AC]

AC 7 - Metal articles

Uses advised against

Do not use for private purposes (household).

Remark

The product is intended for professional use.

1.3 Details of the supplier of the safety data sheet

Supplier (manufacturer) :	Wencon ApS
Street :	Jyllandsvej 15
Postal code/city :	DK-5400 BOGENSE
Telephone :	+45 6481 1010
Information contact :	wencon@wencon.com

1.4 Emergency telephone number

+44 870 600 62 66 (UK National Poisons Emergency Number)
European emergency number: 112. Danmark: (Giftlinjen +45 82 12 12 12), only for the purpose of informing medical personnel in cases of acute intoxications.

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

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

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).

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

P202	Do not handle until all safety precautions have been read and understood.
P261	Avoid breathing dust/fume/gas/mist/vapours/spray.
P264	Wash hands thoroughly after handling.
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 No. : 01-2119966906-20 ; EC No. : 500-137-0; CAS No. : 57214-10-5

Weight fraction : ≥ 10 - < 25 %
Classification 1272/2008 [CLP] : Skin Corr. 1B ; H314 Skin Sens. 1 ; H317 Aquatic Chronic 3 ; H412

M-PHENYLENEBIS(METHYLAMINE) ; REACH No. : 01-2119480150-50 ; EC No. : 216-032-5; CAS No. : 1477-55-0

Weight fraction : ≥ 2,5 - < 10 %
Classification 1272/2008 [CLP] : Skin Corr. 1B ; H314 Acute Tox. 4 ; H302 Acute Tox. 4 ; H332 Skin Sens. 1 ; H317 Aquatic Chronic 3 ; H412

BENZYL ALCOHOL ; REACH No. : 01-2119492630-38 ; EC No. : 202-859-9; CAS No. : 100-51-6

Weight fraction : ≥ 2,5 - < 10 %
Classification 1272/2008 [CLP] : Acute Tox. 4 ; H302 Acute Tox. 4 ; H332 Eye Irrit. 2 ; H319

TITANIUM DIOXIDE (in powder form containing 1 % or more of particles with aerodynamic diameter ≤ 10 µm) ; REACH No. : 01-2119489379-17 ; EC No. : 236-675-5; CAS No. : 13463-67-7

Weight fraction : ≥ 1 - < 2,5 %
Classification 1272/2008 [CLP] : Carc. 2 ; H351

PHENOL ; REACH No. : 01-2119471329-32 ; EC No. : 203-632-7; CAS No. : 108-95-2
Weight fraction : ≥ 1 - < 2,5 %
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

QUARTZ (SIO2) ; REACH No. : Annex V ; EC No. : 238-878-4; CAS No. : 14808-60-7
Weight fraction : ≥ 1 - < 2,5 %
Classification 1272/2008 [CLP] : STOT RE 2 ; H373

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.

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:

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/m^3
Remark :	Skin
Version :	20-06-2019
Limit value type (country of origin) :	TWA (EC)
Limit value :	2 ppm / 8 mg/m^3
Remark :	Skin
Version :	20-06-2019

8.2 Exposure controls

Personal protection equipment

Eye/face protection

Suitable eye protection

Eye glasses with side protection

Skin protection

Hand protection

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

Suitable gloves type : Disposable gloves.

Suitable material : NBR (Nitrile rubber)

Required properties : liquid-tight.

Breakthrough time (maximum wearing time) : > 60 minutes

Thickness of the glove material : > 0.5 mm

Recommended glove articles : EN 374

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

Remark : For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves. The quality of the protective gloves resistant to chemicals must be chosen as a function of the specific working place concentration and quantity of hazardous substances. Observe the wear time limits as specified by the manufacturer. Breakthrough times and swelling

properties of the material must be taken into consideration. In the case of wanting to use the gloves again, clean them before taking off and air them well. When handling with chemical substances, protective gloves must be worn with the CE-label including the four control digits. Barrier creams are not substitutes for body protection.

Body protection

Remark : Body protection: not required.

Respiratory protection

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

Suitable respiratory protection apparatus

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

Additional measures for respiratory protection

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

Remark

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

General information

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.

Other protection measures

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 characteristics

Melting point/freezing point :		not applicable
Initial boiling point and boiling	(1013 hPa)	No data available

range :					
Decomposition temperature :			No data available		
Flash point :		>	150	°C	DIN 53213-1
Auto-ignition temperature :			No data available		
Evaporation rate :		<	1		
Flammable gases :			Not applicable.		
Flammable solids :			Not applicable.		
Oxidising properties.			No data available.		
Lower explosion limit :			No data available		
Upper explosion limit :			No data available		
Explosive properties :			No data available.		
Vapour pressure :	(50 °C)	<	1000	hPa	
Relative vapour density :			No data available		
Relative density :	(20 °C)	approx.	1,84	g/cm^3	DIN 53217
Water solubility :	(20 °C)		practically insoluble		
Partition coefficient n-octanol/water :			No data available		
pH :			6 - 8		
Viscosity :	(20 °C)		not applicable		
Cinematic viscosity :	(40 °C)		No data available		
Odour threshold :			No data available		

9.2 Other information

None

SECTION 10: Stability and reactivity

10.1 Reactivity

No information available.

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

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

Acute toxicity

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
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 (M-PHENYLENEBIS(METHYLAMINE) ; CAS No. : 1477-55-0)
Exposure route : Inhalation
Species : Rat
Effective dose : 2,4 mg/l
Exposure time : 4 h
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/m^3

Corrosion

Skin corrosion/irritation

Irritating to skin.

Serious eye damage/eye irritation

Causes serious eye damage.

Respiratory or skin 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.

Skin sensitisation

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.

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

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

EU legislation

Authorisations and/or restrictions on use

Restrictions on use

Use restriction according to REACH annex XVII, no. : 3, 29

National regulations

REACh-Regulation(1907/2006) Annex XVII [RESTRICTIONS ON THE MANUFACTURE, PLACING ON THE MARKET AND USE OF CERTAIN DANGEROUS SUBSTANCES, MIXTURES AND ARTICLES] 3

Directive 2004/42/EC is not applicable.

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 1-5

Additional information

Substance/product listed in the following inventories

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

15.2 Chemical safety assessment

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

SECTION 16: Other information

16.1 Indication of changes

02. Labelling according to Regulation (EC) No. 1272/2008 [CLP] · 02. Labelling according to Regulation (EC) No. 1272/2008 [CLP] - Hazard components for labelling · 11. Carcinogenicity - Assessment/classification

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

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

No information available.

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

H301+H311+H331	Toxic if swallowed, in contact with skin or if inhaled.
H302	Harmful if swallowed.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H341	Suspected of causing genetic defects.
H351	Suspected of causing cancer.
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.

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.

Sectors of use [SU]

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

Process categories [PROC]

PROC 19 - Manual activities involving hand contact
PROC 21 - Low energy manipulation of substances bound in materials and/or articles
PROC 24 - High (mechanical) energy work-up of substances bound in/on materials and/or articles

Environmental release categories [ERC]

ERC 8c - Widespread use leading to inclusion into/onto article (indoor)
ERC 8f - Widespread use leading to inclusion into/onto article (outdoor)
ERC 10a - Widespread use of articles with low release (outdoor)
ERC 11a - Widespread use of articles with low release (indoor)

Article categories [AC]

AC 7 - Metal articles

Uses advised against

Do not use for private purposes (household).

Remark

The product is intended for professional use.

1.3 Details of the supplier of the safety data sheet

Supplier (manufacturer) :	Wencon ApS
Street :	Jyllandsvej 15
Postal code/city :	DK-5400 BOGENSE
Telephone :	+45 6481 1010
Information contact :	wencon@wencon.com

1.4 Emergency telephone number

+44 870 600 62 66 (UK National Poisons Emergency Number)
European emergency number: 112. Danmark: (Giftlinjen +45 82 12 12 12), only for the purpose of informing medical personnel in cases of acute intoxications.

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

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

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

(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
BIS-[4-(2,3-EPOXIPROPOXI)PHENYL]PROPANE ; CAS No. : 1675-54-3
PHENOL, METHYL STYRENATED ; CAS No. : 68512-30-1
2,3-EPOXYPROPYL NEODECANOATE ; CAS No. : 26761-45-5
REACTION PRODUCTS OF HEXANE-1,6-DIOL WITH 2-(CHLOROMETHYL)OXIRANE ; CAS No. : 933999-84-9

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 No. : 01-211-454392-40 ; EC No. : 500-006-8; CAS No. : 9003-36-5

Weight fraction :	≥ 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 No. : 01-2119456619-26 ; EC No. : 500-033-5; CAS No. : 25068-38-6
Weight fraction : ≥ 2,5 - < 10 %
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 No. : 01-2119962196-31 ; EC No. : 219-553-6; CAS No. : 2461-15-6
Weight fraction : ≥ 2,5 - < 10 %
Classification 1272/2008 [CLP] : Skin Irrit. 2 ; H315 Skin Sens. 1 ; H317

BIS-[4-(2,3-EPOXIPROPOXI)PHENYL]PROPANE ; REACH No. : 01-2119456619-26 ; EC No. : 216-823-5; CAS No. : 1675-54-3
Weight fraction : ≥ 1 - < 2,5 %
Classification 1272/2008 [CLP] : Skin Irrit. 2 ; H315 Skin Sens. 1 ; H317 Eye Irrit. 2 ; H319 Aquatic Chronic 2 ; H411

[3-(2,3-EPOXYPROPOXY)PROPYL]TRIMETHOXYSILANE ; REACH No. : 01-2119513212-58 ; EC No. : 219-784-2; CAS No. : 2530-83-8
Weight fraction : ≥ 1 - < 2,5 %
Classification 1272/2008 [CLP] : Eye Dam. 1 ; H318 Aquatic Chronic 3 ; H412

QUARTZ (SIO2) ; REACH No. : Annex V ; EC No. : 238-878-4; CAS No. : 14808-60-7
Weight fraction : ≥ 1 - < 2,5 %
Classification 1272/2008 [CLP] : STOT RE 2 ; H373

PHENOL, METHYL STYRENATED ; REACH No. : 01-2119555274-38 ; EC No. : 270-966-8; CAS No. : 68512-30-1
Weight fraction : ≥ 0,5 - < 1 %
Classification 1272/2008 [CLP] : Skin Irrit. 2 ; H315 Skin Sens. 1 ; H317 Aquatic Chronic 3 ; H412

2,3-EPOXYPROPYL NEODECANOATE ; REACH No. : 01-211943157-33 ; EC No. : 247-979-2; CAS No. : 26761-45-5
Weight fraction : < 0,5 %
Classification 1272/2008 [CLP] : Muta. 2 ; H341 Skin Sens. 1 ; H317 Aquatic Chronic 2 ; H411

REACTION PRODUCTS OF HEXANE-1,6-DIOL WITH 2-(CHLOROMETHYL)OXIRANE ; REACH No. : 01-2119463471-41 ; EC No. : 618-939-5; CAS No. : 933999-84-9
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

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

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 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/m^3 (0.5 % by vol.); class 3: maximum permitted contaminant concentration in inhaled air = 10000 mL/m^3 (1.0 % by vol.) Half-face mask or quarter facepiece: maximum use concentration for substances with exposure limits: P1 filter: up to a max. of 4 times the exposure limit. P2 filter: up to a max. of 10 times the exposure limit. P3 filter: up to a max. of 30 times the expo. Full-face mask or mouthpiece with particulate filter: maximum use concentration for substances with exposure limits: P1 filter: up to a max. of 4 times the exposure limit. P2 filter: up to a max. of 15 times the exposure limit. P3 filter: up to a max. of

Remark

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

General information

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.

Other protection measures

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 characteristics

Melting point/freezing point :			not applicable		
Initial boiling point and boiling range :	(1013 hPa)		No data available		
Decomposition temperature :			No data available		
Flash point :		>	100	°C	DIN 53213-1
Auto-ignition temperature :			No data available		
Evaporation rate :		<	1		
Flammable gases :			Not applicable.		
Flammable solids :			Not applicable.		
Oxidising properties.			No data available.		
Lower explosion limit :			No data available		
Upper explosion limit :			No data available		
Explosive properties :			No data available.		
Vapour pressure :	(50 °C)	<	1000	hPa	
Relative vapour density :			No data available		
Relative density :	(20 °C)	approx.	1,88	g/cm^3	DIN 53217
Water solubility :	(20 °C)		practically insoluble		
Partition coefficient n-octanol/water :			No data available		
pH :			No data available		
Viscosity :	(20 °C)		not applicable		
Cinematic viscosity :	(40 °C)		No data available		
Odour threshold :			No data available		

9.2 Other information

None

SECTION 10: Stability and reactivity

10.1 Reactivity

No information available.

10.2 Chemical stability

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

10.3 Possibility of hazardous reactions

No hazardous reaction when handled and stored according to provisions.

10.4 Conditions to avoid

Ignition hazard.

10.5 Incompatible materials

Exothermic reaction with: Amines.

10.6 Hazardous decomposition products

Does not decompose when used for intended uses.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

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

Acute toxicity

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
Species : Rat
Effective dose : 30000 mg/kg

Parameter : LD50 (2,3-EPOXYPROPYL NEODECANOATE ; CAS No. : 26761-45-5)
Exposure route : Oral
Species : Rat
Effective dose : > 2000 mg/kg

Parameter : LC50 (REACTION PRODUCTS OF HEXANE-1,6-DIOL WITH 2-(CHLOROMETHYL)OXIRANE ; CAS No. : 933999-84-9)
Exposure route : Oral
Species : Rat
Effective dose : 2190 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 : LD50 (2,3-EPOXYPROPYL NEODECANOATE ; CAS No. : 26761-45-5)
Exposure route : Dermal
Species : Rat
Effective dose : > 2000 mg/kg

Parameter : LC50 (REACTION PRODUCTS OF HEXANE-1,6-DIOL WITH 2-(CHLOROMETHYL)OXIRANE ; CAS No. : 933999-84-9)
Exposure route : Dermal
Species : Rat
Effective dose : > 2000 mg/kg

Corrosion

Skin corrosion/irritation

Irritating to skin.

Serious eye damage/eye irritation

Irritating to eyes.

Respiratory or skin 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.

Skin sensitisation

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.

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
Parameter :	LC50 (REACTION PRODUCTS OF HEXANE-1,6-DIOL WITH 2-(CHLOROMETHYL)OXIRANE ; CAS No. : 933999-84-9)
Species :	Leuciscus idus (golden orfe)
Effective dose :	30 mg/l
Exposure time :	96 h
Parameter :	EC50 (REACTION PRODUCTS OF HEXANE-1,6-DIOL WITH 2-(CHLOROMETHYL)OXIRANE ; CAS No. : 933999-84-9)
Species :	Algae
Effective dose :	23,1 mg/l
Exposure time :	48 h
Parameter :	EC50 (REACTION PRODUCTS OF HEXANE-1,6-DIOL WITH 2-(CHLOROMETHYL)OXIRANE ; CAS No. : 933999-84-9)
Species :	Daphnia magna (Big water flea)
Effective dose :	47 mg/l
Exposure time :	48 h

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 (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
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

12.3 Bioaccumulative potential

No information available.

12.4 Mobility in soil

No information available.

12.5 Results of PBT and vPvB assessment

No information available.

12.6 Other adverse effects

No information available.

12.7 Additional ecotoxicological information

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

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product/Packaging disposal

Do not allow to enter into surface water or drains.

Waste treatment options

Appropriate disposal / Product

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

Appropriate disposal / Package

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

SECTION 14: Transport information

14.1 UN number

UN 3082

14.2 UN proper shipping name

Land transport (ADR/RID)

ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (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) · BIS-[4-(2,3-EPOXIPROPOXI)PHENYL]PROPANE)

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 l · E 1 · 375 · ADR : - (SP 375 <= 5 l/kg)
Hazard label(s) :	9 / N

Sea transport (IMDG)

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

Air transport (ICAO-TI / IATA-DGR)

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

14.4 Packing group

III

14.5 Environmental hazards

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

14.6 Special precautions for user

None

14.8 Additional information

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

SECTION 15: Regulatory information

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

EU legislation

Authorisations and/or restrictions on use

Restrictions on use

Use restriction according to REACH annex XVII, no. : 3

National regulations

REACh-Regulation(1907/2006) Annex XVII [RESTRICTIONS ON THE MANUFACTURE, PLACING ON THE MARKET AND USE OF CERTAIN DANGEROUS SUBSTANCES, MIXTURES AND ARTICLES] 3

Directive 2004/42/EC is not applicable.

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

02. Labelling according to Regulation (EC) No. 1272/2008 [CLP] - Hazard components for labelling · 03. Hazardous ingredients · 14. UN proper shipping name - Sea transport (IMDG)

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

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

No information available.

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

H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
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.
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.

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.

Sectors of use [SU]

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

Process categories [PROC]

PROC 19 - Manual activities involving hand contact
PROC 21 - Low energy manipulation of substances bound in materials and/or articles
PROC 24 - High (mechanical) energy work-up of substances bound in/on materials and/or articles

Environmental release categories [ERC]

ERC 8c - Widespread use leading to inclusion into/onto article (indoor)
ERC 8f - Widespread use leading to inclusion into/onto article (outdoor)
ERC 10a - Widespread use of articles with low release (outdoor)
ERC 11a - Widespread use of articles with low release (indoor)

Article categories [AC]

AC 7 - Metal articles

Uses advised against

Do not use for private purposes (household).

Remark

The product is intended for professional use.

1.3 Details of the supplier of the safety data sheet

Supplier (manufacturer) :	Wencon ApS
Street :	Jyllandsvej 15
Postal code/city :	DK-5400 BOGENSE
Telephone :	+45 6481 1010
Information contact :	wencon@wencon.com

1.4 Emergency telephone number

+44 870 600 62 66 (UK National Poisons Emergency Number)
European emergency number: 112. Danmark: (Giftlinjen +45 82 12 12 12), only for the purpose of informing medical personnel in cases of acute intoxications.

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

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

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).

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

P202	Do not handle until all safety precautions have been read and understood.
P261	Avoid breathing dust/fume/gas/mist/vapours/spray.
P264	Wash hands thoroughly after handling.
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 No. : 01-2119966906-20 ; EC No. : 500-137-0; CAS No. : 57214-10-5

Weight fraction : ≥ 10 - < 25 %
Classification 1272/2008 [CLP] : Skin Corr. 1B ; H314 Skin Sens. 1 ; H317 Aquatic Chronic 3 ; H412

M-PHENYLENEBIS(METHYLAMINE) ; REACH No. : 01-2119480150-50 ; EC No. : 216-032-5; CAS No. : 1477-55-0

Weight fraction : ≥ 2,5 - < 10 %
Classification 1272/2008 [CLP] : Skin Corr. 1B ; H314 Acute Tox. 4 ; H302 Acute Tox. 4 ; H332 Skin Sens. 1 ; H317 Aquatic Chronic 3 ; H412

BENZYL ALCOHOL ; REACH No. : 01-2119492630-38 ; EC No. : 202-859-9; CAS No. : 100-51-6

Weight fraction : ≥ 2,5 - < 10 %
Classification 1272/2008 [CLP] : Acute Tox. 4 ; H302 Acute Tox. 4 ; H332 Eye Irrit. 2 ; H319

TITANIUM DIOXIDE (in powder form containing 1 % or more of particles with aerodynamic diameter ≤ 10 µm) ; REACH No. : 01-2119489379-17 ; EC No. : 236-675-5; CAS No. : 13463-67-7

Weight fraction : ≥ 1 - < 2,5 %
Classification 1272/2008 [CLP] : **Carc. 2 ; H351**

PHENOL ; REACH No. : 01-2119471329-32 ; EC No. : 203-632-7; CAS No. : 108-95-2
Weight fraction : ≥ 1 - < 2,5 %
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**

QUARTZ (SIO2) ; REACH No. : Annex V ; EC No. : 238-878-4; CAS No. : 14808-60-7
Weight fraction : ≥ 1 - < 2,5 %
Classification 1272/2008 [CLP] : **STOT RE 2 ; H373**

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.

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:

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/m^3
Remark :	Skin
Version :	20-06-2019
Limit value type (country of origin) :	TWA (EC)
Limit value :	2 ppm / 8 mg/m^3
Remark :	Skin
Version :	20-06-2019

8.2 Exposure controls

Personal protection equipment

Eye/face protection

Suitable eye protection

Eye glasses with side protection

Skin protection

Hand protection

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

Suitable gloves type : Disposable gloves.

Suitable material : NBR (Nitrile rubber)

Required properties : liquid-tight.

Breakthrough time (maximum wearing time) : > 60 minutes

Thickness of the glove material : > 0.5 mm

Recommended glove articles : EN 374

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

Remark : For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves. The quality of the protective gloves resistant to chemicals must be chosen as a function of the specific working place concentration and quantity of hazardous substances. Observe the wear time limits as specified by the manufacturer. Breakthrough times and swelling

properties of the material must be taken into consideration. In the case of wanting to use the gloves again, clean them before taking off and air them well. When handling with chemical substances, protective gloves must be worn with the CE-label including the four control digits. Barrier creams are not substitutes for body protection.

Body protection

Remark : Body protection: not required.

Respiratory protection

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

Suitable respiratory protection apparatus

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

Additional measures for respiratory protection

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

Remark

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

General information

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.

Other protection measures

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 characteristics

Melting point/freezing point :		not applicable
Initial boiling point and boiling	(1013 hPa)	No data available

range :					
Decomposition temperature :			No data available		
Flash point :		>	150	°C	DIN 53213-1
Auto-ignition temperature :			No data available		
Evaporation rate :		<	1		
Flammable gases :			Not applicable.		
Flammable solids :			Not applicable.		
Oxidising properties.			No data available.		
Lower explosion limit :			No data available		
Upper explosion limit :			No data available		
Explosive properties :			No data available.		
Vapour pressure :	(50 °C)	<	1000	hPa	
Relative vapour density :			No data available		
Relative density :	(20 °C)	approx.	1,84	g/cm^3	DIN 53217
Water solubility :	(20 °C)		practically insoluble		
Partition coefficient n-octanol/water :			No data available		
pH :			6 - 8		
Viscosity :	(20 °C)		not applicable		
Cinematic viscosity :	(40 °C)		No data available		
Odour threshold :			No data available		

9.2 Other information

None

SECTION 10: Stability and reactivity

10.1 Reactivity

No information available.

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

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

Acute toxicity

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
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 (M-PHENYLENEBIS(METHYLAMINE) ; CAS No. : 1477-55-0)
Exposure route :	Inhalation
Species :	Rat
Effective dose :	2,4 mg/l
Exposure time :	4 h
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/m^3

Corrosion

Skin corrosion/irritation

Irritating to skin.

Serious eye damage/eye irritation

Causes serious eye damage.

Respiratory or skin 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.

Skin sensitisation

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.

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

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

EU legislation

Authorisations and/or restrictions on use

Restrictions on use

Use restriction according to REACH annex XVII, no. : 3, 29

National regulations

REACh-Regulation(1907/2006) Annex XVII [RESTRICTIONS ON THE MANUFACTURE, PLACING ON THE MARKET AND USE OF CERTAIN DANGEROUS SUBSTANCES, MIXTURES AND ARTICLES] 3

Directive 2004/42/EC is not applicable.

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 1-5

Additional information

Substance/product listed in the following inventories

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

15.2 Chemical safety assessment

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

SECTION 16: Other information

16.1 Indication of changes

02. Labelling according to Regulation (EC) No. 1272/2008 [CLP] · 02. Labelling according to Regulation (EC) No. 1272/2008 [CLP] - Hazard components for labelling · 11. Carcinogenicity - Assessment/classification

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

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

No information available.

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

H301+H311+H331	Toxic if swallowed, in contact with skin or if inhaled.
H302	Harmful if swallowed.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H341	Suspected of causing genetic defects.
H351	Suspected of causing cancer.
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.