

SAFETY DATA SHEET

Flügger

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

1.1 Product identifier

Trade name : Flügger Floor Paint Epoxy Component A (Bases)

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

Identified uses : Epoxy paint, 2-component

1.3 Details of the supplier of the safety data sheet

Flügger Denmark A/S
 Islevdalvej 151
 DK-2610 Rødovre
 Tlf. +45 76 30 33 80

e-mail address of person responsible for this SDS : produktsupportdk@flugger.com

1.4 Emergency telephone number

National advisory body/Poison Centre

Telephone number : Call a poison center or physician.

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Product definition : Mixture

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

Skin Irrit. 2, H315
 Eye Irrit. 2, H319
 Skin Sens. 1, H317
 Aquatic Chronic 2, H411

The product is classified as hazardous according to Regulation (EC) 1272/2008 as amended.

See Section 16 for the full text of the H statements declared above.

See Section 11 for more detailed information on health effects and symptoms.

2.2 Label elements

Hazard pictograms :**Signal word** : Warning

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

General : P101 - If medical advice is needed, have product container or label at hand.
 P102 - Keep out of reach of children.

Prevention : P280 - Wear protective gloves, protective clothing and eye or face protection.
 P273 - Avoid release to the environment.

Response : P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes.
 Remove contact lenses, if present and easy to do. Continue rinsing.
 P310 - Immediately call a POISON CENTER or doctor.

Storage : Not applicable.

Flügger Floor Paint Epoxy Component A (Bases)

SECTION 2: Hazards identification

Disposal	: P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations.
Contains	bis-[4-(2,3-epoxipropoxi)phenyl]propane Formaldehyde, oligomeric reaction products with 1-chloro-2,3-epoxypropane and phenol p-tert-butylphenyl 1-(2,3-epoxy)propyl ether benzyl alcohol 2,4,7,9-tetramethyldec-5-yne-4,7-diol reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC no. 220-239-6] (3:1) (CMIT/MIT(3:1))
Supplemental label elements	: Contains epoxy constituents. May produce an allergic reaction. Contains a biocidal product that contains: CMIT/MIT (3:1).
Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles	: Not applicable.
Special packaging requirements	
Containers to be fitted with child-resistant fastenings	: Not applicable.
Tactile warning of danger	: Not applicable.

2.3 Other hazards

When mixing two components, the safety data sheets for both components must be followed.

Product meets the criteria for PBT or vPvB according to Regulation (EC) No. 1907/2006, Annex XIII	: This mixture does not contain any substances that are assessed to be a PBT or a vPvB.
Other hazards which do not result in classification	: None known.
EU VOC	: VOC limit value (Cat. A/j): 140 g/l (2010) Product VOC: max. 40 g/l

SECTION 3: Composition/information on ingredients

3.2 Mixtures : Mixture

Product/ingredient name	Identifiers	%	Classification	Specific Conc. Limits, M-factors and ATEs	Type
bis-[4-(2,3-epoxipropoxi)phenyl]propane	REACH #: 01-2119456619-26 EC: 216-823-5 CAS: 1675-54-3	≥25 - ≤50	Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1, H317 Aquatic Chronic 2, H411	Skin Irrit. 2, H315: C ≥ 5% Eye Irrit. 2, H319: C ≥ 5%	[1]
Formaldehyde, oligomeric reaction products with 1-chloro-2,3-epoxypropane and phenol	REACH #: 01-2119454392-40 EC: 500-006-8 CAS: 9003-36-5	≥10 - ≤25	Skin Irrit. 2, H315 Skin Sens. 1, H317 Aquatic Chronic 2, H411	-	[1]
p-tert-butylphenyl 1-(2,3-epoxy)propyl ether	REACH #: 01-2119959496-20 EC: 221-453-2 CAS: 3101-60-8	≤10	Skin Sens. 1, H317 Aquatic Chronic 2, H411	-	[1]

SECTION 3: Composition/information on ingredients

benzyl alcohol	REACH #: 01-2119492630-38 EC: 202-859-9 CAS: 100-51-6	≤3	Acute Tox. 4, H302 Eye Irrit. 2, H319 Skin Sens. 1B, H317	ATE [Oral] = 1200 mg/kg	[1]
ethanediol	REACH #: 01-2119456816-28 EC: 203-473-3 CAS: 107-21-1 Index: 603-027-00-1	≤3	Acute Tox. 4, H302 STOT RE 2, H373 (oral)	ATE [Oral] = 500 mg/kg	[1] [2]
2,4,7,9-tetramethyldec-5-yne-4,7-diol	REACH #: 01-2119954390-39 EC: 204-809-1 CAS: 126-86-3	≤0,3	Eye Dam. 1, H318 Skin Sens. 1B, H317 Aquatic Chronic 3, H412	-	[1]
(2-methoxymethylethoxy) propanol	REACH #: 01-2119450011-60 EC: 252-104-2 CAS: 34590-94-8	≤0,3	Not classified.	-	[2]
2-butoxyethanol	REACH #: 01-2119475108-36 EC: 203-905-0 CAS: 111-76-2	≤0,3	Acute Tox. 4, H302 Acute Tox. 3, H331 Skin Irrit. 2, H315 Eye Irrit. 2, H319	ATE [Oral] = 1200 mg/kg ATE [Inhalation (vapours)] = 3 mg/l	[1] [2]
bronopol (INN)	EC: 200-143-0 CAS: 52-51-7	<0,1	Acute Tox. 4, H302 Acute Tox. 4, H312 Skin Irrit. 2, H315 Eye Dam. 1, H318 STOT SE 3, H335 Aquatic Acute 1, H400 Aquatic Chronic 1, H410	ATE [Oral] = 324 mg/kg ATE [Dermal] = 1600 mg/kg M [Acute] = 10 M [Chronic] = 1	[1]
reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC no. 220-239-6] (3:1) (CMIT/MIT(3:1))	CAS: 55965-84-9 Index: 613-167-00-5	<0,001	Acute Tox. 3, H301 Acute Tox. 2, H310 Acute Tox. 2, H330 Skin Corr. 1C, H314 Eye Dam. 1, H318 Skin Sens. 1A, H317 Aquatic Acute 1, H400 Aquatic Chronic 1, H410 EUH071 See Section 16 for the full text of the H statements declared above.	ATE [Oral] = 64 mg/kg ATE [Dermal] = 87,12 mg/kg ATE [Inhalation (dusts and mists)] = 0,33 mg/l Skin Corr. 1C, H314: C ≥ 0,6% Skin Irrit. 2, H315: 0,06% ≤ C < 0,6% Eye Dam. 1, H318: C ≥ 0,6% Eye Irrit. 2, H319: 0,06% ≤ C < 0,6% Skin Sens. 1A, H317: C ≥ 0,0015% M [Acute] = 100 M [Chronic] = 100	[1]

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment, are PBTs, vPvBs or Substances of equivalent concern, or have been assigned a workplace exposure limit and hence require reporting in this section.

Type

SECTION 3: Composition/information on ingredients

[1] Substance classified with a health or environmental hazard

[2] Substance with a workplace exposure limit

Occupational exposure limits, if available, are listed in Section 8.

SECTION 4: First aid measures

4.1 Description of first aid measures

- Eye contact** : Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention.
- Inhalation** : Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention if adverse health effects persist or are severe. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
- Skin contact** : Wash with plenty of soap and water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Get medical attention. In the event of any complaints or symptoms, avoid further exposure. Wash clothing before reuse. Clean shoes thoroughly before reuse.
- Ingestion** : Wash out mouth with water. Remove dentures if any. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention if adverse health effects persist or are severe. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
- Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

4.2 Most important symptoms and effects, both acute and delayed

Over-exposure signs/symptoms

- Eye contact** : Adverse symptoms may include the following:
pain or irritation
watering
redness
- Inhalation** : No specific data.
- Skin contact** : Adverse symptoms may include the following:
irritation
redness
- Ingestion** : No specific data.

4.3 Indication of any immediate medical attention and special treatment needed

- Notes to physician** : Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
- Specific treatments** : No specific treatment.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media : Use an extinguishing agent suitable for the surrounding fire.

Unsuitable extinguishing media : None known.

5.2 Special hazards arising from the substance or mixture

Hazards from the substance or mixture : In a fire or if heated, a pressure increase will occur and the container may burst. This material is toxic to aquatic life with long lasting effects. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.

Hazardous combustion products : Decomposition products may include the following materials:
carbon dioxide
carbon monoxide
halogenated compounds

5.3 Advice for firefighters

Special protective actions for fire-fighters : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.

Special protective equipment for fire-fighters : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Avoid breathing vapour or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

For emergency responders : If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

6.2 Environmental precautions

: Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Water polluting material. May be harmful to the environment if released in large quantities. Collect spillage.

6.3 Methods and material for containment and cleaning up

Small spill : Stop leak if without risk. Move containers from spill area. Absorb with an inert material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

Large spill : Stop leak if without risk. Move containers from spill area. Approach the release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilt product. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations.

SECTION 6: Accidental release measures

- 6.4 Reference to other sections** : See Section 1 for emergency contact information.
See Section 8 for information on appropriate personal protective equipment.
See Section 13 for additional waste treatment information.

SECTION 7: Handling and storage

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

7.1 Precautions for safe handling

- Protective measures** : Put on appropriate personal protective equipment (see Section 8). Persons with a history of skin sensitization problems should not be employed in any process in which this product is used. Do not get in eyes or on skin or clothing. Do not ingest. Avoid breathing vapour or mist. Avoid release to the environment. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.
- Advice on general occupational hygiene** : Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

7.2 Conditions for safe storage, including any incompatibilities

Store between the following temperatures: 0 to 40°C (32 to 104°F). Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

Seveso Directive - Reporting thresholds

Danger criteria

Category	Notification and MAPP threshold	Safety report threshold
E2	200 tonnes	500 tonnes

7.3 Specific end use(s)

- Recommendations** : Not available.
- Industrial sector specific solutions** : Not available.

SECTION 8: Exposure controls/personal protection

The information in this section contains generic advice and guidance. Information is provided based on typical anticipated uses of the product. Additional measures might be required for bulk handling or other uses that could significantly increase worker exposure or environmental releases.

8.1 Control parameters

Occupational exposure limits

SECTION 8: Exposure controls/personal protection

Product/ingredient name	Exposure limit values
ethanediol	EU OEL (Europe, 1/2022) Absorbed through skin. TWA 8 hours: 20 ppm. TWA 8 hours: 52 mg/m ³ . STEL 15 minutes: 40 ppm. STEL 15 minutes: 104 mg/m ³ .
(2-methoxymethylethoxy)propanol	EU OEL (Europe, 1/2022) [(2-Methoxymethylethoxy)-propanol] Absorbed through skin. TWA 8 hours: 50 ppm. TWA 8 hours: 308 mg/m ³ .
2-butoxyethanol	EU OEL (Europe, 1/2022) Absorbed through skin. TWA 8 hours: 20 ppm. TWA 8 hours: 98 mg/m ³ . STEL 15 minutes: 50 ppm. STEL 15 minutes: 246 mg/m ³ .

Biological exposure indices

No exposure indices known.

Recommended monitoring procedures : Reference should be made to monitoring standards, such as the following:
European Standard EN 689 (Workplace atmospheres - Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy) European Standard EN 14042 (Workplace atmospheres - Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents) European Standard EN 482 (Workplace atmospheres - General requirements for the performance of procedures for the measurement of chemical agents) Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

DNELs/DMELs

Product/ingredient name

2,2'-[(1-methylethylidene)bis
(4,1-phenyleneoxymethylene)]bisoxirane

Result

DNEL - Workers - Long term - Inhalation

12,25 mg/m³

Effects: Systemic

DNEL - Workers - Short term - Inhalation

12,25 mg/m³

Effects: Systemic

DNEL - Workers - Long term - Dermal

8,33 mg/kg bw/day

Effects: Systemic

DNEL - Workers - Short term - Dermal

8,33 mg/kg bw/day

Effects: Systemic

DNEL - General population - Long term - Dermal

89,3 µg/kg bw/day

Effects: Systemic

DNEL - General population - Long term - Oral

0,5 mg/kg bw/day

Effects: Systemic

DNEL - Workers - Long term - Dermal

0,75 mg/kg bw/day

Effects: Systemic

DNEL - General population - Long term - Inhalation

0,87 mg/m³

Flügger Floor Paint Epoxy Component A (Bases)

SECTION 8: Exposure controls/personal protection

	<u>Effects</u> : Systemic
	DNEL - Workers - Long term - Inhalation 4,93 mg/m³ <u>Effects</u> : Systemic
Formaldehyde, oligomeric reaction products with 1-chloro-2,3-epoxypropane and phenol	DMEL - Workers - Short term - Dermal 8,3 µg/cm² <u>Effects</u> : Local
	DNEL - General population - Long term - Oral 6,25 mg/kg bw/day <u>Effects</u> : Systemic
	DNEL - General population - Long term - Inhalation 8,7 mg/m³ <u>Effects</u> : Systemic
	DNEL - Workers - Long term - Inhalation 29,39 mg/m³ <u>Effects</u> : Systemic
	DNEL - General population - Long term - Dermal 62,5 mg/kg bw/day <u>Effects</u> : Systemic
	DNEL - Workers - Long term - Dermal 104,15 mg/kg bw/day <u>Effects</u> : Systemic
p-tert-butylphenyl 1-(2,3-epoxy)propyl ether	DNEL - General population - Short term - Dermal 0,95 µg/cm² <u>Effects</u> : Local
	DNEL - General population - Long term - Dermal 0,95 µg/cm² <u>Effects</u> : Local
	DNEL - Workers - Short term - Dermal 1,6 µg/cm² <u>Effects</u> : Local
	DNEL - Workers - Long term - Dermal 1,6 µg/cm² <u>Effects</u> : Local
	DNEL - General population - Short term - Dermal 0,5 mg/kg bw/day <u>Effects</u> : Systemic
	DNEL - General population - Long term - Dermal 0,5 mg/kg bw/day <u>Effects</u> : Systemic
	DNEL - Workers - Short term - Dermal 1 mg/kg bw/day <u>Effects</u> : Systemic
	DNEL - Workers - Long term - Dermal 1 mg/kg bw/day <u>Effects</u> : Systemic
	DNEL - General population - Long term - Inhalation

SECTION 8: Exposure controls/personal protection

1,75 mg/m³

Effects: Local

DNEL - General population - Long term - Inhalation

1,75 mg/m³

Effects: Systemic

DNEL - Workers - Short term - Inhalation

3,5 mg/m³

Effects: Local

DNEL - Workers - Long term - Inhalation

3,5 mg/m³

Effects: Local

DNEL - Workers - Short term - Inhalation

3,5 mg/m³

Effects: Systemic

DNEL - Workers - Long term - Inhalation

3,5 mg/m³

Effects: Systemic

benzyl alcohol

DNEL - General population - Long term - Oral

4 mg/kg bw/day

Effects: Systemic

DNEL - General population - Long term - Dermal

4 mg/kg bw/day

Effects: Systemic

DNEL - General population - Long term - Inhalation

5,4 mg/m³

Effects: Systemic

DNEL - Workers - Long term - Dermal

8 mg/kg bw/day

Effects: Systemic

DNEL - General population - Short term - Oral

20 mg/kg bw/day

Effects: Systemic

DNEL - General population - Short term - Dermal

20 mg/kg bw/day

Effects: Systemic

DNEL - Workers - Long term - Inhalation

22 mg/m³

Effects: Systemic

DNEL - General population - Short term - Inhalation

27 mg/m³

Effects: Systemic

DNEL - Workers - Short term - Dermal

40 mg/kg bw/day

Effects: Systemic

DNEL - Workers - Short term - Inhalation

110 mg/m³

Effects: Systemic

SECTION 8: Exposure controls/personal protection

ethanediol

DNEL - General population - Long term - Inhalation

7 mg/m³

Effects: Local

DNEL - Workers - Long term - Inhalation

35 mg/m³

Effects: Local

DNEL - General population - Long term - Dermal

53 mg/kg bw/day

Effects: Systemic

DNEL - Workers - Long term - Dermal

106 mg/kg bw/day

Effects: Systemic

2,4,7,9-tetramethyldec-5-yne-4,7-diol

DNEL - General population - Long term - Oral

0,29 mg/kg bw/day

Effects: Systemic

DNEL - General population - Long term - Dermal

0,29 mg/kg bw/day

Effects: Systemic

DNEL - General population - Long term - Inhalation

0,505 mg/m³

Effects: Systemic

DNEL - Workers - Long term - Dermal

0,812 mg/kg bw/day

Effects: Systemic

DNEL - Workers - Long term - Inhalation

2,86 mg/m³

Effects: Systemic

(2-methoxymethylethoxy)propanol

DNEL - General population - Long term - Oral

36 mg/kg bw/day

Effects: Systemic

DNEL - General population - Long term - Inhalation

37,2 mg/m³

Effects: Systemic

DNEL - General population - Long term - Dermal

121 mg/kg bw/day

Effects: Systemic

DNEL - Workers - Long term - Dermal

283 mg/kg bw/day

Effects: Systemic

DNEL - Workers - Long term - Inhalation

308 mg/m³

Effects: Systemic

2-butoxyethanol

DNEL - General population - Long term - Oral

6,3 mg/kg bw/day

Effects: Systemic

DNEL - General population - Short term - Oral

26,7 mg/kg bw/day

Effects: Systemic

Flügger Floor Paint Epoxy Component A (Bases)

SECTION 8: Exposure controls/personal protection

	DNEL - General population - Long term - Inhalation 59 mg/m³ <u>Effects:</u> Systemic
	DNEL - Workers - Long term - Inhalation 98 mg/m³ <u>Effects:</u> Systemic
	DNEL - General population - Short term - Inhalation 147 mg/m³ <u>Effects:</u> Local
	DNEL - Workers - Short term - Inhalation 246 mg/m³ <u>Effects:</u> Local
	DNEL - General population - Short term - Inhalation 426 mg/m³ <u>Effects:</u> Systemic
	DNEL - Workers - Short term - Inhalation 1091 mg/m³ <u>Effects:</u> Systemic
bronopol	DNEL - General population - Short term - Dermal 4 µg/cm² <u>Effects:</u> Local
	DNEL - General population - Long term - Dermal 4 µg/cm² <u>Effects:</u> Local
	DNEL - Workers - Short term - Dermal 8 µg/cm² <u>Effects:</u> Local
	DNEL - Workers - Long term - Dermal 8 µg/cm² <u>Effects:</u> Local
	DNEL - General population - Long term - Oral 0,18 mg/kg bw/day <u>Effects:</u> Systemic
	DNEL - General population - Short term - Oral 0,5 mg/kg bw/day <u>Effects:</u> Systemic
	DNEL - General population - Short term - Inhalation 0,6 mg/m³ <u>Effects:</u> Local
	DNEL - General population - Long term - Inhalation 0,6 mg/m³ <u>Effects:</u> Systemic
	DNEL - General population - Long term - Dermal 0,7 mg/kg bw/day <u>Effects:</u> Systemic
	DNEL - General population - Short term - Inhalation 1,8 mg/m³ <u>Effects:</u> Systemic

Flügger Floor Paint Epoxy Component A (Bases)

SECTION 8: Exposure controls/personal protection

	DNEL - Workers - Long term - Dermal 2 mg/kg bw/day <u>Effects</u> : Systemic
	DNEL - General population - Short term - Dermal 2,1 mg/kg bw/day <u>Effects</u> : Systemic
	DNEL - Workers - Short term - Inhalation 2,5 mg/m³ <u>Effects</u> : Local
	DNEL - Workers - Long term - Inhalation 2,5 mg/m³ <u>Effects</u> : Local
	DNEL - Workers - Long term - Inhalation 3,5 mg/m³ <u>Effects</u> : Systemic
	DNEL - Workers - Short term - Dermal 6 mg/kg bw/day <u>Effects</u> : Systemic
	DNEL - Workers - Short term - Inhalation 10,5 mg/m³ <u>Effects</u> : Systemic
	DNEL - General population - Long term - Inhalation 0,6 mg/m³ <u>Effects</u> : Local
CMIT/MIT (3:1)	DNEL - General population - Long term - Inhalation 0,02 mg/m³ <u>Effects</u> : Local
	DNEL - Workers - Long term - Inhalation 0,02 mg/m³ <u>Effects</u> : Local
	DNEL - General population - Short term - Inhalation 0,04 mg/m³ <u>Effects</u> : Local
	DNEL - Workers - Short term - Inhalation 0,04 mg/m³ <u>Effects</u> : Local
	DNEL - General population - Long term - Oral 0,09 mg/kg bw/day <u>Effects</u> : Systemic
	DNEL - General population - Short term - Oral 0,11 mg/kg bw/day <u>Effects</u> : Systemic

<u>PNECs</u>	
Product/ingredient name	Result

Flügger Floor Paint Epoxy Component A (Bases)

SECTION 8: Exposure controls/personal protection

2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bisoxirane	Fresh water 3 µg/l
	Marine water 0,3 µg/l
	Sewage Treatment Plant 10 mg/l
	Fresh water sediment 0,5 mg/kg dwt
	Marine water sediment 0,5 mg/kg dwt
Formaldehyde, oligomeric reaction products with 1-chloro-2,3-epoxypropane and phenol	Fresh water 0,013 mg/l
	Fresh water 3 µg/l
	Marine water 300 ng/l
	Sewage Treatment Plant 10 mg/l
	Fresh water sediment 294 µg/kg dwt
p-tert-butylphenyl 1-(2,3-epoxy)propyl ether	Marine water sediment 29,4 µg/kg dwt
	Soil 237 µg/kg dwt
	Fresh water 7,5 µg/l
	Marine water 0,75 µg/l
	Sewage Treatment Plant 100 mg/l
ethanediol	Fresh water sediment 33,54 mg/kg dwt
	Marine water sediment 3,354 mg/kg dwt
	Soil 11,4 mg/kg dwt
	Fresh water 10 mg/l
	Fresh water 10 mg/l
	Marine water 1 mg/l
	Sewage Treatment Plant

Flügger Floor Paint Epoxy Component A (Bases)

SECTION 8: Exposure controls/personal protection

	199,5 mg/l
	Fresh water sediment 37 mg/kg dwt
	Marine water sediment 3,7 mg/kg dwt
	Soil 1,53 mg/kg dwt
2,4,7,9-tetramethyldec-5-yne-4,7-diol	Fresh water 0,04 mg/l
	Marine water 0,004 mg/l
	Sewage Treatment Plant 7 mg/l
	Fresh water sediment 0,32 mg/kg dwt
	Marine water sediment 0,032 mg/kg dwt
	Soil 0,028 mg/kg dwt
(2-methoxymethylethoxy)propanol	Fresh water 19 mg/l
	Marine water 1,9 mg/l
	Sewage Treatment Plant 4168 mg/l
	Fresh water sediment 70,2 mg/kg dwt
	Marine water sediment 7,02 mg/kg dwt
	Soil 2,74 mg/kg dwt
2-butoxyethanol	Fresh water 0,8 mg/l
	Marine water 0,88 mg/l
	Sewage Treatment Plant 463 mg/l
	Fresh water sediment 34,6 mg/kg dwt
	Marine water sediment 3,46 mg/kg dwt
	Soil 2,33 mg/kg dwt

SECTION 8: Exposure controls/personal protection

bronopol

Fresh water

0,01 mg/l

Marine water

0,0008 mg/l

Sewage Treatment Plant

0,43 mg/l

Fresh water sediment

0,041 mg/kg dwt

Marine water sediment

0,00328 mg/kg dwt

Soil

0,5 mg/kg dwt

8.2 Exposure controls

Appropriate engineering controls

: Good general ventilation should be sufficient to control worker exposure to airborne contaminants.

Individual protection measures

Hygiene measures

: Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye/face protection

: Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: Wear safety glasses with side protection in accordance with EN 166.

Skin protection

Hand protection

: Wear suitable gloves to prevent prolonged or repeated skin contact. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. The instructions and information provided by the glove manufacturer on use, storage, maintenance and replacement must be followed.

Gloves

: Recommended: neoprene rubber. nitrile rubber. (thickness $\geq$ 0.4 mm, breakthrough time $\geq$ 8 hours, tested according to EN 374).

Body protection

: Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. Recommended: Wear suitable protective clothing, e.g polypropylene coveralls or cotton / polyester workwear.

Other skin protection

: Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Respiratory protection

: For application with brush, roller, or similar, respiratory protection is usually not required. In order to avoid inhalation of spray and abrasive dust, all spray and grinding work must be carried out with a suitable respirator (P2, EN 143).

Environmental exposure controls

: Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

SECTION 9: Physical and chemical properties

The conditions of measurement of all properties are at standard temperature and pressure unless otherwise indicated.

9.1 Information on basic physical and chemical properties

Appearance

Physical state	: Liquid.
Colour	: White.
Odour	: Characteristic.
Odour threshold	: Not available.
Melting point/freezing point	: Not available.
Boiling point or initial boiling point and boiling range	: Not available.
Flammability	: Not available.
Lower and upper explosion limit	: Not available.
Flash point	: Not available.
Auto-ignition temperature	: Not available.
Decomposition temperature	: Not available.
pH	: 8 to 9
Viscosity	: Dynamic (room temperature): Not available. Kinematic (room temperature): Not available. Kinematic (40°C): Not available.
Solubility	: Not available.
Solubility in water	: Not available.
Miscible with water	: Yes.
Partition coefficient n-octanol/ water (log Pow)	: Not applicable.
Vapour pressure	: Not available.
Evaporation rate	: Not available.
Density	: 1 to 1,1 g/cm ³
Relative vapour density	: Not available.
Explosive properties	: Not available.
Oxidising properties	: Not available.
<u>Particle characteristics</u>	
Median particle size	: Not applicable.

9.2.1 Information with regard to physical hazard classes

Explosive properties	: Not available.
Oxidising properties	: Not available.

9.2.2 Other safety characteristics

Miscible with water	: Yes.
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Flügger Floor Paint Epoxy Component A (Bases)

SECTION 10: Stability and reactivity

- 10.1 Reactivity

: No specific test data related to reactivity available for this product or its ingredients.
- 10.2 Chemical stability

: The product is stable.
- 10.3 Possibility of hazardous reactions

: Under normal conditions of storage and use, hazardous reactions will not occur.
- 10.4 Conditions to avoid

: No specific data.
- 10.5 Incompatible materials

: No specific data.
- 10.6 Hazardous decomposition products

: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity	
Product/ingredient name	Result
2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bisoxirane	Rabbit - Dermal - LD50 20 g/kg <u>Toxic effects:</u> Behavioral - Somnolence (general depressed activity) Gastrointestinal - Hypermotility, diarrhea Gross Metabolite Changes - Weight loss or decreased weight gain
benzyl alcohol	Rat - Oral - LD50 1230 mg/kg <u>Toxic effects:</u> Behavioral - Somnolence (general depressed activity) Behavioral - Excitement Behavioral - Coma Rabbit - Dermal - LD50 2000 mg/kg
ethanediol	Rat - Oral - LD50 4700 mg/kg
2-butoxyethanol	Rabbit - Dermal - LD50 220 mg/kg Rat - Oral - LD50 250 mg/kg Rat - Inhalation - LC50 Gas. 450 ppm [4 hours] <u>Toxic effects:</u> Behavioral - Ataxia Gross Metabolite Changes - Weight loss or decreased weight gain
bronopol	Rat - Oral - LD50 180 mg/kg Rat - Dermal - LD50 64 mg/kg Rat - Inhalation - LC50 Dusts and mists 800 mg/m³ [4 hours]
CMIT/MIT (3:1)	Rat - Oral - LD50 53 mg/kg <u>Toxic effects:</u> Behavioral - Somnolence (general depressed

Flügger Floor Paint Epoxy Component A (Bases)

SECTION 11: Toxicological information

activity) Behavioral - Ataxia Lung, Thorax, or Respiration - Respiratory depression

Conclusion/Summary [Product] : Not available.

Acute toxicity estimates

Product/ingredient name	Oral (mg/kg)	Dermal (mg/kg)	Inhalation (gases) (ppm)	Inhalation (vapours) (mg/l)	Inhalation (dusts and mists) (mg/l)
Flügger Floor Paint Epoxy Component A (Bases)	22263,5	N/A	N/A	2678,6	N/A
bis-[4-(2,3-epoxipropoxy)phenyl]propane	N/A	20000	N/A	N/A	N/A
benzyl alcohol	1200	N/A	N/A	N/A	N/A
ethanediol	500	N/A	N/A	N/A	N/A
2-butoxyethanol	1200	N/A	N/A	3	N/A
bronopol (INN)	324	1600	N/A	N/A	N/A
CMIT/MIT (3:1)	64	87,12	N/A	N/A	0,33

Skin corrosion/irritation

Product/ingredient name

2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bisoxirane

Formaldehyde, oligomeric reaction products with 1-chloro-2,3-epoxypropane and phenol

benzyl alcohol

ethanediol

2,4,7,9-tetramethyldec-5-yne-4,7-diol

(2-methoxymethylethoxy)propanol

2-butoxyethanol

bronopol

Result

Rabbit - Skin - Mild irritant

Amount/concentration applied: 500 mg

Rabbit - Skin - Mild irritant

Duration of treatment/exposure: 24 hours

Amount/concentration applied: 500 uL

Man - Skin - Mild irritant

Duration of treatment/exposure: 48 hours

Amount/concentration applied: 16 mg

Pig - Skin - Moderate irritant

Amount/concentration applied: 100 %

Rabbit - Skin - Moderate irritant

Duration of treatment/exposure: 24 hours

Amount/concentration applied: 100 mg

Rabbit - Skin - Mild irritant

Amount/concentration applied: 555 mg

Rabbit - Skin - Mild irritant

Amount/concentration applied: 0.5 gm

Rabbit - Skin - Mild irritant

Amount/concentration applied: 500 mg

Rabbit - Skin - Mild irritant

Amount/concentration applied: 500 mg

Human - Skin - Moderate irritant

Amount/concentration applied: 10 mg

Rabbit - Skin - Mild irritant

Duration of treatment/exposure: 24 hours

Amount/concentration applied: 500 mg

Rabbit - Skin - Moderate irritant

Amount/concentration applied: 80 mg

Flügger Floor Paint Epoxy Component A (Bases)

SECTION 11: Toxicological information

CMIT/MIT (3:1) Human - Skin - Severe irritant
Amount/concentration applied: 0.01 %

Conclusion/Summary [Product] : Not available.

Serious eye damage/eye irritation

Product/ingredient name	Result
2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bisoxirane	Rabbit - Eyes - Severe irritant Duration of treatment/exposure: 24 hours Amount/concentration applied: 2 mg
ethanediol	Rabbit - Eyes - Mild irritant Duration of treatment/exposure: 24 hours Amount/concentration applied: 500 mg
	Rabbit - Eyes - Mild irritant Duration of treatment/exposure: 1 hours Amount/concentration applied: 100 mg
	Rabbit - Eyes - Moderate irritant Duration of treatment/exposure: 6 hours Amount/concentration applied: 1440 mg
2,4,7,9-tetramethyldec-5-yne-4,7-diol	Rabbit - Eyes - Severe irritant Amount/concentration applied: 0.1 MI
(2-methoxymethylethoxy)propanol	Human - Eyes - Mild irritant Amount/concentration applied: 8 mg
	Rabbit - Eyes - Mild irritant Duration of treatment/exposure: 24 hours Amount/concentration applied: 500 mg
2-butoxyethanol	Rabbit - Eyes - Moderate irritant Duration of treatment/exposure: 24 hours Amount/concentration applied: 100 mg
	Rabbit - Eyes - Severe irritant Amount/concentration applied: 100 mg

Conclusion/Summary [Product] : Not available.

Respiratory corrosion/irritation

Not available.

Conclusion/Summary [Product] : Not available.

Respiratory or skin sensitization

Not available.

Skin

Conclusion/Summary [Product] : Not available.

Respiratory

Conclusion/Summary [Product] : Not available.

Germ cell mutagenicity

SECTION 11: Toxicological information

Not available.

Conclusion/Summary [Product] : Not available.

Carcinogenicity

Not available.

Conclusion/Summary [Product] : Not available.

Reproductive toxicity

Not available.

Conclusion/Summary [Product] : Not available.

Specific target organ toxicity (single exposure)

Product/ingredient name

bronopol

Result

STOT SE 3, H335 (Respiratory tract irritation)

Specific target organ toxicity (repeated exposure)

Product/ingredient name

ethanediol

Result

STOT RE 2, H373 (oral)

Aspiration hazard

Not available.

Information on likely routes of exposure

Not available.

Symptoms related to the physical, chemical and toxicological characteristics

- Eye contact** : Adverse symptoms may include the following:
pain or irritation
watering
redness
- Inhalation** : No specific data.
- Skin contact** : Adverse symptoms may include the following:
irritation
redness
- Ingestion** : No specific data.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Short term exposure

Potential immediate effects : Not available.

Potential delayed effects : Not available.

Long term exposure

Potential immediate effects : Not available.

Potential delayed effects : Not available.

Potential chronic health effects

Not available.

Conclusion/Summary [Product] : Not available.

Flügger Floor Paint Epoxy Component A (Bases)

SECTION 11: Toxicological information

- General

: Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels.
- Carcinogenicity

: No known significant effects or critical hazards.
- Mutagenicity

: No known significant effects or critical hazards.
- Reproductive toxicity

: No known significant effects or critical hazards.

11.2 Information on other hazards

11.2.1 Endocrine disrupting properties

Not available.

Conclusion/Summary [Product]

: The product does not meet the criteria to be considered as having endocrine disrupting properties according to the criteria set out in either Regulation (EC) No. 1907/2006 or Regulation (EC) No 1272/2008.

11.2.2 Other information

Not available.

SECTION 12: Ecological information

12.1 Toxicity

Product/ingredient name	Result
2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bisoxirane	LC50 Fish 1,3 mg/l [96 hours]
benzyl alcohol	Acute - LC50 - Fresh water Fish - Bluegill - <i>Lepomis macrochirus</i> 10 ppm [96 hours] <u>Effect</u> : Mortality
ethanediol	Acute - LC50 - Fresh water Fish - Fathead minnow - <i>Pimephales promelas</i> Age: ≤7 days 8050 mg/l [96 hours] <u>Effect</u> : Mortality Acute - LC50 - Fresh water Crustaceans - Water flea - <i>Ceriodaphnia dubia</i> - Neonate 6900 mg/l [48 hours] <u>Effect</u> : Mortality
2,4,7,9-tetramethyldec-5-yne-4,7-diol	LC50 Fish - <i>Pimephales promelas</i> 36 mg/l [96 hours] EC50 Daphnia - <i>Daphnia magna</i> 88 mg/l [48 hours]
2-butoxyethanol	Acute - LC50 - Marine water Crustaceans - Common shrimp, sand shrimp - <i>Crangon crangon</i> 800 mg/l [48 hours] <u>Effect</u> : Mortality Acute - LC50 - Marine water Fish - Inland silverside - <i>Menidia beryllina</i> 1250 ppm [96 hours] <u>Effect</u> : Mortality
bronopol	Acute - EC50 - Fresh water US EPA

Flügger Floor Paint Epoxy Component A (Bases)

SECTION 12: Ecological information

Algae - Green algae - *Desmodesmus subspicatus*
0,02 ppm [96 hours]
Effect: Population

Acute - LC50 - Fresh water
US EPA
Fish - Bluegill - *Lepomis macrochirus*
Weight: 0,34 g
11,17 ppm [96 hours]
Effect: Mortality

Acute - EC50 - Fresh water
US EPA
Daphnia - Water flea - *Daphnia magna*
Age: <24 hours
1,6 ppm [48 hours]
Effect: Intoxication

Chronic - NOEC
US EPA
Fish - Rainbow trout,donaldson trout - *Oncorhynchus mykiss*
1,94 ppm [49 days]
Effect: Growth

Chronic - NOEC
Algae - *Pseudokirchneriella subcapitata*
0,03 mg/l [72 hours]

CMIT/MIT (3:1)

LC50
Fish - Trout - *Oncorhynchus mykiss*
0,19 mg/l [96 hours]

EC50
Daphnia - Daphnia - *Daphnia magna*
0,1 mg/l [48 hours]

NOEC
Fish - Trout - *Oncorhynchus mykiss*
0,05 mg/l [14 days]

NOEC
Daphnia - Daphnia - *Daphnia magna*
0,004 mg/l [21 days]

Conclusion/Summary [Product] : Not available.

12.2 Persistence and degradability

Product/ingredient name

ethanediol

(2-methoxymethylethoxy)propanol

Result

Ready Biodegradability - DOC Die-Away Test
100% [28 days] - Not readily

Ready Biodegradability - Manometric Respirometry Test
>60% [28 days]

Conclusion/Summary [Product] : Not available.

SECTION 12: Ecological information

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
ethanediol	-	-	Not readily
2,4,7,9-tetramethyldec-5-yne-4,7-diol	-	-	Not readily
(2-methoxymethylethoxy) propanol	-	-	Readily
bronopol	-	-	Not readily

12.3 Bioaccumulative potential

Product/ingredient name	LogP _{ow}	BCF	Potential
Formaldehyde, oligomeric reaction products with 1-chloro-2,3-epoxypropane and phenol	2,7	-	Low
benzyl alcohol	0,87	-	Low
ethanediol	-1,36	-	Low
2,4,7,9-tetramethyldec-5-yne-4,7-diol	2,8	-	Low
(2-methoxymethylethoxy) propanol	0,004	-	Low
2-butoxyethanol	0,81	-	Low
bronopol	0,18	3,16	Low
CMIT/MIT (3:1)	0,401	-	Low

12.4 Mobility in soil

Soil/water partition coefficient

Product/ingredient name	logK _{oc}	K _{oc}
2,2'-[(1-methylethylidene)bis (4,1-phenyleneoxymethylene)]bisoxirane	4	10465,7
p-tert-butylphenyl 1-(2,3-epoxy)propyl ether	2,6	367,7
benzyl alcohol	1,1	12,6442
ethanediol	0,75	5,59292
2,4,7,9-tetramethyldec-5-yne-4,7-diol	1,9	83,8929
2-butoxyethanol	1,8	67,3685
bronopol	1	10,3771

Results of PMT and vPvM assessment

Product/ingredient name	PMT	P	M	T	vPvM	vP	vM
2,2'-[(1-methylethylidene)bis (4,1-phenyleneoxymethylene)] bisoxirane	No	No	No	No	No	No	No
Formaldehyde, oligomeric reaction products with 1-chloro-2,3-epoxypropane and phenol	No	No	No	No	No	No	No
p-tert-butylphenyl 1-(2,3-epoxy)propyl ether	No	No	No	No	No	No	No
benzyl alcohol	No	No	No	No	No	No	No
ethanediol	No	No	No	No	No	No	No
2,4,7,9-tetramethyldec-5-yne-4,7-diol	No	No	No	No	No	No	No
(2-methoxymethylethoxy) propanol	No	No	No	No	No	No	No
2-butoxyethanol	No	No	No	No	No	No	No
bronopol	No	No	No	No	No	No	No
CMIT/MIT (3:1)	No	No	No	No	No	No	No

SECTION 12: Ecological information

Mobility : Not available.

Conclusion/Summary : The product does not meet the criteria to be considered as a PMT or vPvM.

12.5 Results of PBT and vPvB assessment
Regulation (EC) No. 1907/2006 [REACH]

Product/ingredient name	PBT	P	B	T	vPvB	vP	vB
2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)] bisoxirane	No	No	No	No	No	No	No
Formaldehyde, oligomeric reaction products with 1-chloro-2,3-epoxypropane and phenol	No	No	No	No	No	No	No
p-tert-butylphenyl 1-(2,3-epoxy)propyl ether	No	No	No	No	No	No	No
benzyl alcohol	No	No	No	No	No	No	No
ethanediol	No	No	No	Yes	No	No	No
2,4,7,9-tetramethyldec-5-yne-4,7-diol	No	No	No	No	No	No	No
(2-methoxymethylethoxy) propanol	No	No	No	No	No	No	No
2-butoxyethanol	No	No	No	No	No	No	No
bronopol	No	No	No	No	No	No	No
CMIT/MIT (3:1)	No	No	No	Yes	No	No	No

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

Product/ingredient name	PBT	P	B	T	vPvB	vP	vB
2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)] bisoxirane	No	No	No	No	No	No	No
Formaldehyde, oligomeric reaction products with 1-chloro-2,3-epoxypropane and phenol	No	No	No	No	No	No	No
p-tert-butylphenyl 1-(2,3-epoxy)propyl ether	No	No	No	No	No	No	No
benzyl alcohol	No	No	No	No	No	No	No
ethanediol	No	No	No	No	No	No	No
2,4,7,9-tetramethyldec-5-yne-4,7-diol	No	No	No	No	No	No	No
(2-methoxymethylethoxy) propanol	No	No	No	No	No	No	No
2-butoxyethanol	No	No	No	No	No	No	No
bronopol	No	No	No	No	No	No	No
CMIT/MIT (3:1)	No	No	No	No	No	No	No

Conclusion/Summary : The product does not meet the criteria to be considered as a PBT or vPvB.

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

12.6 Endocrine disrupting properties
Not available.

Conclusion/Summary [Product] : The product does not meet the criteria to be considered as having endocrine disrupting properties according to the criteria set out in either Regulation (EC) No. 1907/2006 or Regulation (EC) No 1272/2008.

12.7 Other adverse effects

SECTION 12: Ecological information

No known significant effects or critical hazards.

SECTION 13: Disposal considerations

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

13.1 Waste treatment methods

Product

Methods of disposal : The generation of waste should be avoided or minimised wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction.

Hazardous waste : Yes.

European waste catalogue (EWC)

Waste code	Waste designation
08 01 11*	Waste paint and varnish containing organic solvents or other hazardous substances

Packaging

Methods of disposal : The generation of waste should be avoided or minimised wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.

Special precautions : This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.

SECTION 14: Transport information

	ADR/RID	IMDG	IATA
14.1 UN number or ID number	UN3082	UN3082	UN3082
14.2 UN proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N. O.S. (PAINT)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N. O.S. (PAINT)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N. O.S. (PAINT)
14.3 Transport hazard class (es)	9  	9  	9  
14.4 Packing group	III	III	III
14.5 Environmental hazards	Yes.	Yes.	Yes.

Additional information

ADR/RID : This product is not regulated as a dangerous good when transported in sizes of ≤5 L or ≤5 kg, provided the packagings meet the general provisions of 4.1.1.1, 4.1.1.2 and 4.1.1.4 to 4.1.1.8.

Tunnel code -

IMDG : This product is not regulated as a dangerous good when transported in sizes of ≤5 L or ≤5 kg, provided the packagings meet the general provisions of 4.1.1.1, 4.1.1.2 and 4.1.1.4 to 4.1.1.8.

Emergency schedules F-A, S-F

Flügger Floor Paint Epoxy Component A (Bases)

SECTION 14: Transport information

- IATA

: This product is not regulated as a dangerous good when transported in sizes of ≤5 L or ≤5 kg, provided the packagings meet the general provisions of 5.0.2.4.1, 5.0.2.6.1.1 and 5.0.2.8.
- 14.6 Special precautions for user

: **Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.
- 14.7 Maritime transport in bulk according to IMO instruments

: Not available.

SECTION 15: Regulatory information

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

EU Regulation (EC) No. 1907/2006 (REACH)

Annex XIV - List of substances subject to authorisation

Annex XIV

None of the components are listed.

Substances of very high concern

None of the components are listed.

Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles

Product/ingredient name	%	Designation [Usage]
EPV TINT, component A	≥90	3

Labelling

: Not applicable.

Other EU regulations

Industrial emissions (integrated pollution prevention and control) - Air

: Not listed

Industrial emissions (integrated pollution prevention and control) - Water

: Not listed

Explosive precursors

: Not applicable.

Ozone depleting substances (EU 2024/590)

Not listed.

Prior Informed Consent (PIC) (649/2012/EU)

Not listed.

Persistent Organic Pollutants

Not listed.

Seveso Directive

This product is controlled under the Seveso Directive.

Danger criteria

Category
E2
- National regulations

International regulations

Chemical Weapon Convention List Schedules I, II & III Chemicals
- Date of issue/Date of revision

: 26-03-2026

Date of previous issue

: 21-03-2025

Version

: 1.02

26/28

SECTION 15: Regulatory information

Not listed.

Montreal Protocol

Not listed.

Stockholm Convention on Persistent Organic Pollutants

Not listed.

Rotterdam Convention on Prior Informed Consent (PIC)

Not listed.

UNECE Aarhus Protocol on POPs and Heavy Metals

Not listed.

15.2 Chemical safety assessment

: Chemical Safety Assessments for all substances in this product are either Complete or Not applicable.

SECTION 16: Other information

✓ Indicates information that has changed from previously issued version.

Abbreviations and acronyms

: ATE = Acute Toxicity Estimate
CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No. 1272/2008]
DMEL = Derived Minimal Effect Level
DNEL = Derived No Effect Level
EUH statement = CLP-specific Hazard statement
N/A = Not available
PBT = Persistent, Bioaccumulative and Toxic
PNEC = Predicted No Effect Concentration
RRN = REACH Registration Number
SGG = Segregation Group
vPvB = Very Persistent and Very Bioaccumulative

Procedure used to derive the classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

Classification	Justification
Skin Irrit. 2, H315	Calculation method
Eye Irrit. 2, H319	Calculation method
Skin Sens. 1, H317	Calculation method
Aquatic Chronic 2, H411	Calculation method

Full text of abbreviated H statements

H301	Toxic if swallowed.
H302	Harmful if swallowed.
H310	Fatal in contact with skin.
H312	Harmful in contact with skin.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H330	Fatal if inhaled.
H331	Toxic if inhaled.
H335	May cause respiratory irritation.
H373	May cause damage to organs through prolonged or repeated exposure.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.
EUH071	Corrosive to the respiratory tract.

Full text of classifications [CLP/GHS]

Flügger Floor Paint Epoxy Component A (Bases)

SECTION 16: Other information

Acute Tox. 2	ACUTE TOXICITY - Category 2
Acute Tox. 3	ACUTE TOXICITY - Category 3
Acute Tox. 4	ACUTE TOXICITY - Category 4
Aquatic Acute 1	SHORT-TERM (ACUTE) AQUATIC HAZARD - Category 1
Aquatic Chronic 1	LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 1
Aquatic Chronic 2	LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 2
Aquatic Chronic 3	LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 3
Eye Dam. 1	SERIOUS EYE DAMAGE/EYE IRRITATION - Category 1
Eye Irrit. 2	SERIOUS EYE DAMAGE/EYE IRRITATION - Category 2
Skin Corr. 1C	SKIN CORROSION/IRRITATION - Category 1C
Skin Irrit. 2	SKIN CORROSION/IRRITATION - Category 2
Skin Sens. 1	SKIN SENSITISATION - Category 1
Skin Sens. 1A	SKIN SENSITISATION - Category 1A
Skin Sens. 1B	SKIN SENSITISATION - Category 1B
STOT RE 2	SPECIFIC TARGET ORGAN TOXICITY - REPEATED EXPOSURE - Category 2
STOT SE 3	SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE - Category 3

Product code :
Date of printing : 26-03-2026
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Notice to reader

The information in this Safety Data Sheet is based on the present state of knowledge and current legislation. It provides guidance on health, safety and environmental aspects of the product and should not be construed as any guarantee of technical performance or suitability for particular applications. The product should not be used for purposes other than those shown in Section 1 without first referring to the supplier and obtaining written handling instructions. As the specific conditions of use of the product are outside the supplier's control, the user is responsible for ensuring that the requirements of relevant legislation are complied with. The information contained in this safety data sheet does not constitute the user's own assessment of workplace risks, as required by other health and safety legislation.

SAFETY DATA SHEET

Flügger

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

1.1 Product identifier

Trade name : Flügger Floor Paint Epoxy Component B (Bases)

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

Identified uses : Epoxy paint, 2-component

1.3 Details of the supplier of the safety data sheet

Flügger Denmark A/S
 Islevdalvej 151
 DK-2610 Rødovre
 Tlf. +45 76 30 33 80

e-mail address of person responsible for this SDS : produktsupportdk@flugger.com

1.4 Emergency telephone number

National advisory body/Poison Centre

Telephone number : Call a poison center or physician.

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Product definition : Mixture

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

Eye Dam. 1, H318

The product is classified as hazardous according to Regulation (EC) 1272/2008 as amended.

See Section 16 for the full text of the H statements declared above.

See Section 11 for more detailed information on health effects and symptoms.

2.2 Label elements

Hazard pictograms :**Signal word** : Danger**Hazard statements** : H318 - Causes serious eye damage.

Precautionary statements

General : P101 - If medical advice is needed, have product container or label at hand.
 P102 - Keep out of reach of children.

Prevention : P280 - Wear eye or face protection.

Response : P305 + P351 + P338, P310 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
 Immediately call a POISON CENTER or doctor.

Storage : Not applicable.**Disposal** : Not applicable.**Contains** Epoxy resin/polyamine adduct**Supplemental label elements** : Contains CMIT/MIT (3:1). May produce an allergic reaction.

SECTION 2: Hazards identification

Contains a biocidal product that contains: CMIT/MIT (3:1).

Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles : Not applicable.

Special packaging requirements

Containers to be fitted with child-resistant fastenings : Not applicable.

Tactile warning of danger : Not applicable.

2.3 Other hazards

Product meets the criteria for PBT or vPvB according to Regulation (EC) No. 1907/2006, Annex XIII : This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

Other hazards which do not result in classification : None known.

EU VOC : VOC limit value (Cat. A/j): 140 g/l (2010)
Product VOC: max. 5 g/l

SECTION 3: Composition/information on ingredients

3.2 Mixtures : Mixture

Product/ingredient name	Identifiers	%	Classification	Specific Conc. Limits, M-factors and ATEs	Type
Epoxy resin/polyamine adduct	EC: 607-272-5 CAS: 238080-05-2	≥10 - ≤25	Acute Tox. 4, H302 Eye Dam. 1, H318	ATE [Oral] = 500 mg/kg	[1]
2-butoxyethanol	REACH #: 01-2119475108-36 EC: 203-905-0 CAS: 111-76-2	<1	Acute Tox. 4, H302 Acute Tox. 3, H331 Skin Irrit. 2, H315 Eye Irrit. 2, H319	ATE [Oral] = 1200 mg/kg ATE [Inhalation (vapours)] = 3 mg/l	[1] [2]
bronopol (INN)	EC: 200-143-0 CAS: 52-51-7	<0,1	Acute Tox. 4, H302 Acute Tox. 4, H312 Skin Irrit. 2, H315 Eye Dam. 1, H318 STOT SE 3, H335 Aquatic Acute 1, H400 Aquatic Chronic 1, H410	ATE [Oral] = 324 mg/kg ATE [Dermal] = 1600 mg/kg M [Acute] = 10 M [Chronic] = 1	[1]
reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC no. 220-239-6] (3:1) (CMIT/MIT(3:1))	CAS: 55965-84-9 Index: 613-167-00-5	<0,0015	Acute Tox. 3, H301 Acute Tox. 2, H310 Acute Tox. 2, H330 Skin Corr. 1C, H314 Eye Dam. 1, H318 Skin Sens. 1A, H317 Aquatic Acute 1, H400 Aquatic Chronic 1, H410 EUH071	ATE [Oral] = 64 mg/kg ATE [Dermal] = 87,12 mg/kg ATE [Inhalation (dusts and mists)] = 0,33 mg/l Skin Corr. 1C, H314: C ≥ 0,6% Skin Irrit. 2, H315: 0,06% ≤ C < 0,6% Eye Dam. 1, H318: C ≥ 0,6%	[1]

SECTION 3: Composition/information on ingredients

				Eye Irrit. 2, H319: 0,06% ≤ C < 0,6% Skin Sens. 1A, H317: C ≥ 0,0015% M [Acute] = 100 M [Chronic] = 100	
			See Section 16 for the full text of the H statements declared above.		

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment, are PBTs, vPvBs or Substances of equivalent concern, or have been assigned a workplace exposure limit and hence require reporting in this section.

Type

[1] Substance classified with a health or environmental hazard

[2] Substance with a workplace exposure limit

Occupational exposure limits, if available, are listed in Section 8.

SECTION 4: First aid measures

4.1 Description of first aid measures

- Eye contact** : Get medical attention immediately. Call a poison center or physician. Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Chemical burns must be treated promptly by a physician.
- Inhalation** : Get medical attention immediately. Call a poison center or physician. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
- Skin contact** : Get medical attention immediately. Call a poison center or physician. Wash contaminated skin with soap and water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Chemical burns must be treated promptly by a physician. Wash clothing before reuse. Clean shoes thoroughly before reuse.
- Ingestion** : Get medical attention immediately. Call a poison center or physician. Wash out mouth with water. Remove dentures if any. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Chemical burns must be treated promptly by a physician. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
- Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

4.2 Most important symptoms and effects, both acute and delayed

Over-exposure signs/symptoms

SECTION 4: First aid measures

- Eye contact** : Adverse symptoms may include the following:
pain
watering
redness
- Inhalation** : No specific data.
- Skin contact** : Adverse symptoms may include the following:
pain or irritation
redness
blistering may occur
- Ingestion** : Adverse symptoms may include the following:
stomach pains

4.3 Indication of any immediate medical attention and special treatment needed

- Notes to physician** : Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
- Specific treatments** : No specific treatment.

SECTION 5: Firefighting measures

5.1 Extinguishing media

- Suitable extinguishing media** : Use an extinguishing agent suitable for the surrounding fire.
- Unsuitable extinguishing media** : None known.

5.2 Special hazards arising from the substance or mixture

- Hazards from the substance or mixture** : In a fire or if heated, a pressure increase will occur and the container may burst.
- Hazardous combustion products** : Decomposition products may include the following materials:
metal oxide/oxides

5.3 Advice for firefighters

- Special protective actions for fire-fighters** : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.
- Special protective equipment for fire-fighters** : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

- For non-emergency personnel** : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Do not breathe vapour or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
- For emergency responders** : If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

6.2 Environmental precautions

- : Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

SECTION 6: Accidental release measures

6.3 Methods and material for containment and cleaning up

- Small spill** : Stop leak if without risk. Move containers from spill area. Absorb with an inert material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
- Large spill** : Stop leak if without risk. Move containers from spill area. Approach the release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilt product. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations.

6.4 Reference to other sections

- : See Section 1 for emergency contact information.
See Section 8 for information on appropriate personal protective equipment.
See Section 13 for additional waste treatment information.

SECTION 7: Handling and storage

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

7.1 Precautions for safe handling

- Protective measures** : Put on appropriate personal protective equipment (see Section 8). Do not get in eyes or on skin or clothing. Do not breathe vapour or mist. Do not ingest. If during normal use the material presents a respiratory hazard, use only with adequate ventilation or wear appropriate respirator. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.
- Advice on general occupational hygiene** : Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

7.2 Conditions for safe storage, including any incompatibilities

Store between the following temperatures: 0 to 40°C (32 to 104°F). Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

7.3 Specific end use(s)

- Recommendations** : Not available.
- Industrial sector specific solutions** : Not available.

SECTION 8: Exposure controls/personal protection

The information in this section contains generic advice and guidance. Information is provided based on typical anticipated uses of the product. Additional measures might be required for bulk handling or other uses that could significantly increase worker exposure or environmental releases.

8.1 Control parameters

Occupational exposure limits

SECTION 8: Exposure controls/personal protection

Product/ingredient name	Exposure limit values
2-butoxyethanol	EU OEL (Europe, 1/2022) Absorbed through skin. TWA 8 hours: 20 ppm. TWA 8 hours: 98 mg/m ³ . STEL 15 minutes: 50 ppm. STEL 15 minutes: 246 mg/m ³ .

Biological exposure indices

No exposure indices known.

Recommended monitoring procedures : Reference should be made to monitoring standards, such as the following: European Standard EN 689 (Workplace atmospheres - Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy) European Standard EN 14042 (Workplace atmospheres - Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents) European Standard EN 482 (Workplace atmospheres - General requirements for the performance of procedures for the measurement of chemical agents) Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

DNELs/DMELs

Product/ingredient name

2-butoxyethanol

Result

DNEL - General population - Long term - Oral

6,3 mg/kg bw/day

Effects: Systemic

DNEL - General population - Short term - Oral

26,7 mg/kg bw/day

Effects: Systemic

DNEL - General population - Long term - Inhalation

59 mg/m³

Effects: Systemic

DNEL - Workers - Long term - Inhalation

98 mg/m³

Effects: Systemic

DNEL - General population - Short term - Inhalation

147 mg/m³

Effects: Local

DNEL - Workers - Short term - Inhalation

246 mg/m³

Effects: Local

DNEL - General population - Short term - Inhalation

426 mg/m³

Effects: Systemic

DNEL - Workers - Short term - Inhalation

1091 mg/m³

Effects: Systemic

bronopol

DNEL - General population - Short term - Dermal

4 µg/cm²

Effects: Local

DNEL - General population - Long term - Dermal

4 µg/cm²

Effects: Local

SECTION 8: Exposure controls/personal protection

DNEL - Workers - Short term - Dermal

8 µg/cm²

Effects: Local

DNEL - Workers - Long term - Dermal

8 µg/cm²

Effects: Local

DNEL - General population - Long term - Oral

0,18 mg/kg bw/day

Effects: Systemic

DNEL - General population - Short term - Oral

0,5 mg/kg bw/day

Effects: Systemic

DNEL - General population - Short term - Inhalation

0,6 mg/m³

Effects: Local

DNEL - General population - Long term - Inhalation

0,6 mg/m³

Effects: Systemic

DNEL - General population - Long term - Dermal

0,7 mg/kg bw/day

Effects: Systemic

DNEL - General population - Short term - Inhalation

1,8 mg/m³

Effects: Systemic

DNEL - Workers - Long term - Dermal

2 mg/kg bw/day

Effects: Systemic

DNEL - General population - Short term - Dermal

2,1 mg/kg bw/day

Effects: Systemic

DNEL - Workers - Short term - Inhalation

2,5 mg/m³

Effects: Local

DNEL - Workers - Long term - Inhalation

2,5 mg/m³

Effects: Local

DNEL - Workers - Long term - Inhalation

3,5 mg/m³

Effects: Systemic

DNEL - Workers - Short term - Dermal

6 mg/kg bw/day

Effects: Systemic

DNEL - Workers - Short term - Inhalation

10,5 mg/m³

Effects: Systemic

DNEL - General population - Long term - Inhalation

0,6 mg/m³

Effects: Local

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SECTION 8: Exposure controls/personal protection

CMIT/MIT (3:1)	DNEL - General population - Long term - Inhalation 0,02 mg/m³ <u>Effects</u> : Local
	DNEL - Workers - Long term - Inhalation 0,02 mg/m³ <u>Effects</u> : Local
	DNEL - General population - Short term - Inhalation 0,04 mg/m³ <u>Effects</u> : Local
	DNEL - Workers - Short term - Inhalation 0,04 mg/m³ <u>Effects</u> : Local
	DNEL - General population - Long term - Oral 0,09 mg/kg bw/day <u>Effects</u> : Systemic
	DNEL - General population - Short term - Oral 0,11 mg/kg bw/day <u>Effects</u> : Systemic

PNECs

Product/ingredient name	Result
2-butoxyethanol	Fresh water 0,8 mg/l
	Marine water 0,88 mg/l
	Sewage Treatment Plant 463 mg/l
	Fresh water sediment 34,6 mg/kg dwt
	Marine water sediment 3,46 mg/kg dwt
	Soil 2,33 mg/kg dwt
bronopol	Fresh water 0,01 mg/l
	Marine water 0,0008 mg/l
	Sewage Treatment Plant 0,43 mg/l
	Fresh water sediment 0,041 mg/kg dwt
	Marine water sediment 0,00328 mg/kg dwt
	Soil 0,5 mg/kg dwt

SECTION 8: Exposure controls/personal protection

8.2 Exposure controls

Appropriate engineering controls : If user operations generate dust, fumes, gas, vapour or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

Individual protection measures

Hygiene measures : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye/face protection : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles and/or face shield in accordance with EN 166.

Skin protection

Hand protection : Wear suitable gloves to prevent prolonged or repeated skin contact. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. The instructions and information provided by the glove manufacturer on use, storage, maintenance and replacement must be followed.

Gloves : Recommended: Nitrile gloves. (thickness ≥ 0.4 mm, breakthrough time ≥ 8 hours, tested according to EN 374).

Body protection : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. Recommended: Wear suitable protective clothing, e.g polypropylene coveralls or cotton / polyester workwear.

Other skin protection : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Respiratory protection : For application with brush, roller, or similar, respiratory protection is usually not required. In order to avoid inhalation of spray and abrasive dust, all spray and grinding work must be carried out with a suitable respirator (P2, EN 143).

Environmental exposure controls : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

SECTION 9: Physical and chemical properties

The conditions of measurement of all properties are at standard temperature and pressure unless otherwise indicated.

9.1 Information on basic physical and chemical properties

Appearance

Physical state : Liquid.
Colour : Various
Odour : Amine-like. [Slight]
Odour threshold : Not available.
Melting point/freezing point : Not available.
Boiling point or initial boiling point and boiling range : Not available.
Flammability : Not available.
Lower and upper explosion limit : Not available.

SECTION 9: Physical and chemical properties

Flash point	: Not available.
Auto-ignition temperature	: Not available.
Decomposition temperature	: Not available.
pH	: 9 to 10
Viscosity	: Dynamic (room temperature): Not available. Kinematic (room temperature): Not available. Kinematic (40°C): Not available.
Solubility	: Not available.
Solubility in water	: Not available.
Miscible with water	: Yes.
Partition coefficient n-octanol/ water (log Pow)	: Not applicable.
Vapour pressure	: Not available.
Evaporation rate	: Not available.
Density	: 1,25 to 1,35 g/cm ³
Relative vapour density	: Not available.
Explosive properties	: Not available.
Oxidising properties	: Not available.
<u>Particle characteristics</u>	
Median particle size	: Not applicable.

9.2.1 Information with regard to physical hazard classes

Explosive properties	: Not available.
Oxidising properties	: Not available.

9.2.2 Other safety characteristics

Miscible with water	: Yes.
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SECTION 10: Stability and reactivity

10.1 Reactivity	: No specific test data related to reactivity available for this product or its ingredients.
10.2 Chemical stability	: The product is stable.
10.3 Possibility of hazardous reactions	: Under normal conditions of storage and use, hazardous reactions will not occur.
10.4 Conditions to avoid	: No specific data.
10.5 Incompatible materials	: No specific data.
10.6 Hazardous decomposition products	: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

<u>Acute toxicity</u>	
Product/ingredient name	Result
2-butoxyethanol	Rabbit - Dermal - LD50 220 mg/kg
	Rat - Oral - LD50 250 mg/kg
	Rat - Inhalation - LC50 Gas. 450 ppm [4 hours] <u>Toxic effects:</u> Behavioral - Ataxia Gross Metabolite Changes - Weight loss or decreased weight gain
bronopol	Rat - Oral - LD50 180 mg/kg
	Rat - Dermal - LD50 64 mg/kg
	Rat - Inhalation - LC50 Dusts and mists 800 mg/m³ [4 hours]
CMIT/MIT (3:1)	Rat - Oral - LD50 53 mg/kg <u>Toxic effects:</u> Behavioral - Somnolence (general depressed activity) Behavioral - Ataxia Lung, Thorax, or Respiration - Respiratory depression

Conclusion/Summary [Product] : Not available.

Acute toxicity estimates

Product/ingredient name	Oral (mg/kg)	Dermal (mg/kg)	Inhalation (gases) (ppm)	Inhalation (vapours) (mg/l)	Inhalation (dusts and mists) (mg/l)
Flügger Floor Paint Epoxy Component B (Bases)	2501,3	N/A	N/A	1000,0	N/A
Epoxy resin/polyamine adduct	500	N/A	N/A	N/A	N/A
2-butoxyethanol	1200	N/A	N/A	3	N/A
bronopol (INN)	324	1600	N/A	N/A	N/A
CMIT/MIT (3:1)	64	87,12	N/A	N/A	0,33

Skin corrosion/irritation

Product/ingredient name	Result
2-butoxyethanol	Rabbit - Skin - Mild irritant <u>Amount/concentration applied:</u> 500 mg
bronopol	Human - Skin - Moderate irritant <u>Amount/concentration applied:</u> 10 mg
	Rabbit - Skin - Mild irritant <u>Duration of treatment/exposure:</u> 24 hours <u>Amount/concentration applied:</u> 500 mg
	Rabbit - Skin - Moderate irritant <u>Amount/concentration applied:</u> 80 mg
CMIT/MIT (3:1)	Human - Skin - Severe irritant

Flügger Floor Paint Epoxy Component B (Bases)

SECTION 11: Toxicological information

Amount/concentration applied: 0.01 %

Conclusion/Summary [Product] : Not available.

Serious eye damage/eye irritation

Product/ingredient name

2-butoxyethanol

Result

Rabbit - Eyes - Moderate irritant

Duration of treatment/exposure: 24 hours

Amount/concentration applied: 100 mg

Rabbit - Eyes - Severe irritant

Amount/concentration applied: 100 mg

Conclusion/Summary [Product] : Not available.

Respiratory corrosion/irritation

Not available.

Conclusion/Summary [Product] : Not available.

Respiratory or skin sensitization

Not available.

Skin

Conclusion/Summary [Product] : Not available.

Respiratory

Conclusion/Summary [Product] : Not available.

Germ cell mutagenicity

Not available.

Conclusion/Summary [Product] : Not available.

Carcinogenicity

Not available.

Conclusion/Summary [Product] : Not available.

Reproductive toxicity

Not available.

Conclusion/Summary [Product] : Not available.

Specific target organ toxicity (single exposure)

Product/ingredient name

bronopol

Result

STOT SE 3, H335 (Respiratory tract irritation)

Specific target organ toxicity (repeated exposure)

Not available.

SECTION 11: Toxicological information

Aspiration hazard

Not available.

Information on likely routes of exposure

Not available.

Symptoms related to the physical, chemical and toxicological characteristics

- Eye contact** : Adverse symptoms may include the following:
pain
watering
redness
- Inhalation** : No specific data.
- Skin contact** : Adverse symptoms may include the following:
pain or irritation
redness
blistering may occur
- Ingestion** : Adverse symptoms may include the following:
stomach pains

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Short term exposure

- Potential immediate effects** : Not available.
- Potential delayed effects** : Not available.

Long term exposure

- Potential immediate effects** : Not available.
- Potential delayed effects** : Not available.

Potential chronic health effects

Not available.

Conclusion/Summary [Product] : Not available.

- General** : No known significant effects or critical hazards.
- Carcinogenicity** : No known significant effects or critical hazards.
- Mutagenicity** : No known significant effects or critical hazards.
- Reproductive toxicity** : No known significant effects or critical hazards.

11.2 Information on other hazards

11.2.1 Endocrine disrupting properties

Not available.

Conclusion/Summary [Product] : The product does not meet the criteria to be considered as having endocrine disrupting properties according to the criteria set out in either Regulation (EC) No. 1907/2006 or Regulation (EC) No 1272/2008.

11.2.2 Other information

Not available.

SECTION 12: Ecological information

12.1 Toxicity

Product/ingredient name	Result
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Flügger Floor Paint Epoxy Component B (Bases)

SECTION 12: Ecological information

2-butoxyethanol	Acute - LC50 - Marine water Crustaceans - Common shrimp, sand shrimp - <i>Crangon crangon</i> 800 mg/l [48 hours] <u>Effect</u>: Mortality Acute - LC50 - Marine water Fish - Inland silverside - <i>Menidia beryllina</i> 1250 ppm [96 hours] <u>Effect</u>: Mortality
bronopol	Acute - EC50 - Fresh water US EPA Algae - Green algae - <i>Desmodesmus subspicatus</i> 0,02 ppm [96 hours] <u>Effect</u>: Population Acute - LC50 - Fresh water US EPA Fish - Bluegill - <i>Lepomis macrochirus</i> <u>Weight</u>: 0,34 g 11,17 ppm [96 hours] <u>Effect</u>: Mortality Acute - EC50 - Fresh water US EPA Daphnia - Water flea - <i>Daphnia magna</i> <u>Age</u>: <24 hours 1,6 ppm [48 hours] <u>Effect</u>: Intoxication Chronic - NOEC US EPA Fish - Rainbow trout,donaldson trout - <i>Oncorhynchus mykiss</i> 1,94 ppm [49 days] <u>Effect</u>: Growth Chronic - NOEC Algae - <i>Pseudokirchneriella subcapitata</i> 0,03 mg/l [72 hours]
CMIT/MIT (3:1)	LC50 Fish - Trout - <i>Oncorhynchus mykiss</i> 0,19 mg/l [96 hours] EC50 Daphnia - Daphnia - <i>Daphnia magna</i> 0,1 mg/l [48 hours] NOEC Fish - Trout - <i>Oncorhynchus mykiss</i> 0,05 mg/l [14 days] NOEC Daphnia - Daphnia - <i>Daphnia magna</i> 0,004 mg/l [21 days]

Conclusion/Summary [Product] : Not available.

12.2 Persistence and degradability

Not available.

SECTION 12: Ecological information

Conclusion/Summary [Product] : Not available.

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
bronopol	-	-	Not readily

12.3 Bioaccumulative potential

Product/ingredient name	LogP _{ow}	BCF	Potential
2-butoxyethanol	0,81	-	Low
bronopol	0,18	3,16	Low
CMIT/MIT (3:1)	0,401	-	Low

12.4 Mobility in soil

Soil/water partition coefficient

Product/ingredient name	logK _{oc}	K _{oc}
2-butoxyethanol	1,8	67,3685
bronopol	1	10,3771

Results of PMT and vPvM assessment

Product/ingredient name	PMT	P	M	T	vPvM	vP	vM
Epoxy resin/polyamine adduct	No	No	No	No	No	No	No
2-butoxyethanol	No	No	No	No	No	No	No
bronopol	No	No	No	No	No	No	No
CMIT/MIT (3:1)	No	No	No	No	No	No	No

Mobility : Not available.

Conclusion/Summary : The product does not meet the criteria to be considered as a PMT or vPvM.

12.5 Results of PBT and vPvB assessment

Regulation (EC) No. 1907/2006 [REACH]

Product/ingredient name	PBT	P	B	T	vPvB	vP	vB
Epoxy resin/polyamine adduct	No	No	No	No	No	No	No
2-butoxyethanol	No	No	No	No	No	No	No
bronopol	No	No	No	No	No	No	No
CMIT/MIT (3:1)	No	No	No	Yes	No	No	No

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

Product/ingredient name	PBT	P	B	T	vPvB	vP	vB
Epoxy resin/polyamine adduct	No	No	No	No	No	No	No
2-butoxyethanol	No	No	No	No	No	No	No
bronopol	No	No	No	No	No	No	No
CMIT/MIT (3:1)	No	No	No	No	No	No	No

Conclusion/Summary : The product does not meet the criteria to be considered as a PBT or vPvB.

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

12.6 Endocrine disrupting properties

Not available.

Conclusion/Summary [Product] : The product does not meet the criteria to be considered as having endocrine disrupting properties according to the criteria set out in either Regulation (EC) No. 1907/2006 or Regulation (EC) No 1272/2008.

SECTION 12: Ecological information

12.7 Other adverse effects

No known significant effects or critical hazards.

SECTION 13: Disposal considerations

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

13.1 Waste treatment methods

Product

Methods of disposal : The generation of waste should be avoided or minimised wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction.

Hazardous waste : Yes.

European waste catalogue (EWC)

Waste code	Waste designation
08 01 11*	Waste paint and varnish containing organic solvents or other hazardous substances

Packaging

Methods of disposal : The generation of waste should be avoided or minimised wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.

Special precautions : This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spill material and runoff and contact with soil, waterways, drains and sewers.

SECTION 14: Transport information

	ADR/RID	IMDG	IATA
14.1 UN number or ID number	Not regulated.	Not regulated.	Not regulated.
14.2 UN proper shipping name	-	-	-
14.3 Transport hazard class (es)	-	-	-
14.4 Packing group	-	-	-
14.5 Environmental hazards	No.	No.	No.

Additional information

IATA : The environmentally hazardous substance mark may appear if required by other transportation regulations.

14.6 Special precautions for user : **Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

Flügger Floor Paint Epoxy Component B (Bases)

SECTION 14: Transport information

14.7 Maritime transport in bulk according to IMO instruments : Not available.

SECTION 15: Regulatory information

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

[EU Regulation \(EC\) No. 1907/2006 \(REACH\)](#)

[Annex XIV - List of substances subject to authorisation](#)

[Annex XIV](#)

None of the components are listed.

[Substances of very high concern](#)

None of the components are listed.

[Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles](#)

Product/ingredient name	%	Designation [Usage]
EPV TINT, component B	≥90	3

Labelling : Not applicable.

[Other EU regulations](#)

Industrial emissions (integrated pollution prevention and control) - Air : Not listed

Industrial emissions (integrated pollution prevention and control) - Water : Not listed

Explosive precursors : Not applicable.

[Ozone depleting substances \(EU 2024/590\)](#)

Not listed.

[Prior Informed Consent \(PIC\) \(649/2012/EU\)](#)

Not listed.

[Persistent Organic Pollutants](#)

Not listed.

[Seveso Directive](#)

This product is not controlled under the Seveso Directive.

[National regulations](#)

[International regulations](#)

[Chemical Weapon Convention List Schedules I, II & III Chemicals](#)

Not listed.

[Montreal Protocol](#)

Not listed.

[Stockholm Convention on Persistent Organic Pollutants](#)

Not listed.

[Rotterdam Convention on Prior Informed Consent \(PIC\)](#)

Not listed.

[UNECE Aarhus Protocol on POPs and Heavy Metals](#)

Not listed.

SECTION 15: Regulatory information

15.2 Chemical safety assessment : Chemical Safety Assessments for all substances in this product are either Complete or Not applicable.

SECTION 16: Other information

✓ Indicates information that has changed from previously issued version.

Abbreviations and acronyms :

- ATE = Acute Toxicity Estimate
- CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No. 1272/2008]
- DMEL = Derived Minimal Effect Level
- DNEL = Derived No Effect Level
- EUH statement = CLP-specific Hazard statement
- N/A = Not available
- PBT = Persistent, Bioaccumulative and Toxic
- PNEC = Predicted No Effect Concentration
- RRN = REACH Registration Number
- SGG = Segregation Group
- vPvB = Very Persistent and Very Bioaccumulative

Procedure used to derive the classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

Classification	Justification
Eye Dam. 1, H318	Calculation method

Full text of abbreviated H statements

H301	Toxic if swallowed.
H302	Harmful if swallowed.
H310	Fatal in contact with skin.
H312	Harmful in contact with skin.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H330	Fatal if inhaled.
H331	Toxic if inhaled.
H335	May cause respiratory irritation.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
EUH071	Corrosive to the respiratory tract.

Full text of classifications [CLP/GHS]

Acute Tox. 2	ACUTE TOXICITY - Category 2
Acute Tox. 3	ACUTE TOXICITY - Category 3
Acute Tox. 4	ACUTE TOXICITY - Category 4
Aquatic Acute 1	SHORT-TERM (ACUTE) AQUATIC HAZARD - Category 1
Aquatic Chronic 1	LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 1
Eye Dam. 1	SERIOUS EYE DAMAGE/EYE IRRITATION - Category 1
Eye Irrit. 2	SERIOUS EYE DAMAGE/EYE IRRITATION - Category 2
Skin Corr. 1C	SKIN CORROSION/IRRITATION - Category 1C
Skin Irrit. 2	SKIN CORROSION/IRRITATION - Category 2
Skin Sens. 1A	SKIN SENSITISATION - Category 1A
STOT SE 3	SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE - Category 3

Product code :
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Notice to reader

SECTION 16: Other information

The information in this Safety Data Sheet is based on the present state of knowledge and current legislation. It provides guidance on health, safety and environmental aspects of the product and should not be construed as any guarantee of technical performance or suitability for particular applications. The product should not be used for purposes other than those shown in Section 1 without first referring to the supplier and obtaining written handling instructions. As the specific conditions of use of the product are outside the supplier's control, the user is responsible for ensuring that the requirements of relevant legislation are complied with. The information contained in this safety data sheet does not constitute the user's own assessment of workplace risks, as required by other health and safety legislation.