## Safety Data Sheet according to Regulation (EC) 'No. 2020/878

















## SECTION 1: Identification of the Substance/Mixture and of the Company/Undertaking

FLOWSHIELD WHG PART A **Revision Date:** 13/02/2023 **Product Identifier** 

**Supersedes Date:** Flowshield WHG Part A New SDS **Product Name:** 

**UFI Code:** WMHP-N0HW-M00V-JKH5

Nanoform:

Relevant identified uses of the substance or mixture and uses

advised against

Manual activities involving hand contact. Widespread use leading to inclusion into/ onto article (indoor). For use by appropriately trained applicators. Roller application or brushing. Low energy spreading of coatings. Advised against: Home DIY applications, because of the health hazards and training required. Component of multicomponent coatings - Industrial and professional use. Advised against: others than recommended

Details of the supplier of the safety data sheet 1.3

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Germany

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This telephone number is available during office hours only

Supplier:

info@alteco-technik.de **Datasheet Produced by:** 

Chemtrec: 1-800-424-9300 for US 1.4 Emergency telephone number: +1 703 5273887 (Outside US)

## **SECTION 2: Hazards Identification**

#### Classification of the substance or mixture 2.1

Classification according to Classification, Labeling & Packaging Regulation (EC) 1272/2008

## HAZARD STATEMENTS

Other EU extensions	EUH205
Skin Irritation, category 2	H315
Skin Sensitizer, category 1	H317
Eye Irritation, category 2	H319
Hazardous to the aquatic environment, Chronic, category 2	H411

#### 2.2 Label elements

Date Printed: 13/02/2023

## Symbol(s) of Product





## Signal Word

Warning

#### Named Chemicals on Label

1,3-bis(2,3-epoxypropoxy)-2,2-dimethylpropane, Bisphenol-F epoxy resin (Epoxy phenol novolac resin)

#### **HAZARD STATEMENTS**

Other EU extensions	EUH205	Contains epoxy constituents. May produce an allergic reaction.
Skin Irritation, category 2	H315	Causes skin irritation.
Skin Sensitizer, category 1	H317	May cause an allergic skin reaction.
Eye Irritation, category 2	H319	Causes serious eye irritation.
Hazardous to the aquatic environment, Chronic, category 2	H411	Toxic to aquatic life with long lasting effects.
PRECAUTION PHRASES		
	P261	Avoid breathing dust/fume/gas/mist/vapours/spray.
	P273	Avoid release to the environment.
	P280	Wear protective gloves/protective clothing/eye protection/ face protection.
	P302+352	IF ON SKIN: Wash with plenty of soap and water.
	P305+351+338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do so. Continue rinsing.
	P333+313	If skin irritation or rash occurs: Get medical advice/attention.
	P391	Collect spillage.
	P501	Dispose of contents/container to waste treatment/disposal facility in accordance with local, state, and federal regulations.

### 2.3 Other hazards

No Information

## Results of PBT and vPvB assessment:

The product does not meet the criteria for PBT/VPvB in accordance with Annex XIII.

Endocrine disrupting properties - Toxicity

Name According to EEC CAS-No.

No Information

Endocrine disrupting properties - Ecotoxicity

Name According to EEC CAS-No.

# No Information

Date Printed: 13/02/2023

## **SECTION 3: Composition/Information On Ingredients**

## 3.1 Substances

Not applicable

## 3.2 Mixtures

## Hazardous ingredients

Name According to EEC EINEC No. CAS-No. REACH Reg No.	<u>%</u>	Classifications	SCL Value: ATE Value: M-Factor:	
Bisphenol-F epoxy resin (Epoxy phenol novolac resin) 500-006-8 9003-36-5 01-2119454392-40	25 - <50	H315-317-319-411  Aquatic Chronic 2, Eye Irrit. 2, Skin Irrit. 2, Skin Sens. 1	SCL Value:  ATE Value:  M-Factor:	-
Benzyl alcohol 202-859-9 100-51-6 01-2119492630-38	2.5 - <10	H302-332  Acute Tox. 4 Inhalation, Acute Tox. 4 Oral	SCL Value:  ATE Value:  M-Factor:	-
Bis(isopropyl)naphthalene 254-052-6 38640-62-9 01-2119565150-48	1.0 - <2.5	H304-410  Aquatic Chronic 1, Asp. Tox. 1	SCL Value:  ATE Value:  M-Factor:	-
1,3-bis(2,3-epoxypropoxy)-2,2-dimethylpropane 241-536-7 17557-23-2 No Information	1.0 - <2.5	H315-317 Skin Irrit. 2, Skin Sens. 1	SCL Value: ATE Value: M-Factor:	-

Additional Information: The text for CLP Hazard Statements shown above (if any) is given in Section 16.

### **SECTION 4: First-aid Measures**

#### 4.1 Description of First Aid Measures

**GENERAL NOTES:** When symptoms persist or in all cases of doubt seek medical advice. Show this safety data sheet to the doctor in attendance. Risk of product entering the lungs on vomiting after ingestion. Remove contaminated clothing and shoes.

**AFTER INHALATION:** Keep respiratory tract clear. Remove person to fresh air. If signs/symptoms continue, get medical attention.

**AFTER SKIN CONTACT:** Use a mild soap if available. Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. If skin irritation persists, call a physician.

**AFTER EYE CONTACT:** Keep eye wide open while rinsing. Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses. If eye irritation persists, consult a specialist.

**AFTER INGESTION:** Gently wipe or rinse the inside of the mouth with water. Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person. If swallowed, seek medical advice immediately and show this container or label.

#### Self protection of the first aider:

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

May cause long-term adverse effects in the aquatic environment.

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

No information available on clinical testing and medical monitoring. Specific toxicological information on substances, if available, can be found in section 11.

## **SECTION 5: Firefighting Measures**

## 5.1 Extinguishing Media:

Carbon Dioxide, Dry Chemical, Foam, Water Fog

FOR SAFETY REASONS NOT TO BE USED: Alcohol, Alcohol based solutions, any other media not listed above.

#### 5.2 Special hazards arising from the substance or mixture

In case of fire hazardous decomposition products may be produced such as: Carbon dioxide (CO2), carbon monoxide (CO), oxides of nitrogen (NOx), dense black smoke.

#### 5.3 Advice for firefighters

Keep containers and surroundings cool with water spray. Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment. Fire will produce dense black smoke containing hazardous combustion products (see section 10). In the event of fire, wear self-contained breathing apparatus. Collect contaminated fire extinguishing water separately. This must not be discharged into drains.

#### **SECTION 6: Accidental Release Measures**

#### 6.1 Personal precautions, protective equipment and emergency procedures

#### 6.1.1 For non-emergency personnel

Ensure adequate ventilation. Use personal protective equipment. Keep people away from and upwind of spill/leak.

#### 6.1.2 For emergency responders

See Section 7, 8 and 10 for further information.

## 6.2 Environmental precautions

Do not allow material to contaminate ground water system. Prevent product from entering drains. May cause long-term adverse effects in the aquatic environment.

#### 6.3 Methods and material for containment and cleaning up

Prevent further leakage or spillage if safe to do so. Contain spillage, soak up with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and transfer to a container for disposal according to local / national regulations (see section 13). Refer to protective measures listed in sections 7 and 8.

#### 6.4 Reference to other sections

**FURTHER INSTRUCTIONS:** Please refer to EU disposal requirements or country specific disposal requirements for this material. See Section 8 and 13 for further information.

### **SECTION 7: Handling and Storage**

#### 7.1 Precautions for safe handling

Wear personal protective equipment. Use only in well-ventilated areas. Do not breathe vapours or spray mist. Avoid contact with skin and eyes.

Repeated or prolonged skin contact may cause skin irritation and/or dermatitis and sensitization of susceptible persons. In the case of sensitisation to any of the ingredients, it is inadvisable to work with the product. Handle in accordance with good industrial hygiene and safety practice. Keep working clothes separately. Keep away from food, drink and animal feedingstuffs. When using, do not eat, drink or smoke. Wash hands and face before breaks and immediately after handling the product.

#### 7.2 Conditions for safe storage, including any incompatibilities

CONDITIONS TO AVOID: Do not freeze.

**STORAGE CONDITIONS:** Keep at temperatures between 5 and 25 °C. Do not freeze. Store at room temperature in the original container. Keep locked up or in an area accessible only to qualified or authorised persons. Keep container closed when not in use. Store in a dry, well ventilated place away from sources of heat, ignition and direct sunlight.

#### 7.3 Specific end use(s)

Component of a resin flooring product. The mixing and application to be in accordance with the technical data sheets.

## **SECTION 8: Exposure Controls/Personal Protection**

#### 8.1 Control parameters

# Ingredients with Occupational Exposure Limits (UK WELS)

<u>Name</u>	CAS-No.		LTEL ppm	STEL ppm	STEL mg/m3	LTEL mg/m3
Bisphenol-F epoxy resin (Epoxy phenol novolac resin)	9003-36-5					
Benzyl alcohol	100-51-6					
Bis(isopropyl)naphthalene	38640-62-9					
1,3-bis(2,3-epoxypropoxy)-2,2-dimethylpropane	17557-23-2					
Name	CAS-No.	OEL Note				
Bisphenol-F epoxy resin (Epoxy phenol novolac resin)	9003-36-5					
Benzyl alcohol	100-51-6					
Bis(isopropyl)naphthalene	38640-62-9					
1,3-bis(2,3-epoxypropoxy)-2,2-dimethylpropane	17557-23-2					

**FURTHER ADVICE:** Refer to the regulatory exposure limits for the workforce enforced in each country. Some components may not have been classified under the EU CLP Regulation.

#### **Chemical Name:**

Bisphenol-F epoxy resin (Epoxy phenol novolac resin)

EC No.:
500-006-8

CAS-No.:
9003-36-5

#### DNELs - Derived no effect level

	Workers					Con	sumers	
Route of	Acute effect	Acute effects	Chronic	Chronic effects	Acute effect	Acute effects	Chronic	Chronic effects
Exposure	local	systemic	effects local	systemic	local	systemic	effects local	systemic
Oral	Not required							6.25 mg/kg bw/d
Inhalation			29.39 mg/m <sup>3</sup>				8.7 mg/m <sup>3</sup>	
Dermal				104.15 mg/kg				62.5 mg/kg bw/d
	_			bw/d				

## PNEC's - Predicted no effect concentration

Environmental protection target	PNEC
Fresh water	0.003 mg/l
Fresh water sediments	0.294 mg/kg
Marine water	0.0003 mg/l
Marine sediments	0.0294 mg/kg
Food chain	
Microorganisms in sewage treatment	10 mg/l
soil (agricultural)	0.237 mg/kg
Air	

#### **Chemical Name:**

Benzyl alcohol

**EC No.: CAS-No.:** 202-859-9 100-51-6

#### DNELs - Derived no effect level

	Workers				Cons	sumers		
Route of	Acute effect	Acute effects	Chronic	Chronic effects	Acute effect	Acute effects	Chronic	Chronic effects
Exposure	local	systemic	effects local	systemic	local	systemic	effects local	systemic
Oral	Not required				20 mg/kg bw/d		4 mg/kg bw/d	
Inhalation	-	110 mg/m <sup>3</sup>	-	22 mg/m³	-	27 mg/m <sup>3</sup>	-	5.4 mg/m <sup>3</sup>
Dermal	-	40 mg/kg bw/d	-	8 mg/kg bw/d	-	20 mg/kg bw/d	-	4 mg/kg bw/d

### PNEC's - Predicted no effect concentration

Environmental protection target	PNEC
Fresh water	1 mg/l
Fresh water sediments	5.27 mg/kg
Marine water	0.1 mg/l
Marine sediments	0.527 mg/kg
Food chain	
Microorganisms in sewage treatment	39 mg/l
soil (agricultural)	0.456 mg/kg
Air	

#### 8.2 Exposure controls

#### **Personal Protection**

**RESPIRATORY PROTECTION:** When workers are facing concentrations above the exposure limit they must use appropriate certified respirators. Wear a positive-pressure supplied-air respirator. In case of insufficient ventilation and where workplace exposure limits may be exceeded, wear suitable respiratory equipment. Respirator with filter for organic vapor. Recommended Filter type: A2, EN 136/140/145/143/149

**EYE PROTECTION:** Eye wash bottle with pure water. Tightly fitting safety goggles. If splashes are likely to occur, wear: Face-shield, tightly fitting safety goggles (EN 166).

HAND PROTECTION: Impervious gloves. Chemical resistant gloves made of butyl rubber or nitrile rubber category III according to EN 374. Take note of the information given by the producer concerning permeability and break through times, and of special workplace conditions (mechanical strain, duration of contact). Long sleeved clothing. Remove and wash contaminated clothing before re-use.

**OTHER PROTECTIVE EQUIPMENT:** No Information

ENGINEERING CONTROLS: As a rule, at least 5 air changes per hour are recommended at the workplace. Avoid contact

with skin, eyes and clothing. Ensure adequate ventilation, especially in confined areas.

## **SECTION 9: Physical and Chemical Properties**

#### 9.1 Information on basic physical and chemical properties

Colour: VARIOUS

Physical State No Information

Odor Not characteristic

Odor threshold Not determined

**pH** Not determined

Melting point / freezing point (°C) Not determined

Boiling point or initial boiling point and

boiling range (°C)

0 - N.D.

Flash Point, (°C) 100

Evaporation rate Not determined Flammability (solid, gas) Not determined

Llower and upper explosive limit Not determined

Vapour Pressure Not determined

Relative vapour density Not determined

Density and/or relative density 1.83 g/cm3

Solubility in / Miscibility with water Not determined

Partition coefficient: n-octanol/water Not determined

Auto-ignition temperature (°C) 167°C

Decomposition temperature (°C)

Not determined

Kinematic viscosity

Not determined

Particle characteristics Not applicable to liquids

9.2 Other information

VOC Content g/l: 0.00

Specific Gravity (g/cm3) 0.120

## **SECTION 10: Stability and Reactivity**

#### 10.1 Reactivity

No reactivity hazards known under normal storage and use conditions.

## 10.2 Chemical stability

No decomposition if stored and applied as directed. Stable under normal conditions.

#### 10.3 Possibility of hazardous reactions

Hazardous polymerisation does not occur.

## 10.4 Conditions to avoid

Do not freeze.

#### 10.5 Incompatible materials

Keep away from oxidising agents, strongly alkaline and strongly acid materials in order to avoid exothermic reactions. Strong oxidizing agents. Copper alloys. Copper. Avoid radical-forming starting agents, peroxides and reactive metals. Halogenated hydrocarbons.

#### 10.6 Hazardous decomposition products

In case of fire **hazardous decomposition products** may be produced such as: Carbon dioxide (CO2), carbon monoxide (CO), oxides of nitrogen (NOx), dense black smoke.

## **SECTION 11: Toxicological information**

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

**Acute Toxicity:** 

Oral LD50: No information available.

Inhalation LC50: No information available.

Dermal LD50: No Information

Irritation: Irritating to eyes and skin.

Corrosivity: No information available.

Sensitization: May cause an allergic skin reaction.

Repeated dose toxicity: No information available.

Carcinogenicity: No information available.

Mutagenicity: No information available.

**Toxicity for reproduction:** No information available.

STOT-single exposure: No information available.

STOT-repeated exposure: No information available.

Aspiration hazard: No information available.

If no information is available above under Acute Toxicity then the acute effects of this product have not been tested. Data on individual components are tabulated below:

CAS-No.	Name According to EEC	Oral LD50	Dermal LD50	Vapor LC50	Gas LC50	Dust/Mist LC50
9003-36-5	Bisphenol-F epoxy resin (Epoxy phenol novolac resin)	>5000 mg/kg (rat) OECD 401	>2000 mg/kg (rat) OECD 402		0.000	0.000
100-51-6	Benzyl alcohol		>2000 mg/kg (rat)			>4178 mg/l (rat)

#### Additional Information:

In the case of sensitisation to any of the ingredients, it is inadvisable to work with the product. Repeated or prolonged skin contact may cause skin irritation and/or dermatitis and sensitization of susceptible persons. Corrosive - causes irreversible eye damage.

## 11.2 Information on other hazards

**Endocrine disrupting properties - Toxicity** 

Name According to EEC CAS-No.

No Information

## **SECTION 12: Ecological Information**

12.1 Toxicity:

EC50 48hr (Daphnia):

IC50 72hr (Algae):

No information

No information

No information

12.2 Persistence and degradability: No information

12.3 Bioaccumulative potential: No information

12.4 Mobility in soil: No information

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12.5 Results of PBT and vPvB

assessment:

The product does not meet the criteria for PBT/VPvB in accordance with Annex XIII.

12.6 Endocrine disrupting properties

Endocrine disrupting properties - Ecotoxicity

Name According to EEC CAS-No.

No Information

12.7 Other adverse effects: No information

CAS-No.	Name According to EEC	EC50 48hr	IC50 72hr	LC50 96hr
9003-36-5	Bisphenol-F epoxy resin (Epoxy phenol novolac resin)	1.6 mg/l	1.8 mg/l (Pseudokirchnerella subcapitata) OECD 201	0.55 mg/l
100-51-6	Benzyl alcohol	230 mg/l	770 mg/l (Pseudokirchneriella)	460 mg/l (Pimephales promelas)
38640-62-9	Bis(isopropyl)naphthalene	No information	No information	No information
17557-23-2	1,3-bis(2,3-epoxypropoxy)-2,2-dimethylpropane	No information	No information	

## **SECTION 13: Disposal Considerations**

13.1 WASTE TREATMENT METHODS: Dispose of as hazardous waste in compliance with local and national regulations.

Container hazardous when empty. Empty containers should be taken to an approved waste handling site for recycling or disposal. The product should not be allowed to enter drains, water courses or the soil.

European Waste Code: No Information

Packaging Waste Code: 150110

## **SECTION 14: Transport Information**

		ADR/RID	ADN	IMDG	IATA
14.1	UN-number or ID number	UN3082	UN3082	UN3082	UN3082
14.2	UN proper shipping name	Environmentally Hazardous substance, Liquid, N.O.S.,Epoxy resin	Environmentally Hazardous substance, Liquid, N.O.S.,Epoxy resin	Environmentally Hazardous substance, Liquid, N.O.S.,Epoxy resin	Environmentally Hazardous substance, Liquid, N.O.S.,Epoxy resin
14.3	Transport Hazard Class(es)	9	9	9	9
14.4	Packing Group	III	III	III	III
14.5	Enviromental Hazards	Marine pollutant	Marine pollutant	Marine pollutant	Marine pollutant

14.6 Special precautions for user Not applicable EmS-No.: F-A, S-F

14.7 Maritime transport in bulk according to IMO

intruments

Not applicable

## **SECTION 15: Regulatory Information**

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

**National Regulations:** 

**Denmark Product Registration Number:** Not available Danish MAL Code: Not available Danish MAL Code - Mixture: Not available Sweden Product Registration Number: Not available **Norway Product Registration Number:** Not available Germany WGK Class: Not available

Covered by Directive 2012/18/EC (Seveso III): Not applicable

Restrictions to product or to substances according to Annex XVII, Regulation (CE) 1907/2006:

Not applicable

Annex XIV, Regulation (CE) 1907/2006 - Authorisation List:

Name According to EEC CAS-No.

Not Applicable

SVHC - Substances of very high concern (Candidate List - Art. 59 REACH):

Name According to EEC CAS-No.

Not Applicable

#### 15.2 **Chemical Safety Assessment:**

No Chemical Safety Assessment has been carried out for this substance/mixture by the supplier.

#### SECTION 16: Other Information

#### Text for CLP Hazard Statements shown in Section 3 describing each ingredient:

H302	Harmful if swallowed.
H304	May be fatal if swallowed and enters airways.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H410	Very toxic to aquatic life with long lasting effects.
H411	Toxic to aquatic life with long lasting effects.

#### Reasons for revision

This Safety Data Sheet (SDS) has been revised to meet the new EU CLP requirements. There have been both formatting and content changes based on the CLP classification (if applicable), please review each section of the SDS for specific changes.

List of References:

This Safety Data Sheet was compiled with data and information from the following sources:

- The Ariel Regulatory Database provided by the 3E Corporation in Copenhagen, Denmark.
- Joint Research Centre in Ispra, Italy.
- Regulation (EC) 1272/2008 with subsequent amendments.
- Regulation (EC) 1272/2006 with subsequent amendments.
- Commission Regulation (EU) 2020/878
- EU Council Decision 2000/532/EC and its Annex entitled "List of Wastes"
- Safety Data Sheet from raw material supplier
- The classification declared in sec. 2.2 is based on the calculation methods set out in Annex I and Annex II of the CLP Reg. 1272/2008 on the composition of the formula.

#### Acronym & Abbreviation Key:

Classification, Labeling & Packaging Regulation CLP

EC European Commission ΕU European Union US United States

CAS Chemical Abstract Service

EINECS European Inventory of Existing Chemical Substances

REACH Registration, Evaluation, Authorization of Chemicals Regulation

GHS Globally Harmonized System of Classification and Labeling of Chemicals

LTEL Long term exposure limit STEL Short term exposure limit
OEL Occupational exposure limit

ppm Parts per million

mg/m3 Milligrams per cubic meter TLV Threshold Limit Value

ACGIH American Conference of Governmental Industrial Hygienists

OSHA Occupational Safety & Health Administration

PEL Permissible Exposure Limits
VOC Volatile organic compounds

g/l Grams per liter

mg/kg Milligrams per kilogram

N/A Not applicable LD50 Lethal dose at 50%

LC50 Lethal concentration at 50%

EC50 Half maximal effective concentration
IC50 Half maximal inhibitory concentration
PBT Persistent bioaccumulative toxic chemical
vPvB Very persistent and very bioaccumulative

EEC European Economic Community

ADR International Transport of Dangerous Goods by Road RID International Transport of Dangerous Goods by Rail

UN United Nations

IMDG International Maritime Dangerous Goods Code
IATA International Air Transport Association

MARPOL International Convention for the Prevention of Pollution From Ships, 1973 as

modified by the Protocol of 1978
International Bulk Container

RTI Respiratory Tract Irritation

NE Narcotic Effects

IMO International Maritime Organization

Note P: The classification as a carcinogen or mutagen need not apply; the substance

contains less than 0,1 % w/w benzene

Note 10: The classification as a carcinogen by inhalation applies only to mixtures in

powder form containing 1 % or more of titanium dioxide which is in the form of

or incorporated in particles with aerodynamic diameter  $\leq$  10  $\mu m$ .

For further information, please contact: Technical Services Department

The information on this sheet corresponds to our present knowledge. It is not a specification and it does not guarantee specific properties. The information is intended to provide general guidance as to health and safety based upon our knowledge of the handling, storage, and use of the product. It is not applicable to unusual or non-standard uses of the product or where instructions and recommendations are not followed.