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



Eillbruck Flowcrete Nullifire Vandex TREMCO Tryvit TNudura

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

1.1	Product Identifier	FLOWSHIELD ESD WHG PART A	Revision Date:	13/02/2023
	Product Name:	Flowshield ESD WHG Part A	Supersedes Date:	New SDS
	UFI Code:	VV4N-K0T7-300E-4KA1 No		
1.2	Nanoform: Relevant identified uses of the		at Widooprood upo looding to incl	lucion into/
1.2	substance or mixture and uses advised against	Manual activities involving hand conta onto article (indoor). For use by appro brushing. Low energy spreading of co because of the health hazards and tra coatings - Industrial and professional	ppriately trained applicators. Roller atings. Advised against: Home DIN ining required. Component of mult	r application or Y applications, ticomponent
1.3	Details of the supplier of the safety	data sheet		
		Alteco Technik GmbH Raiffeisenstrasse 16 D-27239 Twistringen Germany Phone: +49(0) 4243 92950 Fax: +49(0) 4243 929589 This telephone number is available du	ring office hours only	
	Supplier:			
	Datasheet Produced by:	info@alteco-technik.de		
1.4	Emergency telephone number:	Chemtrec: 1-800-424-9300 for US +1 703 5273887 (Outside US)		

2.1 Classification of the substance or mixture

SECTION 2: Hazards Identification

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

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

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>	<u>Classifications</u>	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)

Name	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.:	CAS-No.:
500-006-8	9003-36-5

DNELs - Derived no effect level

		Workers				Consumers			
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 ³				8.7 mg/m ³	
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

		Wo	rkers		Consumers			
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 ³	-	22 mg/m ³	-	27 mg/m ³	-	5.4 mg/m ³
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.

SE	SECTION 9: Physical and Chemical Properties			
9.1	Information on basic physical and chemical properties Colour: VARIOUS			
	Physical State	Liquid		
	Odor	Not characteristic		
	Odor threshold	Not determined		
	рН	Not determined		
	Melting point / freezing point (°C)	Not determined		
	Boiling point or initial boiling point and boiling range (°C)	Not determined		
	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:	May cause skin and eye irritation.
Corrosivity:	No information available.
Sensitization:	May cause skin sensitization.
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):		No information				
	IC50 72hr (Algae):		No information			
	LC5	50 96hr (fish):	No info	ormation		
12.2	Persis	tence and degradability:	No info	ormation		
12.3	Bioaco	cumulative potential:	No info	ormation		
12.4	Mobili	ty in soil:	No info	ormation		
12.5		s of PBT and vPvB sment:	The pro	oduct does not meet the	e criteria for PBT/VPvB	in accordance with Annex XIII.
12.6	Endoc	rine disrupting properties				
	Endocrine disrupting properties - Ecotoxicity					
Name According to EEC			CAS-No.			
No Information						
12.7	Other	adverse effects:	No info	ormation		
<u>CAS-</u>	<u>No.</u>	Name According to EEC		<u>EC50 48hr</u>	<u>IC50 72hr</u>	<u>LC50 96hr</u>
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
100-5	51-6	Benzyl alcohol		230 mg/l	770 mg/l (Pseudokirchneriella)	460 mg/l (Pimephales promelas)
38640	0-62-9	Bis(isopropyl)naphthalene		No information	No information	No information
1755	7-23-2	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 InformationPackaging Waste Code:150110

SECTION 14: Transport Information

		ADR/RID	ADN	IMDG	ΙΑΤΑ
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, Diisopropylnapthalene isomers	Environmentally Hazardous substance, Liquid, N.O.S.,Epoxy resin, Diisopropylnapthale ne isomers	Environmentally Hazardous substance, Liquid, N.O.S.,Epoxy resin, Diisopropylnapthalene isomers	Environmentally Hazardous substance, Liquid, N.O.S.,Epoxy resin, Diisopropylnapthalene isomers
14.3	Transport Hazard Class(es)	9	9	9	9
14.4	Packing Group	Ш	Ш	III	III
14.5	Enviromental Hazards	Marine pollutant	Marine pollutant	Marine pollutant	Marine pollutant

14.6 Special precautions for user EmS-No.: F-A, S-F

Not applicable

14.7 Maritime transport in bulk according to IMO Not applicable intruments

SECTION 15: Regulatory Information

15.1	Safety, health and environmental regulations/legislation for the substance or mixtu National Regulations:		
	Denmark Product Registration Number:	Not available	

Deninark Flouder Registration Number.	NUL avaliable
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:

CAS-No. Name According to EEC

Not Applicable

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

CAS-No. Name According to EEC

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 of the product is based on the calculation methods set out in Annex I and Annex II of the CLP Reg. 1272/2008 on the exact composition of the formula

Acronym & Abbreviation Key:

CLP	Classification, Labeling & Packaging Regulation
EC	European Commission
EU	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

Date Printed: 13/02/2023

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
q/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
IBC	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 µm.

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.