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



Eillbruck Flowcrete, Nullifire Vandex TREMCO Tryvit Nudura

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

1.1	Product Identifier Product Name:	FLOWSEAL EPW HARDENER B (GLOSS & MATT) Flowseal EPW Hardener B (Gloss & Matt)	Revision Date: Supersedes Date:	03/01/2023 25/03/2021		
1.2	UFI Code: Nanoform: Relevant identified uses of the substance or mixture and uses advised against	M831-V0RE-5004-R7R7 No Component of multicomponent industrial coatings - Industrial use. 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. Advised against: others than recommended				
1.3	Details of the supplier of the safety	data sheet				
	Manufacturer:	Tremco CPG Poland Sp. z o. o. Ul. Marywilska 34 03-228 Warszawa Polska				
		Tel· +48 22 879 8907				

Tel: +48 22 879 8907 Fax: +48 22 879 8918 ehs.uk@flowcrete.com www.flowcrete.com.pl/

	Datasheet Produced by:	ehs.uk@flowcrete.com		
1.4	Emergency telephone number:	CHEMTREC +1 703 5273887 (Outside US)		

SECTION 2: Hazards Identification

2.1 Classification of the substance or mixture

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

H318

HAZARD STATEMENTS

Serious Eye Damage, category 1

2.2 Label elements

Symbol(s) of Product



Signal Word Danger

Named Chemicals on Label

Formaldehyde,polymer w/MXDA,bis A,DETA-glycidyl Ph ether reaction prod.,epichlo.,propyl_oxide &TETA

HA	ZARD STATEMENTS				
	rious Eye Damage, category 1 ECAUTION PHRASES	H318	Causes serious eye damage.		
		P280	Wear protective gloves/protective clothing/eye protection/ face protection.		
		P301+310	IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.		
		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.		
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>	Classifications		SCL Value: ATE Value: M-Factor:
Formaldehyde,polymer w/ MXDA,bis A,DETA-glycidyl Ph ether reaction prodepichlopropvl oxide - 238080-05-2 -	10 - <25	H302-318 Acute Tox. 4 Oral, Eye Dam. 1	SCL Value: ATE Value: M-Factor:	-
Titanium dioxide 236-675-5 13463-67-7 01-2119489379-17	2.5 - <10		SCL Value: ATE Value: M-Factor:	-
Alcohols, C12-14, ethoxylated - 68439-50-9 N/A	<0.1	H400-412 Aquatic Acute 1, Aquatic Chronic 3	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: Move to fresh air.

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.

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. Never give anything by mouth to an unconscious person. If swallowed, DO NOT induce vomiting unless directed to do so by medical personnel.

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

No Information

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

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 No Information

5.3 Advice for firefighters

Keep containers and surroundings cool with water spray. Fire will produce dense black smoke containing hazardous combustion products (see section 10). 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

No Information

6.2 Environmental precautions

Do not allow material to contaminate ground water system. Prevent product from entering drains.

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). After cleaning, flush away traces with water. 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.

Handle in accordance with good industrial hygiene and safety practice. Keep working clothes separately. Wash hands before breaks and at the end of workday. Keep away from food, drink and animal feeding stuffs. 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: Avoid temperatures above 40 °C, direct sunlight and contact with sources of heat. **STORAGE CONDITIONS:** 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
Formaldehyde,polymer w/MXDA,bis A,DETA-glycidyl Ph ether reaction prod.,epichlo.,propyl_oxide &TETA	238080-05-2					
Titanium dioxide	13463-67-7					4 10
Alcohols, C12-14, ethoxylated	68439-50-9					
Name	<u>CAS-No.</u>	OEL Note				
Formaldehyde.polymer w/MXDA.bis	238080-05-2					
A,DETA-glycidyl Ph ether reaction prod.,epichlo.,propyl oxide &TETA	230000-03-2					
Titanium dioxide	13463-67-7					
Alcohols, C12-14, ethoxylated	68439-50-9					

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:

Titanium dioxide

EC No.:	CAS-No.:
236-675-5	13463-67-7

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						700 mg/kg/d
Inhalation			10					
Dermal								

PNEC's - Predicted no effect concentration

Environmental protection target	PNEC
Fresh water	0.127
Fresh water sediments	1000
Marine water	1
Marine sediments	100
Food chain	1667
Microorganisms in sewage treatment	100 mg/l
soil (agricultural)	100
Air	

8.2 Exposure controls

Personal Protection

RESPIRATORY PROTECTION: In case of insufficient ventilation wear suitable respiratory equipment. Respirator with a vapor filter.

EYE PROTECTION: Eye wash bottle with pure water. Tightly fitting safety goggles.

HAND PROTECTION: Gloves should be discarded and replaced if there is any indication of degradation or chemical breakthrough. Rubber or plastic gloves. 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.

SEG	SECTION 9: Physical and Chemical Properties				
9.1	Information on basic physical and chemical p Colour:	roperties miscellaneous colours			
	Physical State	Liquid			
	Odor	slight			
	Odor threshold	Not determined			
	рН	Not determined			
	Melting point / freezing point (°C)	Not determined			
	Boiling point or initial boiling point and boiling range (°C)	100 - N.D.			
	Flash Point, (°C)	Not measured			
	Evaporation rate	Not determined			
	Flammability (solid, gas)	Not determined			
	Llower and upper explosive limit	999 - 0			
	Vapour Pressure	Not determined			
	Relative vapour density	Not determined			
	Density and/or relative density	ca. 1.35			
	Solubility in / Miscibility with water	Not determined			
	Partition coefficient: n-octanol/water	Not determined			
	Auto-ignition temperature (°C)	Not determined			
	Decomposition temperature (°C)	Not determined			
	Kinematic viscosity	Not determined			
	Particle characteristics	Not applicable to liquids			
9.2	Other information				
	VOC Content g/I:	<30			
	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 Information

10.3 Possibility of hazardous reactions

Hazardous polymerisation does not occur.

10.4 Conditions to avoid

Avoid temperatures above 40 °C, direct sunlight and contact with sources of heat.

10.5 Incompatible materials

Incompatible with strong acids and oxidizing agents.

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
Inhalation LC50:	No Information
Dermal LD50:	No Information
Irritation:	No information available.
Corrosivity:	Causes serious eye damage.
Sensitization:	No information available.
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
238080-05-2	Formaldehyde,polymer w/ MXDA,bis A,DETA-glycidyl Ph ether reaction prod.,epichlo.,propyl_oxide &TETA		>2000 mg/kg (rabbit)		0.000	0.000
13463-67-7	Titanium dioxide	10000 mg/kg (rat)			0.000	0.000
68439-50-9	Alcohols, C12-14, ethoxylated	1 >2000 mg/kg (rat)			0.000	0.000

Additional Information:

This product may contain Titanium Dioxide, which is listed by IARC as possibly carcinogenic to humans (Group 2B). This listing is based on inadequate evidence of carcinogenicity in humans and sufficient evidence in experimental animals. This classification is relevant when exposed to titanium dioxide in dust or powder form only, including cured product that is subject to sanding, grinding, cutting, or other surface preparation activities.

CAS-No.

11.2 Information on other hazards

Endocrine disrupting properties - Toxicity

Name According to EEC

No Information

SECTION 12: Ecological Information

12.1 Toxicity:

		· · ·					
EC50 48hr (Daphnia):		No info	No information				
	IC50 72hr (Algae):		No infe	No information			
	LC5	60 96hr (fish):	No infe	ormation			
12.2	Persis	tence and degradability:	No info	No information			
12.3	Bioaco	cumulative potential:	No information				
12.4	Mobili	ty in soil:	No information				
12.5	I2.5 Results of PBT and vPvB assessment:		The product does not meet the criteria for PBT/VPvB in accordance with Annex XIII.				
12.6	12.6 Endocrine disrupting properties						
	Endocrine disrupting properties - Ecotoxicity						
	Name According to EEC 0		CAS-No.				
No Information							
12.7	Other	adverse effects:	No inf	ormation			
12.7	Other			ormation			
<u>CAS-</u>	<u>No.</u>	Name According to EEC		<u>EC50 48hr</u>	<u>IC50 72hr</u>	<u>LC50 96hr</u>	
23808	30-05-2	Formaldehyde,polymer w/MXDA,bis A glycidyl Ph ether reaction prod.,epichlo.,propyl_oxide &TETA	,DETA-	No information	No information	No information	
13463-67-7		7 Titanium dioxide		No information	No information		
68439	9-50-9	Alcohols, C12-14, ethoxylated		No information	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:	080119*
Packaging Waste Code:	150110*

SECTION 14: Transport Information

		ADR/RID	ADN	IMDG	ΙΑΤΑ
14.1	UN-number or ID number	No Information	No Information	No Information	No Information
14.2	UN proper shipping name	Not regulated for transport according to U.S. DOT, ADR/RID, IMDG, and IATA regulations.	Not regulated for transport according to U.S. DOT, ADR/ RID, IMDG, and IATA regulations.	Not regulated for transport according to U.S. DOT, ADR/RID, IMDG, and IATA regulations.	Not regulated for transport according to U.S. DOT, ADR/RID, IMDG, and IATA regulations.
14.3	Transport Hazard Class(es)	No Information	No Information	No Information	No Information
14.4	Packing Group	No Information	No Information	No Information	No Information
14.5	Enviromental Hazards	No Information	No Information	No Information	No Information

14.6	Special precautions for user	Not applicable
	EmS-No.:	Not applicable
14.7	Maritime transport in bulk according to IMO	Not applicable

Maritime transport in bulk according to IMO 14.7 intruments

SECTION 15: Regulatory Information

15.1	.1 Safety, health and environmental regulations/legislation for the substance or m		
	National Regulations:		

Denmark Product Registration Number:	PR-nr. 894228
Danish MAL Code:	00-3(1993)
Danish MAL Code - Mixture:	00-5(1993)
Sweden Product Registration Number:	Not available
Norway Product Registration Number:	24061
Germany WGK Class:	Not available
Directive 2004/42/CE :	<30
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.
H318	Causes serious eye damage.
H400	Very toxic to aquatic life.
H412	Harmful to aquatic life with long lasting effects.

Reasons for revision

Substance and/or Product Properties Changed in Section(s):

- 01 Identification
- 02 Hazard Identification
- 03 Composition/Information On Ingredients
- 08 Exposure Controls/Personal Protection
- 09 Physical and Chemical Properties
- 11 Toxicological Information
- 12 Ecological Information
- 14 Transportation Information

15 - Regulatory Information Substance CAS Number Changed

Revision Statement(s) Changed

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
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
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.