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



illbruck Flowcrete, **Nullifire** Vandex **TREMCO Dryvit Nudura**

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

1.1	Product Identifier Product Name:	FLOWCOAT PA302 PART A Flowcoat PA302 Part A	Revision Date: Supersedes Date:	01/02/2023 05/03/2021		
1.2	UFI Code: Nanoform: Relevant identified uses of the substance or mixture and uses advised against	3DH1-A0C5-000U-YFW3 No Manual activities involving hand contact. Widespread use leading to inclusion into/ onto article (indoor). For use by appropriately trained applicators. Roller application brushing. Low energy spreading of coatings. Advised against: Home DIY application because of the health hazards and training required. Component of multicomponent coatings - Industrial and professional use. Advised against: others than recommende				
1.3	Details of the supplier of the safety Manufacturer:					
		Tel: +48 22 879 8907				

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

SECTION 2: Hazards Identification

2.1 Classification of the substance or mixture

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

HAZARD STATEMENTS

Skin Sensitizer, category 1	H317
Hazardous to the aquatic environment, Chronic, category 3	H412

2.2 Label elements

Symbol(s) of Product



Signal Word

Warning

Named Chemicals on Label

Tetraethyl N,N'-(methylenedicyclohexane-4,1-diyl)bis-dl-aspartate

HAZARD STATEMENTS

Skin Sensitizer, category 1 Hazardous to the aquatic environment, Chronic, category 3 PRECAUTION PHRASES	H317 H412	May cause an allergic skin reaction. Harmful to aquatic life with long lasting effects.
	P261 P273 P280	Avoid breathing dust/fume/gas/mist/vapours/spray. Avoid release to the environment. Wear protective gloves/protective clothing/eye protection/ face protection.
	P302+352 P333+313 P501	IF ON SKIN: Wash with plenty of soap and water. If skin irritation or rash occurs: Get medical advice/attention. 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

CAS-No.

Endocrine disrupting properties - Ecotoxicity

Name According to EEC

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:	
Tetraethyl N,N'- (methylenedicyclohexane-4,1- diyl)bis-dl-aspartate 429-270-1 136210-30-5 01-0000017556-64	75-100	H317-412 Aquatic Chronic 3, Skin Sens. 1	SCL Value: ATE Value: M-Factor:	-
Polyalkyleneoxide modified Heptamethyltrisiloxane 608-078-3 27306-78-1 No Information	0.1 - <1.0	H319-332-411 Acute Tox. 4 Inhalation, Aquatic Chronic 2, Eye Irrit. 2	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. Remove contaminated clothing and shoes.

AFTER INHALATION: Move to fresh air. Consult a physician after significant exposure. 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. Do NOT use solvents or thinners. **AFTER EYE CONTACT:** Consult a physician. Rinse thoroughly with plenty of water, also under the eyelids. Remove contact lenses. In case of eye contact, remove contact lens and rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.

AFTER INGESTION: Gently wipe or rinse the inside of the mouth with water. Do NOT induce vomiting. 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

May cause damage to organs through prolonged or repeated exposure. Harmful by inhalation. Irritating to respiratory system. Irritating to eyes and skin. May cause sensitization by inhalation and skin contact.

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

FOR SAFETY REASONS NOT TO BE USED: Do not use a solid water stream as it may scatter and spread fire. Alcohol, Alcohol based solutions, any other media not listed above.

5.2 Special hazards arising from the substance or mixture

Carbon monoxide, carbon dioxide, nitrogen oxide, cyanides, isocyanate vapours.

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). In the event of fire, wear self-contained breathing apparatus. Hazardous decomposition products formed under fire conditions. Collect contaminated fire extinguishing water separately. This must not be discharged into drains. Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide. Do not allow run-off from fire fighting to enter drains or water courses.

SECTION 6: Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures

6.1.1 For non-emergency personnel

Avoid contact with skin, eyes and clothing. For personal protection see section 8.2. 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. Local authorities should be advised if significant spillages cannot be contained. Discharge into the environment must be avoided. 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. Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas.

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

Persons susceptible to skin sensitisation problems or asthma, allergies, chronic or recurrent respiratory disease should not be employed in any process in which this preparation is being used. Provide sufficient air exchange and/or exhaust in work rooms. Wear personal protective equipment. Use only in well-ventilated areas. Do not breathe vapours or spray mist. Avoid contact with skin and eyes. Protect from frost, heat and sunlight. Apply technical measures to comply with the occupational exposure limits (see section 8).

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. 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. Avoid contact with the skin and the eyes.

7.2 Conditions for safe storage, including any incompatibilities

CONDITIONS TO AVOID: Avoid temperatures above 30 °C, direct sunlight and contact with sources of heat. Heat, flames and sparks. Avoid moisture. Do not freeze.

STORAGE CONDITIONS: Keep at temperatures between 5 and 25 °C. Do not freeze. Keep containers tightly closed in a dry, cool and well-ventilated place. 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 multicomponent coatings. 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> Tetraethyl N.N'-	<u>CAS-No.</u> 136210-30-5	LTEL ppm	STEL ppm	STEL mg/m3	LTEL mg/m3
(methylenedicyclohexane-4,1-diyl)bis-dl- aspartate Polyalkyleneoxide modified	27306-78-1				
Heptamethyltrisiloxane					
Name	CAS-No. OEL Note				
Tetraethyl N,N'- (methylenedicyclohexane-4,1-diyl)bis-dl- aspartate	136210-30-5				
Polyalkyleneoxide modified Heptamethyltrisiloxane	27306-78-1				

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:

EC No.: CAS-No.:

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							
Inhalation								

Dermal

PNEC's - Predicted no effect concentration

Environmental protection target	PNEC
Fresh water	
Fresh water sediments	
Marine water	
Marine sediments	
Food chain	
Microorganisms in sewage treatment	
soil (agricultural)	
Air	

8.2 Exposure controls

Personal Protection

RESPIRATORY PROTECTION: When workers are facing concentrations above the exposure limit they must use appropriate certified respirators. In case of insufficient ventilation wear suitable respiratory equipment. Wear a positive-pressure supplied-air respirator. Respirator with filter for organic vapor.

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

HAND PROTECTION: Gloves should be discarded and replaced if there is any indication of degradation or chemical breakthrough. Protective 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. Wear rubber gloves. Protective gloves complying with EN 374: Viton®, Neoprene, Nitril rubber, Butyl rubber.

OTHER PROTECTIVE EQUIPMENT: Ensure that eyewash stations and safety showers are close to the workstation location.

ENGINEERING CONTROLS: At temperatures below 30°C, provide a good standard of general ventilation. At temperatures over 30°C - and always if sprayed - exhaust ventilation is required. Avoid contact with skin, eyes and clothing. Ensure adequate ventilation, especially in confined areas.

SE	SECTION 9: Physical and Chemical Properties					
9.1	1 Information on basic physical and chemical properties Colour: Colourless					
	Physical State	Liquid				
	Odor	Mild				
	Odor threshold	Not determined				
	рН	Not determined				
	Melting point / freezing point (°C)	Not determined				
	Boiling point or initial boiling point and boiling range (°C)	> 200°C / 392°F - N.D.				
	Flash Point, (°C)	70				
	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	1.3 g/cm3				
	Solubility in / Miscibility with water	Insoluble				
	Partition coefficient: n-octanol/water	Not determined				
	Auto-ignition temperature (°C)	Not determined				
	Decomposition temperature (°C)	Not determined				
	Kinematic viscosity	ca. 600 mPa.s (20°C)				
	Particle characteristics	Not applicable to liquids				
9.2	Other information					
	VOC Content g/l:	No Information				
	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

Stable under normal conditions.

10.3 Possibility of hazardous reactions

Amines and alcohols cause exothermic reactions. Preparation reacts slowly with water resulting in evolution of CO2.

10.4 Conditions to avoid

Avoid temperatures above 30 °C, direct sunlight and contact with sources of heat. Heat, flames and sparks. Avoid moisture. Do not freeze.

10.5 Incompatible materials

Keep away from oxidising agents, strongly acid or alkaline materials, as well as of amines, alcohols and water.

10.6 Hazardous decomposition products

In case of fire **hazardous decomposition products** may be produced such as: Carbon monoxide, carbon dioxide and unburned hydrocarbons (smoke). Preparation reacts slowly with water resulting in evolution of CO2. Evolution of CO2 in closed containers causes overpressure and produces a risk of bursting.

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:	No information available.
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
136210-30-5	Tetraethyl N,N'- (methylenedicyclohexane-4,1 -diyl)bis-dl-aspartate	>2000 mg/kg (rat)	>2000 mg/kg (rat)	>4224 mg/m3, 4 hr. (rat)	0.000	0.000

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. 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.

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 No information LC50 96hr (fish): 12.2 Persistence and degradability: No information 12.3 Bioaccumulative potential: No information 12.4 Mobility in soil: No information Results of PBT and vPvB 12.5 The product does not meet the criteria for PBT/VPvB in accordance with Annex XIII. assessment: 12.6 Endocrine disrupting properties Endocrine disrupting properties - Ecotoxicity CAS-No. Name According to EEC No Information 12.7 Other adverse effects: No information CAS-No. Name According to EEC IC50 72hr EC50 48hr LC50 96hr Tetraethyl N,N'-(methylenedicyclohexane-4,1-136210-30-5 88.6 mg/l 113 mg/l 66 mg/l (danio rerio) diyl)bis-dl-aspartate Polyalkyleneoxide modified 27306-78-1 No information No information 6 mg/l (Bluegill sunfish) Heptamethyltrisiloxane

SECTION 13: Disposal Considerations

13.1 WASTE TREATMENT METHODS: Dispose of waste material at an approved hazardous waste treatment/disposal facility in accordance with applicable local state, and federal regulations. Do not dispose of waste with normal garbage, or to sewer systems. Contaminated packaging to be disposed of as product. If recycling is not practicable, dispose of in compliance with local regulations. 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:	080111
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

14.7 Maritime transport in bulk according to IMO intruments

SECTION 15: Regulatory Information

15.1	Safety, health and environmental regulations/legislation for the substance or mixt 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:	1	
	Directive 2004/42/CE : Covered by Directive 2012/18/EC (Seveso III):	Not available 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:

May cause an allergic skin reaction.
Causes serious eye irritation.
Harmful if inhaled.
Toxic to aquatic life with long lasting effects.
Harmful to aquatic life with long lasting effects.

Reasons for revision

Revision Description Changed Composition Information Changed 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 14 - Transportation Information 15 - Regulatory Information 15 - Regulatory Information Substance Chemical Name Changed 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 Long term exposure limit
LTEL STEL	
OEL	Short term exposure limit
	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/1	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.