

Trade name: TYVcure 3PX A

According to Regulation (EC)
No 1907/2006 and
Regulation (EU) 2020/878

Date of print: 13/07/2023
Date of issue: 01/06/2023
Version: 1.0 / EN

SECTION 1: Identification of the substance/mixture and of the company/undertaking**1.1. Product identifier**

TYVcure 3PX A

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

"A" component for water glass – polyisocyanate based two-component synthetic resin. The synthetic resin (components "A" + "B") is used for the lining of sewer pipes and manholes. The application has to be carried out under professional, industrial conditions by persons having proper previous training.

1.3. Details of the supplier of the safety data sheet

Producer/Supplier:

Polinvent Ltd.

Street/POB:

Bánki Donát u. 22.

Postcode/City/Country:

H-2360 Gyál, Hungary

**E-mail address for a competent person
responsible for the safety data sheet:**

info@polinvent.com

Phone:

+36-30-734-4525 (8:00-16:00 CET)

1.4. Emergency telephone number

Regional Medicines and Poisons Information Centre NI, Belfast
Tel.: +44 844 892 0111 (24 hrs)

SECTION 2: Hazards identification**2.1. Classification of the substance or mixture****Classification according to Regulation (EC) No 1272/2008 (CLP)**

Hazard classes / categories	Hazard statements
Skin Irrit. 2	H315 Causes skin irritation.
Eye Dam. 1	H318 Causes serious eye damage.

2.2. Label elements**Labelling according to Regulation (EC) No 1272/2008 (CLP)**

Hazard pictograms:



Signal word: Danger

Hazard statements:

H315 Causes skin irritation.
H318 Causes serious eye damage.

Precautionary statements:

P262 Do not get in eyes, on skin, or on clothing.
P280 Wear protective gloves/protective clothing/eye protection/face protection.

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P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Hazard determining component(s) for labelling:

Silicic acid, sodium salt

2.3. Other hazards

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, Annex XIII.

SECTION 3: Composition/information on ingredients**3.2. Mixtures**

Chemical characterization

<i>Name</i>	<i>EC No.</i>	<i>CAS No.</i>	<i>REACH Reg. No.</i>	<i>Content (%)</i>	<i>Classification according to Regulation (EC) No 1272/2008 (CLP)</i>	
					<i>Hazard categories¹</i>	<i>H-phrase(s)¹</i>
Silicic acid, sodium salt (Molar ratio Na ₂ O: SiO ₂ = 1 : > 1.6 - < 2.6)	215-687-4	1344-09-8	01-2119448725-31	25-50	Skin Irrit. 2 Eye Dam. 1	H315 H318
Water	231-791-2	7732-18-5	—	50-75	—	—

¹ – See Section 16 for the full text of the abbreviations declared above.

SECTION 4: First aid measures**4.1. Description of first aid measures**

General information:

No special measures necessary. When in doubt or if symptoms are observed, get medical advice. First aid responders should pay attention to self-protection.

4.1.1. Inhalation:

Remove to fresh air. Obtain medical attention if breathing difficulty persists.

4.1.2. Skin contact:

Remove contaminated, saturated clothing immediately. After contact with skin, wash immediately with plenty of water and soap. In the event of skin irritation take medical treatment.

4.1.3. Eye contact:

Rinse immediately carefully and thoroughly with eye bath or water. Remove contact lenses, if present and easy to do. Continue rinsing. Consult an ophthalmologist.

4.1.4. Ingestion:

Immediately rinse mouth and drink plenty of water. Do not induce vomiting. Never give anything by mouth to an unconscious person or a person with cramps. Call a physician immediately.

4.2. Most important symptoms and effects, both acute and delayed

No symptoms known.

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

Hints for the physician/dangers: The product contains alkali silicate. After swallowing and vomiting aspiration into lung is possible, which can cause chemical pneumonia or asphyxia.

SECTION 5: Firefighting measures

5.1. Extinguishing media

The product itself is non-combustible. Adapt fire extinguishing measures to surrounding areas.

Suitable extinguishing media: water spray, carbon dioxide, dry chemical extinguishing agent (powder), foam

Non-suitable extinguishing media: full water jet

5.2. Special hazards arising from the substance or mixture

None known.

5.3. Advice for firefighters

Special protective equipment: Use suitable breathing apparatus. In case of fire and/or explosion do not breathe fumes.

Further information: Fire in vicinity poses risk of pressure build-up and burst. Containers at risk from fire should be cooled with water spray. Fire residues and contaminated extinguishing water should be disposed of in accordance with local authority regulations. Carbon dioxide should be applied carefully in confined spaces since it can displace oxygen.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Use personal protective clothing. Avoid contact with skin, eyes, and clothing. High risk of slipping due to leakage/spillage of product.

6.2. Environmental precautions

Do not allow to enter drains or waterways. Prevent spread over a wide area (e.g. by containment or oil barriers).

6.3. Methods and material for containment and cleaning up

Take up with absorbent material (e.g. sand, diatomaceous earth, universal binder). Rinse away rest with plenty of water. Dispose according to authority regulations.

6.4. Reference to other sections

Safe handling: see Section 7.

Personal protective equipment: see Section 8.

Disposal: see Section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Observe the usual precautions for handling chemicals. Open and handle container with care. Avoid contact with skin, eyes and clothing. Do not breathe aerosol. Wear personal protective equipment. The product is not combustible or explosive, but heating leads to pressure build-up and risk of burst.

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7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels: Keep only in the original container. Keep container tightly closed. Provide adequate protection against leakage, e.g. with the aid of collection trays or lowered areas. Provide a solvent-resistant and solid floor.

Further information on storage conditions:

Protect from frost.

Recommended storage temperature:

Between +5 and +45 °C.

Storing together hints:

Keep away from food, drink, and feeding stuff. Do not store with acids.

Storage stability:

Under correct storing conditions the product is stable for at least 12 months.

7.3. Specific end use(s)

Restricted to professional users.

SECTION 8: Exposure controls/personal protection**8.1. Control parameters**

Limit values according to REACH registration:

DNEL for workers: 5.61 mg/m³ (inhalation); 1.59 mg/kg bw/day (dermal)

PNEC for freshwater: 7.5 mg/L, for sewage treatment plant: 348 mg/L

8.2. Exposure controls

General protective and hygiene measures:

Observe the usual precautions when handling chemicals. Avoid contact with skin and eyes. Do not breathe aerosol. Do not eat, drink or smoke during working time. Take off immediately all contaminated clothing and wash before reuse. Hands and face should be washed before breaks and at the end of the shift. Take a shower, if necessary. Apply skin care products after work.

Respiratory protection:

Usually no personal respiratory protection is needed. It is only required when the exposure limit value is exceeded, or in the event of aerosol/mist formation. Suitable respiratory protection apparatus: P2 particle filter device (DIN EN 143).

Hand protection:

Tested protective gloves must be worn (DIN EN 374).

Suitable material: NBR (nitrile rubber), butyl rubber.

Thickness \geq 0,4 mm, breakthrough time (maximum wearing time) \geq 480 min.

Eye protection:

Observe the wear time limits as specified by the manufacturer.

Body protection:

Safety glasses with side protection (DIN EN 166).

Environmental exposure controls:

Clothing as usual in the chemical industry.

See Section 7. No additional measures necessary.

SECTION 9: Physical and chemical properties**9.1. Information on basic physical and chemical properties**

a) Appearance:

liquid, clear, colourless to slightly yellow

b) Odour:

odourless

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c) Odour threshold:	not applicable
d) pH-value:	13-14
e) Melting point/freezing point:	no data
f) Boiling range:	> 100 °C
g) Flash point:	does not ignite
h) Evaporation rate:	no data
i) Flammability (solid, gaseous):	not applicable (liquid)
j) Ignitable, explosive range:	not applicable
k) Vapour pressure:	no data
l) Vapour density:	no data
m) Density:	1.5 ± 0.1 g/cm ³ (25 °C)
n) Solubility:	completely miscible with water
o) Partition coefficient n-octanol/water:	not applicable
p) Self-ignition temperature:	not applicable
q) Decomposition temperature:	not applicable
r) Dynamic viscosity:	400 ± 50 mPa.s (25 °C)
s) Explosive properties:	non-explosive
t) Oxidizing properties:	non-oxidizing

9.2. Other information

Solids content: ca. 46%.

SECTION 10: Stability and reactivity

10.1. Reactivity

Under normal conditions of storage and use, hazardous reactions will not occur.

10.2. Chemical stability

Under normal conditions of storage and use, hazardous reactions will not occur.

10.3. Possibility of hazardous reactions

Under normal conditions of storage and use, hazardous reactions will not occur.

10.4. Conditions to avoid

Protect from frost.

10.5. Incompatible materials

Substances to avoid: acids. Reacts with metals like aluminium, tin, zinc under evolution of hydrogen and heat.

10.6. Hazardous decomposition products

No known hazardous decomposition products.

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SECTION 11: Toxicological information**11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008**

11.1.1. Acute toxicity

Based on available data, the classification criteria are not met.

CAS No.	Chemical name				
	Exposure route	Dose	Species	Source	Method
1344-09-8	Silicic acid, sodium salt (Molar ratio $\text{Na}_2\text{O} : \text{SiO}_2 = 1 : > 1.6 - \leq 2.6$)				
	oral	LD50 > 2000 mg/kg	Rat	IUCLID	
	dermal	LD50 > 5000 mg/kg	Rat	IUCLID	

11.1.2. Irritation/Corrosion

Causes skin irritation. Causes serious eye damage.

11.1.3. Sensitisation

Based on available data, the classification criteria are not met.

11.1.4. Germ cell mutagenicity

Based on available data, the classification criteria are not met.

11.1.5. Carcinogenicity

Based on available data, the classification criteria are not met.

11.1.6. Reproductive toxicity

Based on available data, the classification criteria are not met.

11.1.7. STOT – single exposure

Based on available data, the classification criteria are not met.

11.1.8. STOT – repeated exposure

Based on available data, the classification criteria are not met.

11.1.9. Aspiration hazard

Based on available data, the classification criteria are not met.

11.2. Information on other hazards

No data available.

SECTION 12: Ecological information**12.1. Toxicity**

The product has not been tested.

CAS No.	Chemical name					
	Aquatic toxicity	Dose	Time	Species	Source	Method
1344-09-8	Silicic acid, sodium salt (Molar ratio $\text{Na}_2\text{O} : \text{SiO}_2 = 1 : > 1.6 - \leq 2.6$)					
	Acute fish toxicity	LC50 1108 mg/l	96 h	Brachydanio rerio (zebrafish)	IUCLID	
	Acute algae toxicity	ErC50 207 mg/l	72 h	Scenedesmus subspicatus	IUCLID	
	Acute crustacea toxicity	EC50 1700 mg/l	48 h	Daphnia magna (big water flea)	IUCLID	

12.2. Persistence and degradability

The product has not been tested.

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12.3. Bioaccumulative potential

The product has not been tested.

12.4. Mobility in soil

The product has not been tested.

12.5. Results of PBT and vPvB assessment

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, Annex XIII.

12.6. Endocrine disrupting properties

No data available.

12.7. Other adverse effects

The product is an alkali. Do not allow uncontrolled discharge of product into the environment. It must be prevented from entering the soil, surface waters, and canals. Before discharge into sewage plants the product normally needs to be neutralised.

SECTION 13: Disposal considerations**13.1. Waste treatment methods**

Advice on disposal:

Dispose according to legislation. Consult the appropriate local waste disposal expert about waste disposal.

Waste disposal number of waste
from residues/unused products:

060205 WASTES FROM INORGANIC CHEMICAL PROCESSES; wastes from the MFSU of bases; other bases; hazardous waste

Contaminated packaging:

Handle contaminated packaging in the same way as the substance itself. Packaging which cannot be properly cleaned must be disposed of. Non-contaminated and completely emptied packaging may be recycled. Do not mix with other wastes.

SECTION 14: Transport information

Land transport (ADR/RID) / Inland waterways transport (ADN) / Marine transport (IMDG) / Air transport (ICAO-TI/IATA-DGR)

14.1. UN number or ID number

No dangerous good in sense of this transport regulation.

14.2. UN proper shipping name

No dangerous good in sense of this transport regulation.

14.3. Transport hazard class(es)

No dangerous good in sense of this transport regulation.

14.4. Packing group

No dangerous good in sense of this transport regulation.

14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: no

Danger releasing substance: No dangerous good in sense of this transport regulation.

14.6. Special precautions for user

No dangerous good in sense of this transport regulation.

14.7. Maritime transport in bulk according to IMO instruments

No dangerous good in sense of this transport regulation.

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SECTION 15: Regulatory information

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

EU regulatory information

2010/75/EU (VOC): 0%

Information according to 2012/18/EU (SEVESO III): Not subject to 2012/18/EU (SEVESO III)

Additional information

The product does not contain substances of very high concern (SVHC).

National regulatory information

Water contaminating class (D): 1 – slightly water contaminating

15.2. Chemical safety assessment

In accordance with REACH chemical safety assessment has not been carried out for the product.

SECTION 16: Other information

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material. The information is based on present level of our knowledge. It does not, however, give assurances of product properties and establishes no contract legal rights.

16.1. Indication of changes

This is the first edition of the safety data sheet.

16.2. Abbreviations and acronyms

bw: bodyweight

CAS No.: Chemical Abstracts Service number

CLP: Regulation on Classification, Labelling and Packaging

DNEL: Derived no effect level

EC: European Commission

EC No.: EINECS and ELINCS number

EC50: Half maximal effective concentration

ErC50: EC50 based on growth rate

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

EU: European Union

LC50: Lethal concentration, 50%

LD50: Median lethal dose

MFSU: Manufacture, formulation, supply, and use

PBT: Persistent, Bioaccumulative and Toxic

PNEC: Predicted No Effect Concentration

REACH: The Registration, Evaluation, Authorisation and Restriction of Chemicals (EU regulation)

SVHC: Substances of Very High Concern

SAFETY DATA SHEET



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VOC: Volatile Organic Compound

vPvB: Very Persistent and Very Bioaccumulative

H-Phrases

H315 Causes skin irritation.
H318 Causes serious eye damage.

P-Phrases

P262 Do not get in eyes, on skin, or on clothing.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Hazard classes

Eye Dam. Serious eye damage
Skin Irrit. Skin irritation