Printing date 27.09.2021 Version number 3 (replaces version 2) Revision: 27.09.2021

SECTION 1: Identification of the substance/mixture and of the company/undertaking

- · 1.1 Product identifier
- · Trade name SILAN VERFESTIGUNGSHARZ MS-X
- · 1.2 Relevant identified uses of the substance or mixture and uses advised against No further relevant information available.
- · Application of the substance / the mixture Coating material
- · 1.3 Details of the supplier of the safety data sheet
- Manufacturer/Supplier:

MUREXIN GmbH

Franz v. Furtenbachstr. 1 A-2700 Wiener Neustadt Tel.: +43 (0)2622/27401

- · Informing department: chemikalieninfo@murexin.com
- · 1.4 Emergency telephone number:

UK National poisons Emergency number.: +44 (0) 870 600 6266

SECTION 2: Hazards identification

- · 2.1 Classification of the substance or mixture
- Classification according to Regulation (EC) No 1272/2008



Eye Dam. 1 H318 Causes serious eye damage.

- · 2.2 Label elements
- · Labelling according to Regulation (EC) No 1272/2008

The product is classified and labelled according to the CLP regulation.

· Hazard pictograms



GHS05

- · Signal word Danger
- · Hazard-determining components of labelling:

3-(trimethoxysilyl)propylamine

· Hazard statements

H318 Causes serious eye damage.

· Precautionary statements

P101 If medical advice is needed, have product container or label at hand.

P102 Keep out of reach of children.

P103 Read carefully and follow all instructions.
P280 Wear eye protection / face protection.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact

lenses, if present and easy to do. Continue rinsing.

P310 Immediately call a POISON CENTER/doctor.

Additional information:

Contains Bis(1,2,2,6,6-pentamethyl-4-piperidyl)sebacat. May produce an allergic reaction.

- 2.3 Other hazards
- · Results of PBT and vPvB assessment
- · **PBT:** Not applicable.
- · vPvB: Not applicable.

GB

Printing date 27.09.2021 Version number 3 (replaces version 2) Revision: 27.09.2021

Trade name SILAN VERFESTIGUNGSHARZ MS-X

(Contd. of page 1)

SECTION 3: Composition/information on ingredients

- · 3.2 Mixtures
- Description: Mixture consisting of the following components with harmless additives.

· Dangerous components:		
CAS: 35435-21-3 EINECS: 252-558-1 Reg.nr.: 01-2119555666-27- 0000	Triethoxy(2,4,4-trimethylpentyl)silan Flam. Liq. 3, H226	10-25%
CAS: 13822-56-5 EINECS: 237-511-5	3-(trimethoxysilyl)propylamine Eye Dam. 1, H318 Skin Irrit. 2, H315	2.5-5%
CAS: 2996-92-1 EINECS: 221-066-9 Reg.nr.: 01-2119964479-19- 0001	Trimethoxyphenylsilan Flam. Liq. 3, H226 STOT RE 2, H373 Acute Tox. 4, H302	1-2.5%
CAS: 6674-22-2 EINECS: 229-713-7	1,8-diazabicyclo[5.4.0]undec-7-ene Acute Tox. 3, H301 Skin Corr. 1B, H314 Acute Tox. 4, H312 Aquatic Chronic 3, H412	<0.5%
CAS: 41556-26-7	Bis(1,2,2,6,6-pentamethyl-4-piperidyl)sebacat Aquatic Acute 1, H400; Aquatic Chronic 1, H410 Skin Sens. 1, H317	<0.5%

SECTION 4: First aid measures

- · 4.1 Description of first aid measures
- · After inhalation Seek medical treatment in case of complaints.
- · After skin contact

Instantly wash with water and soap and rinse thoroughly.

If skin irritation continues, consult a doctor.

- · After eye contact Rinse opened eye for several minutes under running water. Then consult doctor.
- · After swallowing

Seek medical treatment.

Rinse out mouth and then drink plenty of water.

4.2 Most important symptoms and effects, both acute and delayed

No further relevant information available.

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

No further relevant information available.

SECTION 5: Firefighting measures

- · 5.1 Extinguishing media
- · Suitable extinguishing agents

CO2, extinguishing powder or water jet. Fight larger fires with water jet or alcohol-resistant foam.

5.2 Special hazards arising from the substance or mixture

No further relevant information available.

- · 5.3 Advice for firefighters
- · Protective equipment: No special measures required.

GB

Printing date 27.09.2021 Version number 3 (replaces version 2)

Trade name SILAN VERFESTIGUNGSHARZ MS-X

(Contd. of page 2)

Revision: 27.09.2021

SECTION 6: Accidental release measures

- 6.1 Personal precautions, protective equipment and emergency procedures Wear protective clothing.
- 6.2 Environmental precautions: Do not allow product to reach sewage system or water bodies.
- · 6.3 Methods and material for containment and cleaning up:

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust). Use neutralising agent.

Dispose of contaminated material as waste according to item 13.

6.4 Reference to other sections

No dangerous materials are released.

See Section 7 for information on safe handling

See Section 8 for information on personal protection equipment.

See Section 13 for information on disposal.

SECTION 7: Handling and storage

- · 7.1 Precautions for safe handling Keep containers tightly sealed.
- Information about protection against explosions and fires: No special measures required.
- · 7.2 Conditions for safe storage, including any incompatibilities
- Storage
- Requirements to be met by storerooms and containers: Store only in the original container.
- Information about storage in one common storage facility: Store away from foodstuffs.
- · Further information about storage conditions: Keep container tightly sealed.
- · Storage class 10
- · 7.3 Specific end use(s) No further relevant information available.

SECTION 8: Exposure controls/personal protection

- · 8.1 Control parameters
- Components with critical values that require monitoring at the workplace:

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

- Additional information: The lists that were valid during the compilation were used as basis.
- · 8.2 Exposure controls
- · Appropriate engineering controls No further data; see item 7.
- Individual protection measures, such as personal protective equipment
- · General protective and hygienic measures

The usual precautionary measures should be adhered to in handling the chemicals.

Keep away from foodstuffs, beverages and food.

Instantly remove any soiled and impregnated garments.

Wash hands during breaks and at the end of the work.

Avoid contact with the eyes and skin.

- · Breathing equipment: Not required.
- · Hand protection Protective gloves.
- · Material of gloves

Nitrile rubber, NBR

Butyl rubber, BR

Penetration time of glove material

The exact break trough time has to be found out by the manufacturer of the protective gloves and has to be observed.

· Eye/face protection Tightly sealed safety glasses.

(Contd. on page 4)

Printing date 27.09.2021 Version number 3 (replaces version 2) Revision: 27.09.2021

Trade name SILAN VERFESTIGUNGSHARZ MS-X

· Body protection: Protective work clothing.

(Contd. of page 3)

SECTION 9: Physical and chemical properties

· 9.1 Information on basic physical and chemical properties

· General Information

· Colour: Yellow tint · Smell: Characteristic

· Boiling point or initial boiling point and

boiling range 237 °C

· Flammability Not applicable.

Flash point: >60 °C

· **Self-inflammability:** Product is not selfigniting.

Decomposition temperature: Not determined.pH Not determined.

Solubility

· Water: Not miscible or difficult to mix

• Steam pressure at 25 °C: 6 hPa (35435-21-3 Triethoxy(2,4,4-

trimethylpentyl)silan)

· Density and/or relative density

Density at 20 °C 1.1 g/cm³

· 9.2 Other information

· Appearance:

· Form: Fluid

· Important information on protection of health

and environment, and on safety.

Ignition temperature: 265 °C (35435-21-3 Triethoxy(2,4,4-

trimethylpentyl)silan)

• Explosive properties: Product is not explosive.

Information with regard to physical hazard classes

Void Explosives Void · Flammable gases Aerosols Void Oxidising gases Void · Gases under pressure Void · Flammable liquids Void · Flammable solids Void · Self-reactive substances and mixtures Void · Pyrophoric liquids Void · Pyrophoric solids Void · Self-heating substances and mixtures Void · Substances and mixtures, which emit flammable gases in contact with water Void

flammable gases in contact with water

Oxidising liquids
Oxidising solids
Organic peroxides
Corrosive to metals
Desensitised explosives
Void
Void
Void
Void

SECTION 10: Stability and reactivity

· 10.1 Reactivity No further relevant information available.

(Contd. on page 5)

Printing date 27.09.2021 Version number 3 (replaces version 2) Revision: 27.09.2021

Trade name SILAN VERFESTIGUNGSHARZ MS-X

(Contd. of page 4)

- · 10.2 Chemical stability
- · Conditions to be avoided: No decomposition if used according to specifications.
- · 10.3 Possibility of hazardous reactions No dangerous reactions known
- · 10.4 Conditions to avoid No further relevant information available.
- · 10.5 Incompatible materials: No further relevant information available.
- · 10.6 Hazardous decomposition products: None

SECTION 11: Toxicological information

- · 11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008
- · Acute toxicity Based on available data, the classification criteria are not met.

· LD/LC5	0 valu	es that are relevant for classification:
35435-2	21-3 Tr	iethoxy(2,4,4-trimethylpentyl)silan
Oral	LD50	>2,000 mg/kg (rat)
Dermal	LD50	>2,000 mg/kg (rat)
2996-92	2-1 Trir	methoxyphenylsilan
Oral	LD50	1,049 mg/kg (rat)
Dermal	LD50	3,014 mg/kg (rabbit)
6674-22	-2 1,8-	diazabicyclo[5.4.0]undec-7-ene
Oral	LD50	251-300 mg/kg (rat)
Dermal	LD50	>1,233 mg/kg (rabbit)

- · Skin corrosion/irritation Based on available data, the classification criteria are not met.
- · Serious eye damage/irritation

Causes serious eye damage.

- · Germ cell mutagenicity Based on available data, the classification criteria are not met.
- · Carcinogenicity Based on available data, the classification criteria are not met.
- Reproductive toxicity Based on available data, the classification criteria are not met.
- · STOT-single exposure Based on available data, the classification criteria are not met.
- STOT-repeated exposure Based on available data, the classification criteria are not met.
- Aspiration hazard Based on available data, the classification criteria are not met.
- Additional toxicological information:
- · CMR effects (carcinogenity, mutagenicity and toxicity for reproduction) -
- · 11.2 Information on other hazards
- · Endocrine disrupting properties

None of the ingredients is listed.

SECTION 12: Ecological information

· 12.1 Toxicity

· Aquatic to	xicity:
35435-21-3	Triethoxy(2,4,4-trimethylpentyl)silan
EC 50	32 mg/l (Daphnia magna (Großer Wasserfloh))
2996-92-1	Trimethoxyphenylsilan
EC 50/48h	>100 mg/l (Daphnia magna (Großer Wasserfloh))
EC 50	>100 mg/l (Pseudokirchneriella subcapitata (Alge))
LC50	>100 mg/l (Oncorhynchus mykiss (Regenbogenforelle))
6674-22-2	1,8-diazabicyclo[5.4.0]undec-7-ene
EC 50/48h	50 mg/l (Daphnia magna (Großer Wasserfloh))

- · 12.2 Persistence and degradability No further relevant information available.
- · 12.3 Bioaccumulative potential No further relevant information available.

(Contd. on page 6)

Printing date 27.09.2021 Version number 3 (replaces version 2) Revision: 27.09.2021

Trade name SILAN VERFESTIGUNGSHARZ MS-X

(Contd. of page 5)

- **12.4 Mobility in soil** No further relevant information available.
- · 12.5 Results of PBT and vPvB assessment
- · PBT: Not applicable.
- · vPvB: Not applicable.
- · 12.6 Endocrine disrupting properties

The product does not contain substances with endocrine disrupting properties.

- · 12.7 Other adverse effects
- · Additional ecological information:
- · General notes:

Must not reach sewage water or drainage ditch undiluted or unneutralised.

Water hazard class (Germany) 1 (Self-assessment): slightly hazardous for water.

Do not allow undiluted product or large quantities of it to reach ground water, water bodies or sewage system.

SECTION 13: Disposal considerations

- · 13.1 Waste treatment methods
- Recommendation

Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

- · Uncleaned packagings:
- · Recommendation: Disposal must be made according to official regulations.

14.1 UN number or ID number		
ADR, ADN, IMDG, IATA	Void	
14.2 UN proper shipping name		
ADR, ADN, IMDG, IATA	Void	
14.3 Transport hazard class(es)		
ADR, ADN, IMDG, IATA		
Class	Void	
14.4 Packing group		
ADR, IMDG, IATA	Void	
14.5 Environmental hazards:		
Marine pollutant:	No	
14.6 Special precautions for user	Not applicable.	
14.7 Maritime transport in bulk accordi	ng to	
IMO instruments	Not applicable.	

SECTION 15: Regulatory information

- · 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
- · Directive 2012/18/EU
- · Named dangerous substances ANNEX I None of the ingredients is listed.

(Contd. on page 7)

Printing date 27.09.2021 Version number 3 (replaces version 2) Revision: 27.09.2021

Trade name SILAN VERFESTIGUNGSHARZ MS-X

(Contd. of page 6)

· 15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· Relevant phrases

H226 Flammable liquid and vapour.

H301 Toxic if swallowed.

H302 Harmful if swallowed.

H312 Harmful in contact with skin.

H314 Causes severe skin burns and eye damage.

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

H318 Causes serious eye damage.

H373 May cause damage to organs through prolonged or repeated exposure.

H400 Very toxic to aquatic life.

H410 Very toxic to aquatic life with long lasting effects.

H412 Harmful to aquatic life with long lasting effects.

· Contact: chemikalieninfo@murexin.com (+43 02622/27401)

· Abbreviations and acronyms:

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)

ICAO: International Civil Aviation Organisation

ICAO-TI: Technical Instructions by the "International Civil Aviation Organisation" (ICAO)

ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

Flam. Liq. 3: Flammable liquids - Category 3

Acute Tox. 3: Acute toxicity - Category 3

Acute Tox. 4: Acute toxicity – Category 4

Skin Corr. 1B: Skin corrosion/irritation - Category 1B

Skin Irrit. 2: Skin corrosion/irritation - Category 2

Eye Dam. 1: Serious eye damage/eye irritation - Category 1

Skin Sens. 1: Skin sensitisation - Category 1

STOT RE 2: Specific target organ toxicity (repeated exposure) – Category 2

Aquatic Acute 1: Hazardous to the aquatic environment - acute aquatic hazard - Category 1

Aquatic Chronic 1: Hazardous to the aquatic environment - long-term aquatic hazard – Category 1 Aquatic Chronic 3: Hazardous to the aquatic environment - long-term aquatic hazard – Category 3

* Data compared to the previous version altered.