i.GLUESYSTEMS GmbH



### **Safety Data Sheet**

according to UK REACH Regulation

#### i.SEAL White

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

#### 1.1. Product identifier

i.SEAL White

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

### Use of the substance/mixture

Barrier (Sealant)

### 1.3. Details of the supplier of the safety data sheet

Company name: i.GLUESYSTEMS GmbH Street: Heinrich-Otto-Str. 71

Place: D-73240 Wendlingen am Neckar

Telephone: +49(0) 7024 41549 20 e-mail: info@i-gluesystems.com

Contact person: Peter Fichte Telephone: +49(0) 7024 41549 20

e-mail: info@i-gluesystems.com Internet: www.i-gluesystems.com

1.4. Emergency telephone GIZ-Nord, Göttingen +49 551 19240 (24h / 7d)

number:

### **SECTION 2: Hazards identification**

# 2.1. Classification of the substance or mixture

#### **GB CLP Regulation**

The product is not classified, according to the CLP regulation.

# 2.2. Label elements

#### **GB CLP Regulation**

#### **Hazard statements**

Void

### **Precautionary statements**

P103 Read carefully and follow all instructions.
P273 Avoid release to the environment.

P501 Dispose of waste according to applicable legislation.

#### Special labelling of certain mixtures

EUH208 Contains N-(3-(trimethoxysilyl)propyl)ethylenediamine. May produce an allergic reaction.

#### 2.3. Other hazards

According to REACH (Annex XIII), the substances in the mixture do not meet the PBT / vPvB criteria.

### **SECTION 3: Composition/information on ingredients**

### 3.2. Mixtures



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#### **Hazardous components**

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	GHS Classification			
2768-02-7	Trimethoxyvinylsilane			1 - < 5 %
	220-449-8		01-2119513215-52	
	Flam. Liq. 3, Acute Tox. 4; H226 H332			
1760-24-3	N-(3-(trimethoxysilyl)propyl)ethylenediamine			< 1 %
	217-164-6		01-2119970215-39	
	Eye Dam. 1, Skin Sens. 1B, STOT SE 3; H318 H317 H335			
63843-89-0	Bis(1,2,2,6,6-pentamethyl-4-piperid	· · · · · · · · · · · · · · · · · · ·		< 1 %
	264-513-3		01-2119978231-37	
	Acute Tox. 4, STOT RE 1, Aquatic Chronic 1; H302 H372 H410			

Full text of H and EUH statements: see section 16.

Specific Conc. Limits, M-factors and ATE

CAS No	EC No	Chemical name	Quantity
	Specific Conc.	Limits, M-factors and ATE	
2768-02-7	220-449-8	Trimethoxyvinylsilane	1 - < 5 %
		50 = 16,8 mg/l (vapours); inhalation: ATE = 1,5 mg/l (dusts or mists); dermal: ng/kg; oral: LD50 = 7120 mg/kg	
1760-24-3	217-164-6	N-(3-(trimethoxysilyI)propyI)ethylenediamine	< 1 %
	dermal: LD50	= > 2000 mg/kg; oral: LD50 = 2995 mg/kg	
63843-89-0	264-513-3	Bis(1,2,2,6,6-pentamethyl-4-piperidyl) [[3,5-bis(1,1-dimethylethyl) -4-hydroxyphenyl]methyl]butylmalonate	< 1 %
oral: ATE = 500 mg/kg M chron.; H410: M=10		00 mg/kg M chron.; H410: M=10	

### **SECTION 4: First aid measures**

### 4.1. Description of first aid measures

### **General information**

When in doubt or if symptoms are observed, get medical advice.

#### After inhalation

Provide fresh air. In case of respiratory tract irritation, consult a physician.

### After contact with skin

After contact with skin, wash immediately with plenty of water and soap. Take off immediately all contaminated clothing and wash it before reuse. In case of skin reactions, consult a physician.



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#### After contact with eyes

In case of contact with eyes flush immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart and consult an ophthalmologist. Remove contact lenses, if present and easy to do. Continue rinsing.

#### After ingestion

If accidentally swallowed rinse the mouth with plenty of water (only if the person is conscious) and obtain immediate medical attention.

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

No information available.

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

Treat symptomatically.

### **SECTION 5: Firefighting measures**

#### 5.1. Extinguishing media

### Suitable extinguishing media

Co-ordinate fire-fighting measures to the fire surroundings.

#### 5.2. Special hazards arising from the substance or mixture

Non-flammable.

Reacts with: Water (Hydrolysis) Formation of: Methanol In case of fire may be liberated: Pyrolysis products, toxic

#### 5.3. Advice for firefighters

Wear a self-contained breathing apparatus and chemical protective clothing. Full protection suit.

#### **Additional information**

Suppress gases/vapours/mists with water spray jet. Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

#### **SECTION 6: Accidental release measures**

#### 6.1. Personal precautions, protective equipment and emergency procedures

### **General measures**

Provide adequate ventilation. Do not breathe gas/fumes/vapour/spray. Avoid contact with skin, eyes and clothes.

#### For non-emergency personnel

Use personal protection equipment. Remove persons to safety.

### For emergency responders

Use personal protection equipment.

#### 6.2. Environmental precautions

Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil.

### 6.3. Methods and material for containment and cleaning up

#### For containment

Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding agents).

### Other information

Treat the recovered material as prescribed in the section on waste disposal.



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#### 6.4. Reference to other sections

Safe handling: see section 7

Personal protection equipment: see section 8

Disposal: see section 13

### **SECTION 7: Handling and storage**

### 7.1. Precautions for safe handling

#### Advice on safe handling

Provide adequate ventilation. Do not breathe gas/fumes/vapour/spray. Avoid contact with skin, eyes and clothes. Use personal protection equipment.

### Advice on protection against fire and explosion

Usual measures for fire prevention.

#### Advice on general occupational hygiene

Avoid contact with skin, eyes and clothes. Do not breathe gas/fumes/vapour/spray. Remove contaminated, saturated clothing immediately. Draw up and observe skin protection programme. Wash hands and face before breaks and after work and take a shower if necessary. When using do not eat, drink, smoke, sniff.

#### 7.2. Conditions for safe storage, including any incompatibilities

#### Requirements for storage rooms and vessels

Store in a dry place. Keep container tightly closed in a cool, well-ventilated place. Provide for retaining containers, eg. floor pan without outflow.

#### Hints on joint storage

Do not store together with: Food and feedingstuffs

To follow: TRGS 510

#### Further information on storage conditions

Keep away from heat. Protect against direct sunlight.

Protect from moisture.

### 7.3. Specific end use(s)

Barrier (Sealant)

#### **SECTION 8: Exposure controls/personal protection**

### 8.1. Control parameters Exposure limits

**Derived No Effect Level** 

There is no information.

### **Predicted No Effect Concentration (PNEC)**

There is no information.



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### **DNEL/DMEL values**

CAS No	Substance			
DNEL type		Exposure route	Effect	Value
2768-02-7	Trimethoxyvinylsilane			
Consumer DNE	EL, long-term	inhalation	systemic	0,7 mg/m³
Consumer DNE	EL, acute	inhalation	systemic	0,7 mg/m³
Consumer DNE	EL, long-term	dermal	systemic	0,1 mg/kg bw/day
Consumer DNEL, acute		dermal	systemic	0,1 mg/kg bw/day
Consumer DNE	EL, long-term	oral	systemic	0,1 mg/kg bw/day
Worker DNEL,		inhalation	systemic	2,6 mg/m³
Worker DNEL,		dermal	systemic	0,2 mg/kg bw/day
1760-24-3	N-(3-(trimethoxysilyl)propyl)ethylenediamine			
Worker DNEL,	long-term	inhalation	systemic	35,5 mg/m³
Worker DNEL, acute		dermal	systemic	5 mg/kg bw/day
Consumer DNEL, long-term		oral	systemic	2,5 mg/kg bw/day
Consumer DNEL, long-term		inhalation	systemic	8,7 mg/m³
Consumer DNE	EL, long-term	dermal	systemic	2,5 mg/kg bw/day

### **PNEC** values

CAS No	Substance	
Environmenta	I compartment	Value
2768-02-7	Trimethoxyvinylsilane	
Freshwater		0,36 mg/l
Freshwater (ir	ntermittent releases)	2,4 mg/l
Marine water		0,036 mg/l
Marine water	(intermittent releases)	2,4 mg/l
Freshwater se	ediment	0,29 mg/kg
Micro-organisms in sewage treatment plants (STP)		6,6 mg/l
Soil		0,048 mg/kg
1760-24-3	N-(3-(trimethoxysilyl)propyl)ethylenediamine	
Freshwater		0,062 mg/l
Freshwater (ir	ntermittent releases)	0,62 mg/l
Marine water		0,0062 mg/l
Freshwater sediment		0,05 mg/kg
Marine sediment		0,005 mg/kg
Micro-organisms in sewage treatment plants (STP)		25 mg/l
Soil		0,0075 mg/kg

# 8.2. Exposure controls





# Appropriate engineering controls

Provide adequate ventilation as well as local exhaustion at critical locations.



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#### Individual protection measures, such as personal protective equipment

#### Eye/face protection

Suitable eye protection: Eye glasses with side protection (EN 166)

#### Hand protection

Wear suitable gloves. (EN ISO 374)

When handling with chemical substances, protective gloves must be worn with the CE-label including the four control digits. The quality of the protective gloves resistant to chemicals must be chosen as a function of the specific working place concentration and quantity of hazardous substances. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.

Suitable material: NBR (Nitrile rubber)
Thickness of the glove material: 0,2 mm

Breakthrough time (maximum wearing time): > 60 min

#### Skin protection

Use of protective clothing.

#### Respiratory protection

This product should not be used under conditions of poor ventilation unless a protective mask with an appropriate gas filter (i.e. type A1 according to standard EN 14387) is used.

#### Thermal hazards

No information available.

#### **Environmental exposure controls**

Avoid release to the environment.

### **SECTION 9: Physical and chemical properties**

### 9.1. Information on basic physical and chemical properties

Physical state: Liquid
Colour: White
Odour: characteristic
Odour threshold: not determined

### Changes in the physical state

Melting point/freezing point:

Boiling point or initial boiling point and

not determined

boiling range:

Flash point: not applicable

**Flammability** 

Solid/liquid: not determined
Gas: not applicable

**Explosive properties** 

The product is not: Explosive.

Lower explosion limits:

Upper explosion limits:

not determined

not determined

Auto-ignition temperature:

not determined

Self-ignition temperature

Solid: not applicable
Gas: not applicable

Decomposition temperature: not determined

**Oxidizing properties** 

The product is not: oxidising.



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pH-Value: 7

Viscosity / dynamic: not determined
Viscosity / kinematic: not determined

Water solubility: practically insoluble (Hydrolysis)

Solubility in other solvents

not determined

Partition coefficient n-octanol/water:

Vapour pressure:

Density:

not determined

not determined

not determined

not determined

not determined

not determined

#### 9.2. Other information

### Other safety characteristics

No information available.

### **SECTION 10: Stability and reactivity**

#### 10.1. Reactivity

No hazardous reaction when handled and stored according to provisions.

#### 10.2. Chemical stability

The product is stable under storage at normal ambient temperatures.

#### 10.3. Possibility of hazardous reactions

Reacts with: Water (Hydrolysis) Formation of: Methanol

### 10.4. Conditions to avoid

Humidity, heat. UV-radiation/sunlight

### 10.5. Incompatible materials

No information available.

### 10.6. Hazardous decomposition products

(Hydrolysis) Methanol

In case of fire may be liberated: Pyrolysis products, toxic

### **SECTION 11: Toxicological information**

#### 11.1. Information on hazard classes as defined in GB CLP Regulation

### **Acute toxicity**

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



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CAS No	Chemical name					
	Exposure route	Dose		Species	Source	Method
2768-02-7	Trimethoxyvinylsilane					
	oral	LD50 mg/kg	7120	Rat	Manufacturer	OECD 401
	dermal	LD50 mg/kg	3200	Rabbit	Manufacturer	OECD 402
	inhalation (4 h) vapour	LC50	16,8 mg/l	Rat	Manufacturer	OECD 403
	inhalation aerosol	ATE	1,5 mg/l			
1760-24-3	N-(3-(trimethoxysilyl)propyl)ethylenediamine					
	oral	LD50 mg/kg	2995	Rat	Manufacturer	
	dermal	LD50 mg/kg	> 2000	Rat	Manufacturer	
63843-89-0	Bis(1,2,2,6,6-pentamethyl-4-piperidyl) [[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]methyl]butylmalonate					ate
	oral	ATE mg/kg	500			

#### Irritation and corrosivity

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

### Sensitising effects

Contains N-(3-(trimethoxysilyl)propyl)ethylenediamine. May produce an allergic reaction.

### Carcinogenic/mutagenic/toxic effects for reproduction

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.

# Information on likely routes of exposure

Inhalation, oral, dermal.

### 11.2. Information on other hazards

#### Other information

No information available.



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# **SECTION 12: Ecological information**

#### 12.1. Toxicity

Toxic to aquatic life with long lasting effects.

CAS No	Chemical name						
	Aquatic toxicity	Dose		[h]   [d]	Species	Source	Method
2768-02-7	Trimethoxyvinylsilane						
	Acute fish toxicity	LC50	191 mg/l	96 h	Oncorhynchus mykiss (Rainbow trout)	Manufacturer	
	Acute algae toxicity	ErC50	210 mg/l	72 h	Selenastrum capricornutum	Manufacturer	
	Acute crustacea toxicity	EC50	169 mg/l	48 h	Daphnia magna (Big water flea)	Manufacturer	OECD 202
	Crustacea toxicity	NOEC	28 mg/l	21 d	Daphnia magna (Big water flea)	Manufacturer	OECD 211
1760-24-3	N-(3-(trimethoxysilyl)propyl)ethylenediamine						
	Acute fish toxicity	LC50	597 mg/l	96 h	Brachydanio rerio (zebra-fish)	Manufacturer	
	Acute algae toxicity	ErC50	8,8 mg/l	72 h	Algae	Manufacturer	OECD 201
	Acute crustacea toxicity	EC50	81 mg/l	48 h	Daphnia magna (Big water flea)	Manufacturer	
	Algae toxicity	NOEC	3,1 mg/l	3 d	Algae	Manufacturer	OECD 201
	Crustacea toxicity	NOEC	> 1 mg/l	21 d	Daphnia magna (Big water flea)	Manufacturer	

### 12.2. Persistence and degradability

The product has not been tested.

Reacts with: Water (Hydrolysis) Formation of: Methanol

	T					
CAS No	nemical name					
	Method	Value	d	Source		
	Evaluation	•	-			
2768-02-7	Trimethoxyvinylsilane					
	Biochemical oxygen demand (OECD 301F)	51 %	28	Manufacturer		
	Not readily biodegradable (according to OECD criteria)					
1760-24-3	N-(3-(trimethoxysilyl)propyl)ethylenediamine					
	OECD 301A	39 %	28	Manufacturer		
	Not readily biodegradable (according to OECD criteria)					

### 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 information available.



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#### 12.7. Other adverse effects

No information available.

#### **Further information**

Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil.

### **SECTION 13: Disposal considerations**

### 13.1. Waste treatment methods

#### **Disposal recommendations**

Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil. Dispose of waste according to applicable legislation.

#### Contaminated packaging

Dispose of waste according to applicable legislation. Handle contaminated packages in the same way as the substance itself.

### **SECTION 14: Transport information**

### Land transport (ADR/RID)

14.1. UN 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.

#### Inland waterways transport (ADN)

14.1. UN 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.

### Marine transport (IMDG)

14.1. UN 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.

#### Air transport (ICAO-TI/IATA-DGR)

14.1. UN 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

#### 14.6. Special precautions for user

No information available.

### 14.7. Maritime transport in bulk according to IMO instruments

not applicable

# **SECTION 15: Regulatory information**

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

**EU regulatory information** 



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Restrictions on use (REACH, annex XVII): Entry 3, Entry 40, Entry 48, Entry 69

2010/75/EU (VOC): < 6 %

**National regulatory information** 

Ordinance on Industrial Safety and Health

- Germany - BetrSichV: No flammable liquids in accordance with BetrSichV

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

#### 15.2. Chemical safety assessment

Chemical safety assessments for substances in this mixture were not carried out.

### **SECTION 16: Other information**

### Abbreviations and acronyms

CLP: Classification, labelling and Packaging

REACH: Registration, Evaluation and Authorization of Chemicals

GHS: Globally Harmonised System of Classification, Labelling and Packaging of Chemicals

**UN: United Nations** 

CAS: Chemical Abstracts Service
DNEL: Derived No Effect Level
DMEL: Derived Minimal Effect Level
PNEC: Predicted No Effect Concentration

ATE: Acute toxicity estimate LC50: Lethal concentration, 50%

LD50: Lethal dose, 50% LL50: Lethal loading, 50% EL50: Effect loading, 50%

EC50: Effective Concentration 50%

ErC50: Effective Concentration 50%, growth rate NOEC: No Observed Effect Concentration

BCF: Bio-concentration factor

PBT: persistent, bioaccumulative, toxic vPvB: very persistent, very bioaccumulative

ADR: Accord européen sur le transport des marchandises dangereuses par Route

(European Agreement concerning the International Carriage of Dangerous Goods by Road)

RID: Regulations concerning the international carriage of dangerous goods by rail

ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways (Accord européen relatif au transport international des marchandises dangereuses par voies de navigation intérieures)

IMDG: International Maritime Code for Dangerous Goods

EmS: Emergency Schedules MFAG: Medical First Aid Guide

IATA: International Air Transport Association ICAO: International Civil Aviation Organization

MARPOL: International Convention for the Prevention of Marine Pollution from Ships

IBC: Intermediate Bulk Container VOC: Volatile Organic Compounds SVHC: Substance of Very High Concern

For abbreviations and acronyms, see table at http://abbrev.esdscom.eu



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### Relevant H and EUH statements (number and full text)

H226	Flammable liquid and vapour.
H302	Harmful if swallowed.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H332	Harmful if inhaled.

H335 May cause respiratory irritation.

H372 Causes damage to organs through prolonged or repeated exposure.

H410 Very toxic to aquatic life with long lasting effects.

EUH208 Contains N-(3-(trimethoxysilyl)propyl)ethylenediamine. May produce an allergic reaction.

#### **Further Information**

The information is based on the present level of our knowledge. It does not, however, give assurance of product properties and establishes no contract legal rights. The receiver of our product is singularly responsible for adhering to existing laws and regulations.

(The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)