## SAFETY DATA SHEET

Based upon Regulation (EC) No. 1907/2006, as amended by Regulation (EC) No. 453/2010



## X-TACK7

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

#### 1.1. Product identifier

Product name : X-TACK7

Registration number REACH : Not applicable (mixture)

Product type REACH : Mixture

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

#### 1.2.1 Relevant identified uses

Adhesive

#### 1.2.2 Uses advised against

No uses advised against

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

#### Supplier of the safety data sheet

TEC7\*

Industrielaan 5B

B-2250 Olen

**2** +32 14 85 97 37

**4** +32 14 85 97 38

info@tec7.be

\*TEC7 is a registered trademark of Novatech International

Industrielaan 5B

#### Manufacturer of the product

Novatech International N.V.

Industrielaan 5B

B-2250 Olen

**2** +32 14 85 97 37

**4** +32 14 85 97 38

info@tec7.be

### 1.4. Emergency telephone number

24h/24h (Telephone advice: English, French, German, Dutch):

+32 14 58 45 45 (BIG)

## SECTION 2: Hazards identification

### 2.1. Classification of the substance or mixture

Not classified as dangerous according to the criteria of Regulation (EC) No 1272/2008

#### 2.2. Label elements

Not classified as dangerous according to the criteria of Regulation (EC) No 1272/2008

On grounds of experience and test data, the classification for this mixture is less stringent than the one based on the calculation set out referred to in Regulation (EC) No 1272/2008

## Supplemental information

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

### 2.3. Other hazards

No other hazards known

## SECTION 3: Composition/information on ingredients

## 3.1. Substances

Not applicable

#### 3.2. Mixtures

|  | CAS No<br>EC No         | Conc. (C) | Classification according to CLP         | Note    | Remark      |
|--|-------------------------|-----------|---|---------|-------------|
| 3-(trimethoxysilyl)propylamine<br>01-2119510159-45 | 13822-56-5<br>237-511-5 |           | Skin Irrit. 2; H315<br>Eye Dam. 1; H318 | (1)(10) | Constituent |

Created by: Brandweerinformatiecentrum voor gevaarlijke stoffen vzw (BIG)

Technische Schoolstraat 43 A, B-2440 Geel

http://www.big.be

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134-16433-470-en

| N-(3-(trimethoxysilyl)propyl)ethylenediamine |           | <br>l ·                 | (1)(10) | Constituent |
|--|-----------|-------------------------|---------|-------------|
| 01-2119970215-39                             | 217-164-6 | Eye Dam. 1; H318        |         |             |
|  |           | Skin Sens. 1; H317      |         |             |
|  |           | Aquatic Chronic 2; H411 |         |             |

<sup>(1)</sup> For H-statements in full: see heading 16

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

#### 4.1. Description of first aid measures

#### General:

If you feel unwell, seek medical advice.

Remove the victim into fresh air. Respiratory problems: consult a doctor/medical service.

## After skin contact:

Wash immediately with lots of water. Soap may be used. Take victim to a doctor if irritation persists.

#### After eve contact:

Rinse with water. Take victim to an ophthalmologist if irritation persists.

#### After ingestion:

Rinse mouth with water. Consult a doctor/medical service if you feel unwell.

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

#### 4.2.1 Acute symptoms

After inhalation:

No effects known.

After skin contact:

No effects known.

After eye contact: No effects known.

After ingestion:

No effects known.

## 4.2.2 Delayed symptoms

No effects known.

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

If applicable and available it will be listed below.

## **SECTION 5: Firefighting measures**

## 5.1. Extinguishing media

#### 5.1.1 Suitable extinguishing media:

Water spray. Alcohol-resistant foam. Dry chemical powder. Carbon dioxide.

#### 5.1.2 Unsuitable extinguishing media:

No unsuitable extinguishing media known.

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

Upon combustion: formation of CO, CO2 and small quantities of nitrous vapours.

#### 5.3. Advice for firefighters

### 5.3.1 Instructions:

No specific fire-fighting instructions required.

## 5.3.2 Special protective equipment for fire-fighters:

Gloves. Protective clothing. Heat/fire exposure: compressed air/oxygen apparatus.

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

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

No naked flames.

## 6.1.1 Protective equipment for non-emergency personnel

See heading 8.2

## 6.1.2 Protective equipment for emergency responders

Gloves. Protective clothing.

Suitable protective clothing

See heading 8.2

### 6.2. Environmental precautions

Contain leaking substance.

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

Reason for revision: CLP-ATP4 Publication date: 2005-03-29 Date of revision: 2015-07-20

Revision number: 0600 Product number: 42121 2/12

<sup>(10)</sup> Subject to restrictions of Annex XVII of Regulation (EC) No. 1907/2006

Scoop solid spill into closing containers. Clean contaminated surfaces with an excess of water. Wash clothing and equipment after handling.

#### 6.4. Reference to other sections

See heading 13.

## SECTION 7: Handling and storage

The information in this section is a general description. If applicable and available, exposure scenarios are attached in annex. Always use the relevant exposure scenarios that correspond to your identified use.

#### 7.1. Precautions for safe handling

Keep away from naked flames/heat. Observe strict hygiene. Keep container tightly closed.

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

#### 7.2.1 Safe storage requirements:

Store in a cool area. Store in a dry area. Keep container in a well-ventilated place. Keep only in the original container. Meet the legal requirements.

#### 7.2.2 Keep away from:

Heat sources.

#### 7.2.3 Suitable packaging material:

No data available

#### 7.2.4 Non suitable packaging material:

No data available

## 7.3. Specific end use(s)

If applicable and available, exposure scenarios are attached in annex. See information supplied by the manufacturer.

## SECTION 8: Exposure controls/personal protection

#### 8.1. Control parameters

#### 8.1.1 Occupational exposure

#### a) Occupational exposure limit values

If limit values are applicable and available these will be listed below.

#### b) National biological limit values

If limit values are applicable and available these will be listed below.

#### 8.1.2 Sampling methods

If applicable and available it will be listed below.

## $\bf 8.1.3$ Applicable limit values when using the substance or mixture as intended

If limit values are applicable and available these will be listed below.

## 8.1.4 DNEL/PNEC values

### **DNEL/DMEL - Workers**

3-(trimethoxysilyl)propylamine

| Effect level (DNEL/DMEL) | Туре                                  | Value            | Remark |
|--------------------------|---------------------------------------|------------------|--------|
| DNEL                     | Long-term systemic effects inhalation | 58 mg/m³         |        |
|                          | Long-term systemic effects dermal     | 8.3 mg/kg bw/day |        |

## **DNEL/DMEL - General population**

3-(trimethoxysilyl)propylamine

| Effect level (DNEL/DMEL) | Туре                                  | Value          | Remark |
|--------------------------|---------------------------------------|----------------|--------|
| DNEL                     | Long-term systemic effects inhalation | 17 mg/m³       |        |
|                          | Long-term systemic effects dermal     | 5 mg/kg bw/day |        |
|                          | Long-term systemic effects oral       | 5 mg/kg bw/day |        |

#### **PNEC**

## 3-(trimethoxysilyl)propylamine

| Compartments                 | Value                  | Remark |
|------------------------------|------------------------|--------|
| Fresh water                  | 0.33 mg/l              |        |
| Marine water                 | 0.033 mg/l             |        |
| Aqua (intermittent releases) | 3.3 mg/l               |        |
| STP                          | 13 mg/l                |        |
| Fresh water sediment         | 1.2 mg/kg sediment dw  |        |
| Marine water sediment        | 0.12 mg/kg sediment dw |        |
| Soil                         | 0.045 mg/kg soil dw    |        |
| Oral                         | 44.4 mg/kg food        |        |

#### 8.1.5 Control banding

If applicable and available it will be listed below.

## 8.2. Exposure controls

The information in this section is a general description. If applicable and available, exposure scenarios are attached in annex. Always use the relevant exposure scenarios that correspond to your identified use.

## 8.2.1 Appropriate engineering controls

 $Keep\ away\ from\ naked\ flames/heat.\ Carry\ operations\ in\ the\ open/under\ local\ exhaust/ventilation\ or\ with\ respiratory\ protection.$ 

Reason for revision: CLP-ATP4 Publication date: 2005-03-29
Date of revision: 2015-07-20

Revision number: 0600 Product number: 42121 3 / 12

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

Observe strict hygiene. Keep container tightly closed. Do not eat, drink or smoke during work.

#### a) Respiratory protection:

Respiratory protection not required in normal conditions.

#### b) Hand protection:

Gloves.

- materials (good resistance)

Butyl rubber, nitrile rubber, PVA.

## c) Eye protection:

Safety glasses.

d) Skin protection:

Protective clothing.

#### 8.2.3 Environmental exposure controls:

See headings 6.2, 6.3 and 13

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

## 9.1. Information on basic physical and chemical properties

| Physical form             | Paste  |
|---------------------------|--|
| Odour                     | Characteristic odour                                   |
| Odour threshold           | No data available                                      |
| Colour                    | Variable in colour, depending on the composition       |
| Particle size             | Not applicable (liquid)                                |
| Explosion limits          | No data available                                      |
| Flammability              | Non-flammable  |
| Log Kow                   | Not applicable (mixture)                               |
| Dynamic viscosity         | No data available                                      |
| Kinematic viscosity       | No data available                                      |
| Melting point             | No data available                                      |
| Boiling point             | No data available                                      |
| Flash point               | No data available                                      |
| Evaporation rate          | No data available                                      |
| Relative vapour density   | No data available                                      |
| Vapour pressure           | No data available                                      |
| Solubility                | water ; insoluble                                      |
| Relative density          | 1.4  |
| Decomposition temperature | No data available                                      |
| Auto-ignition temperature | No data available                                      |
| Explosive properties      | No chemical group associated with explosive properties |
| Oxidising properties      | No chemical group associated with oxidising properties |
| рН                        | No data available                                      |

## 9.2. Other information

| 1400 kg/m³ |
|------------|

## SECTION 10: Stability and reactivity

## 10.1. Reactivity

No data available.

#### 10.2. Chemical stability

No data available.

## 10.3. Possibility of hazardous reactions

No data available.

## 10.4. Conditions to avoid

Keep away from naked flames/heat.

## 10.5. Incompatible materials

No data available.

## 10.6. Hazardous decomposition products

Upon combustion: formation of CO, CO2 and small quantities of nitrous vapours.

## **SECTION 11: Toxicological information**

## 11.1. Information on toxicological effects

11.1.1 Test results

## Acute toxicity

Reason for revision: CLP-ATP4 Publication date: 2005-03-29

Date of revision: 2015-07-20

 Revision number: 0600
 Product number: 42121
 4 / 12

#### X-TACK7

No (test)data on the mixture available

3-(trimethoxysilyl)propylamine

| Route of exposure    | Parameter | Method                    | Value          | Exposure time | Species       | Value              | Remark |
|----------------------|-----------|---------------------------|----------------|---------------|---------------|--------------------|--------|
|                      |           |                           |                |               |               | determination      |        |
| Oral                 |           | Equivalent to OECD<br>401 | 2.970 ml/kg bw |               | Rat (male)    | Experimental value |        |
| Dermal               | LD50      | Equivalent to OECD<br>402 | 11.3 ml/kg bw  | 24 h          | Rabbit (male) | Experimental value |        |
| Inhalation (vapours) | LC50      | OECD 403                  | > 5 ppm        | 6 h           | Rat (male)    | Read-across        |        |
| Inhalation (vapours) | LC50      | OECD 403                  | > 16 ppm       | 6 h           | Rat (female)  | Read-across        |        |

N-(3-(trimethoxysilyl)propyl)ethylenediamine

| Route of exposure | Parameter | Method                    | Value                            | Exposure time | Species                 | Value              | Remark |
|-------------------|-----------|---------------------------|----------------------------------|---------------|-------------------------|--------------------|--------|
|                   |           |                           |                                  |               |                         | determination      |        |
| Oral              | LD50      | OECD 401                  | 2413 mg/kg bw                    |               | Rat (male/female)       | Experimental value |        |
| Oral              | 1         | Equivalent to OECD<br>401 | 7684 mg/kg bw                    |               | Rat (male)              | Experimental value |        |
| Dermal            | LD50      | Equivalent to OECD<br>402 | 16480 mg/kg bw                   |               | Rabbit<br>(male/female) | Experimental value |        |
| Inhalation (mist) | LC50      | OECD 403                  | 1.49 mg/l air - 2.44<br>mg/l air | 4 h           | Rat (male/female)       | Experimental value |        |

Judgement is based on the relevant ingredients

#### Conclusion

Not classified for acute toxicity

## Corrosion/irritation

#### X-TACK7

No (test)data on the mixture available

3-(trimethoxysilyl)propylamine

| esult I  | Method          | Exposure time                  | Time point   |   |                  | Remark  |
|----------|-----------------|--------------------------------|--|---|------------------|---|
| <i>'</i> | '               |                                | 24; 48; 72 hours   | Rabbit  | Read-across      |   |
| - 0 -    |                 |                                |  | Rat   | Calculated value |   |
| ri       | ous eye<br>nage | ous eye Equivalent to OECD 405 | ious eye Equivalent to OECD anage 405 ating OECD 404 3 min-4 h | ious eye Equivalent to OECD 24; 48; 72 hours nage 405 | ious eye         | determination lous eye Equivalent to OECD 24; 48; 72 hours Rabbit Read-across louge 405 lating OECD 404 3 min-4 h 1; 24; 48; 72; 168 Rat Calculated value |

N-(3-(trimethoxysilyl)propyl)ethylenediamine

| Route of exposure | Result         | Method   | Exposure time | Time point       | Species | Value              | Remark |
|-------------------|----------------|----------|---------------|------------------|---------|--------------------|--------|
|                   |                |          |               |                  |         | determination      |        |
| Eye               | Serious eye    | OECD 405 | 21 day(s)     | 24; 48; 72 hours | Rabbit  | Experimental value |        |
|                   | damage         |          |               |                  |         |                    |        |
| Skin              | Not irritating | OECD 404 | 4 h           | 24; 48; 72 hours | Rabbit  | Experimental value |        |

Judgement is based on the relevant ingredients

## Conclusion

On grounds of experience and test data, the classification for this mixture is less stringent than the one based on the calculation set out referred to in Regulation (EC) No 1272/2008

Not classified as irritating to the skin

Not classified as irritating to the eyes

Not classified as irritating to the respiratory system

## Respiratory or skin sensitisation

## X-TACK7

No (test)data on the mixture available

3-(trimethoxysilyl)propylamine

| _ |                   |                 |          |  |                        |               |                     |        |  |
|---|-------------------|-----------------|----------|--|------------------------|---------------|---------------------|--------|--|
|   | Route of exposure | Result          | Method   |  | Observation time point | Species       | Value determination | Remark |  |
|   | Skin              | Not sensitizing | OECD 406 |  |                        | Guinea pig    | Experimental value  |        |  |
|   |                   |                 |          |  |                        | (male/female) |                     |        |  |

N-(3-(trimethoxysilyl)propyl)ethylenediamine

| Route of exposure | Result      | Method   |      | Observation time point | Species    | Value determination | Remark |
|-------------------|-------------|----------|------|------------------------|------------|---------------------|--------|
| Skin              | Sensitizing | OECD 406 | 72 h |                        | Guinea pig | Experimental value  |        |

Judgement is based on the relevant ingredients

## Conclusion

Not classified as sensitizing for inhalation Not classified as sensitizing for skin

## Specific target organ toxicity

Reason for revision: CLP-ATP4 Publication date: 2005-03-29

Date of revision: 2015-07-20

Revision number: 0600 Product number: 42121 5 / 12

#### X-TACK7

No (test)data on the mixture available

3-(trimethoxysilyl)propylamine

| Route of exposure      | Parameter | Method                    | Value               | Organ | Effect  | Exposure time                    |                      | Value<br>determination |
|------------------------|-----------|---------------------------|---------------------|-------|---|----------------------------------|----------------------|------------------------|
| Oral (stomach<br>tube) | LOAEL     | 1                         | 600 mg/kg<br>bw/day |       | Clinical signs;<br>mortality; body<br>weight; food<br>consumption | / \ - /                          | Rat<br>(male/female) | Read-across            |
| Oral (stomach tube)    | NOAEL     | 1                         | 200 mg/kg<br>bw/day | Liver | No effect   | / \ - /                          | Rat<br>(male/female) | Read-across            |
|                        |           | Equivalent to<br>OECD 412 | 147 mg/m³ air       |       |   | 4 weeks (6h/day, 5<br>days/week) | Rat (male)           | Read-across            |

N-(3-(trimethoxysilyl)propyl)ethylenediamine

| Route of exposure | Parameter | Method   | Value                 | Organ | Effect            | Exposure time    | <br>Value<br>determination |
|-------------------|-----------|----------|-----------------------|-------|-------------------|------------------|----------------------------|
| Oral              | NOAEL     | OECD 422 | 500 mg/kg bw          |       | Systemic toxicity | , , ,            | Experimental value         |
| Dermal            | NOAEL     | Other    | ≥ 2.0 ml/kg/day       |       |                   | 8 day(s)         | <br>Experimental value     |
| Dermal            | LOAEL     | 1        | 257.5 mg/kg<br>bw/day | Skin  | irritation        | 11 days (6h/day) | Experimental value         |

Judgement is based on the relevant ingredients

#### Conclusion

Not classified for subchronic toxicity

## Mutagenicity (in vitro)

## X-TACK7

No (test)data on the mixture available

3-(trimethoxysilyl)propylamine

| Result  | Method   | Test substrate                   | Effect    | Value determination |
|---|----------|----------------------------------|-----------|---------------------|
| Negative with metabolic activation, negative without metabolic activation | OECD 476 | Chinese hamster ovary (CHO)      | No effect | Read-across         |
| Negative with metabolic activation, negative without metabolic activation |          | Chinese hamster lung fibroblasts | No effect | Read-across         |
| Negative with metabolic activation, negative without metabolic activation | OECD 471 | Escherichia coli                 | No effect | Experimental value  |
| Negative with metabolic activation, negative without metabolic activation | OECD 471 | Bacteria (S.typhimurium)         | No effect | Experimental value  |

 $\underline{\text{N-}(3\text{-}(trimethoxysilyl)propyl)ethylenediamine}}$ 

| Result   | Method                 | lethod Test substrate Ef    |  | Value determination |
|----------|------------------------|-----------------------------|--|---------------------|
| Negative | OECD 471               | Bacteria (S.typhimurium)    |  | Experimental value  |
| Negative | Other                  | Chinese hamster ovary (CHO) |  | Experimental value  |
| Negative | Equivalent to OECD 479 | Chinese hamster ovary (CHO) |  | Experimental value  |

## Mutagenicity (in vivo)

### X-TACK7

No (test)data on the mixture available

3-(trimethoxysilyl)propylamine

| Result   | Method             | Exposure time | Test substrate      | Organ       | Value determination |
|----------|--------------------|---------------|---------------------|-------------|---------------------|
| Negative | Equivalent to OECD |               | Mouse (male/female) | Bone marrow | Read-across         |
|          | 474                |               |                     |             |                     |

N-(3-(trimethoxysilyl)propyl)ethylenediamine

| Result   | Method             | Exposure time | Test substrate      | Organ | Value determination |
|----------|--------------------|---------------|---------------------|-------|---------------------|
| Negative | Equivalent to OECD | 30-48-72 h    | Mouse (male/female) |       | Experimental value  |
|          | 1474               |               |                     |       |                     |

## Carcinogenicity

## X-TACK7

No (test)data on the mixture available

Reason for revision: CLP-ATP4 Publication date: 2005-03-29
Date of revision: 2015-07-20

Revision number: 0600 Product number: 42121 6 / 12

3-(trimethoxysilyl)propylamine

| Route of exposure | Parameter | Method      | Value        | Exposure time | - •           | Value<br>determination | Organ | Effect          |
|-------------------|-----------|-------------|--------------|---------------|---------------|------------------------|-------|-----------------|
| Dermal            | NOAEL     | Not further | 43.8 mg/week | 104 weeks (3  | Mouse         | Inconclusive,          | Skin  | No carcinogenic |
|                   |           | determined  |              | times/week)   | (male/female) | insufficient data      |       | effect          |

## Reproductive toxicity

## X-TACK7

No (test)data on the mixture available

3-(trimethoxysilyl)propylamine

|                        | Parameter | Method              | Value               | Exposure time                    | Species              | Effect  | Organ    | Value determination |
|------------------------|-----------|---------------------|---------------------|----------------------------------|----------------------|---|----------|---------------------|
| Developmental toxicity | NOAEL     | EPA OTS<br>798.4900 | 100 mg/kg<br>bw/day | 14 days<br>(gestation,<br>daily) | Rat                  | No effect   |          | Read-across         |
|                        | LOAEL     | EPA OTS<br>798.4900 | 600 mg/kg<br>bw/day | 14 days<br>(gestation,<br>daily) | Rat                  | Minor skeletal variations   | Skeleton | Read-across         |
| Maternal toxicity      | NOAEL     | Other               | 100 mg/kg<br>bw/day | 14 day(s)                        | Rat                  | No effect   |          | Read-across         |
|                        | LOAEL     | Other               | 600 mg/kg<br>bw/day | 14 day(s)                        | Rat                  | Clinical signs;<br>mortality; body<br>weight; food<br>consumption | General  | Read-across         |
| Effects on fertility   | NOAEL     | OECD 408            | 600 mg/kg<br>bw/day | 92 day(s)                        | Rat<br>(male/female) | No effect   |          | Read-across         |

N-(3-(trimethoxysilyl)propyl)ethylenediamine

|                        | Parameter | Method | Value               | Exposure time                       | Species              | Effect               | - 0- | Value<br>determination |
|------------------------|-----------|--------|---------------------|-------------------------------------|----------------------|----------------------|------|------------------------|
| Developmental toxicity | NOAEL     |        | 500 mg/kg<br>bw/day | / ( - /                             | Rat<br>(male/female) | Teratogenicity       | l    | Experimental value     |
| Maternal toxicity      | NOAEL     |        | 0, 0                | 39-44 days<br>(gestation,<br>daily) | (                    | Maternal<br>toxicity | l    | Experimental value     |

Judgement is based on the relevant ingredients

## **Conclusion CMR**

Not classified for carcinogenicity

Not classified for mutagenic or genotoxic toxicity

Not classified for reprotoxic or developmental toxicity

## Toxicity other effects

X-TACK7

No (test)data on the mixture available

## Chronic effects from short and long-term exposure

X-TACK7

 $Skin\ rash/inflammation.$ 

## SECTION 12: Ecological information

## 12.1. Toxicity

X-TACK7

No (test)data on the mixture available

3-(trimethoxysilyl)propylamine

|   | Parameter | Method           | Value       | Duration | Species                    |               | Fresh/salt<br>water | Value determination |
|---|-----------|------------------|-------------|----------|----------------------------|---------------|---------------------|---------------------|
| Acute toxicity fishes                   | LC50      | OECD 203         | > 934 mg/l  | 96 h     |                            |               |                     | Read-across; GLP    |
| Acute toxicity invertebrates            | EC50      | OECD 202         | 331 mg/l    | 48 h     | Daphnia magna              | Static system | Fresh water         | Read-across; GLP    |
| Toxicity algae and other aquatic plants | EC50      | EU Method<br>C.3 | > 1000 mg/l | 72 h     | Desmodesmus<br>subspicatus | Static system | Fresh water         | Read-across; GLP    |
| Toxicity aquatic micro-<br>organisms    | EC50      | Other            | 43 mg/l     |          | Pseudomonas<br>putida      | Static system | Fresh water         | Read-across; GLP    |

Reason for revision: CLP-ATP4 Publication date: 2005-03-29
Date of revision: 2015-07-20

 Revision number: 0600
 Product number: 42121
 7 / 12

## N-(3-(trimethoxysilyl)propyl)ethylenediamine

|   | Parameter | Method                | Value    | Duration | Species                      | Test design   | Fresh/salt<br>water | Value determination                             |
|---|-----------|-----------------------|----------|----------|------------------------------|---------------|---------------------|---|
| Acute toxicity fishes                   | LC50      | EPA 660/3 -<br>75/009 | 213 mg/l | 96 h     | Salmo gairdneri              | Static system |                     | Experimental value;<br>Nominal<br>concentration |
| Acute toxicity invertebrates            | EC50      | OECD 202              | 90 mg/l  | 48 h     | Daphnia magna                | Static system | Fresh water         | Experimental value;<br>GLP                      |
| Toxicity algae and other aquatic plants | ErC50     | OECD 201              | 8.8 mg/l | 72 h     | Selenastrum<br>capricornutum |               | Fresh water         | Experimental value;<br>GLP                      |
| Toxicity aquatic micro-<br>organisms    | EC50      | DIN 38412-8           | 67 mg/l  | 16 h     | Pseudomonas<br>putida        | Static system |                     | Experimental value;<br>GLP                      |

Judgement of the mixture is based on the relevant ingredients

#### Conclusion

Not classified as dangerous for the environment according to the criteria of Regulation (EC) No 1272/2008

## 12.2. Persistence and degradability

## 3-(trimethoxysilyl)propylamine

## **Biodegradation water**

| ı | Method        | Value     | Duration  | Value determination |
|---|---------------|-----------|-----------|---------------------|
| E | EU Method C.4 | 67 %; GLP | 28 day(s) | Experimental value  |
|   |               |           |           |                     |

## Half-life water (t1/2 water)

| Method |             | Primary<br>degradation/mineralisation | Value determination |
|--------|-------------|---------------------------------------|---------------------|
|        | 4 h; pH = 7 | Primary degradation                   | QSAR                |

#### N-(3-(trimethoxysilyl)propyl)ethylenediamine

#### **Biodegradation water**

| Method                       | Value  | Duration  | Value determination |
|------------------------------|--------|-----------|---------------------|
| OECD 301A: DOC Die-Away Test | > 98 % | 28 day(s) | Experimental value  |

## Phototransformation air (DT50 air)

| Method       | Value   | Conc. OH-radicals | Value determination |
|--------------|---------|-------------------|---------------------|
| AOPWIN v1.91 | 1.059 h |                   | Calculated value    |

## Half-life water (t1/2 water)

| Method                                   |                 | Primary degradation/mineralisation | Value determination |
|--|-----------------|------------------------------------|---------------------|
| OECD 111: Hydrolysis as a function of pH | 0.3 h; pH < 7   | Primary degradation                | Experimental value  |
| OECD 111: Hydrolysis as a function of pH | 0.025 h; pH = 7 | Primary degradation                | Experimental value  |

## Conclusion

Contains non readily biodegradable component(s)

## 12.3. Bioaccumulative potential

## X-TACK7

#### Log Kow

| Method | Remark                   | Value | Temperature | Value determination |
|--------|--------------------------|-------|-------------|---------------------|
|        | Not applicable (mixture) |       |             |                     |

## 3-(trimethoxysilyl)propylamine

## Log Kow

| Method | Remark | Value | Temperature | Value determination |
|--------|--------|-------|-------------|---------------------|
|        |        | 10.7  | 20 °C       | QSAR                |

## N-(3-(trimethoxysilyl)propyl)ethylenediamine

## Log Kow

| I | Method | Remark | Value | Temperature | Value determination |
|---|--------|--------|-------|-------------|---------------------|
| Ī | KOWWIN |        |       | 25 °C       | Estimated value     |

#### Conclusion

Does not contain bioaccumulative component(s)

## 12.4. Mobility in soil

 $\underline{\text{N-(3-(trimethoxysilyl)propyl)ethylenediamine}}$ 

#### Percent distribution

| Method           | Fraction air | <br>Fraction sediment | Fraction soil | Fraction water | Value determination |
|------------------|--------------|-----------------------|---------------|----------------|---------------------|
| Mackay level III | 31.3 %       | 0.00 %                | 63.6 %        | 5.2 %          | Calculated value    |

## Conclusion

Contains component(s) that adsorb(s) into the soil

Reason for revision: CLP-ATP4 Publication date: 2005-03-29
Date of revision: 2015-07-20

Revision number: 0600 Product number: 42121 8 / 12

#### 12.5. Results of PBT and vPvB assessment

Does not contain component(s) that meet(s) the criteria of PBT and/or vPvB as listed in Annex XIII of Regulation (EC) No 1907/2006.

#### 12.6. Other adverse effects

#### X-TACK7

#### Global warming potential (GWP)

None of the known components is included in the list of fluorinated greenhouse gases (Regulation (EC) No 517/2014)

## Ozone-depleting potential (ODP)

Not classified as dangerous for the ozone layer (Regulation (EC) No 1005/2009)

#### 3-(trimethoxysilyl)propylamine

#### Global warming potential (GWP)

Not included in the list of fluorinated greenhouse gases (Regulation (EC) No 517/2014)

#### **Ground water**

Ground water pollutant

## N-(3-(trimethoxysilyl)propyl)ethylenediamine

#### Global warming potential (GWP)

Not included in the list of fluorinated greenhouse gases (Regulation (EC) No 517/2014)

## SECTION 13: Disposal considerations

The information in this section is a general description. If applicable and available, exposure scenarios are attached in annex. Always use the relevant exposure scenarios that correspond to your identified use.

#### 13.1. Waste treatment methods

#### 13.1.1 Provisions relating to waste

Waste material code (Directive 2008/98/EC, Decision 2000/0532/EC).

08 04 10 (wastes from MFSU of adhesives and sealants (including waterproofing products): waste adhesives and sealants other than those mentioned in 08 04 09). Depending on branch of industry and production process, also other waste codes may be applicable. Can be considered as non-hazardous waste according to Regulation (EU) No 1357/2014.

#### 13.1.2 Disposal methods

Remove to a household waste incinerator with energy recovery. Remove waste in accordance with local and/or national regulations. Dispose of the small quantities as household waste. Treat using the best available techniques before discharge into drains or the aquatic environment.

## 13.1.3 Packaging/Container

Waste material code packaging (Directive 2008/98/EC).

15 01 01 (paper and cardboard packaging).

15 01 02 (plastic packaging).

## **SECTION 14: Transport information**

## Road (ADR) 14.1. UN number Transport Not subject 14.2. UN proper shipping name 14.3. Transport hazard class(es) Hazard identification number Class Classification code 14.4. Packing group Packing group Labels 14.<u>5. Environmental hazards</u> Environmentally hazardous substance mark 14.6. Special precautions for user

## Rai

| Special provisions               |             |
|----------------------------------|-------------|
| Limited quantities               |             |
| ail (RID)                        |             |
| 14.1. UN number                  |             |
| Transport                        | Not subject |
| 14.2. UN proper shipping name    |             |
| 14.3. Transport hazard class(es) |             |
| Hazard identification number     |             |
| Class                            |             |
| Classification code              |             |
| 14.4. Packing group              |             |
| Packing group                    |             |

Reason for revision: CLP-ATP4 Publication date: 2005-03-29 Date of revision: 2015-07-20

Revision number: 0600 Product number: 42121 9/12

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|--|-------------|
| Labels   |             |
| 14.5. Environmental hazards  |             |
| Environmentally hazardous substance mark                                 | no          |
| 14.6. Special precautions for user                                       |             |
| Special provisions   |             |
| Limited quantities   |             |
| and waterway (ADN)   |             |
| and waterways (ADN)  |             |
| 14.1. UN number  |             |
| Transport  | Not subject |
| 14.2. UN proper shipping name  |             |
| 14.3. Transport hazard class(es)   |             |
| Class  |             |
| Classification code  |             |
| 14.4. Packing group  |             |
| Packing group  |             |
| Labels   |             |
| 14.5. Environmental hazards  |             |
| Environmentally hazardous substance mark                                 | no          |
| 14.6. Special precautions for user                                       |             |
| Special provisions   |             |
| Limited quantities   |             |
| a (IMDG/IMSBC) 14.1. UN number   | _           |
| Transport  | Not subject |
| 14.2. UN proper shipping name  |             |
| 14.3. Transport hazard class(es)   |             |
| Class  |             |
| 14.4. Packing group  |             |
| Packing group  |             |
| Labels   |             |
| 14.5. Environmental hazards  |             |
| Marine pollutant   | -           |
| Environmentally hazardous substance mark                                 | no          |
| 14.6. Special precautions for user                                       |             |
| Special provisions   |             |
| Limited quantities   |             |
| 14.7. Transport in bulk according to Annex II of Marpol and the IBC Code |             |
| Annex II of MARPOL 73/78   |             |
| (ICAO-TI/IATA-DGR) 14.1. UN number                                       |             |
| Transport  | Not subject |
| 14.2. UN proper shipping name  |             |
| 14.3. Transport hazard class(es)   |             |
| Class  |             |
| 14.4. Packing group  |             |
| Packing group  |             |
| Labels   |             |
| 14.5. Environmental hazards  |             |
| Environmentally hazardous substance mark                                 | no          |
|  |             |
|  | 1           |
| 14.6. Special precautions for user                                       |             |
|  |             |

## SECTION 15: Regulatory information

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

## **European legislation:**

VOC content Directive 2010/75/EU

| VOC content | Remark            |
|-------------|-------------------|
|             | Insufficient data |

## REACH Annex XVII - Restriction

Contains component(s) subject to restrictions of Annex XVII of Regulation (EC) No 1907/2006: restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles.

Reason for revision: CLP-ATP4 Publication date: 2005-03-29

Date of revision: 2015-07-20

Revision number: 0600 Product number: 42121 10/12

|  | Designation of the substance, of the group of substances or of the mixture  | Conditions of restriction  |
|--|---|--|
| · 3-(trimethoxysilyl)propyl) ethylenediamine | Liquid substances or mixtures which are regarded as dangerous in accordance with Directive 1999/45/EC or are fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008: (a) hazard classes 2.1 to 2.4, 2.6 and 2.7, 2.8 types A and B, 2.9, 2.10, 2.12, 2.13 categories 1 and 2, 2.14 categories 1 and 2, 2.15 types A to F; (b) hazard classes 3.1 to 3.6, 3.7 adverse effects on sexual function and fertility or on development, 3.8 effects other than narcotic effects, 3.9 and 3.10; (c) hazard class 4.1; (d) hazard class 5.1. | 1. Shall not be used in:  — ornamental articles intended to produce light or colour effects by means of different phases, for example in ornamental lamps and ashtrays,  — tricks and jokes, — games for one or more participants, or any article intended to be used as such, even with ornamental aspects, 2. Articles not complying with paragraph 1 shall not be placed on the market. 3. Shall not be placed on the market if they contain a colouring agent, unless required for fiscal reasons, or perfume, or both, if they:  — can be used as fuel in decorative oil lamps for supply to the general public, and, — present an aspiration hazard and are labelled with R65 or H304,4. Decorative oil lamps for supply to the general public shall not be placed on the market unless they conform to the European Standard on Decorative oil lamps (EN 14059) adopted by the European Committee for Standardisation (CEN).5. Without prejudice to the implementation of other Community provisions relating to the classification, packaging and labelling of dangerous substances and mixtures, suppliers shall ensure, before the placing on the market, that the following requirements are met:  a) lamp oils, labelled with R65 or H304, intended for supply to the general public are visibly, legibly and indelibly marked as follows: "Keep lamps filled with this liquid out of the reach of children"; and, by 1 December 2010, "Just a sip of lamp oil — or even sucking the wick of lamps — may lead to life- threatening lung damage"; b) grill lighter fluids, labelled with R65 or H304, intended for supply to the general public are legibly and indelibly marked by 1 December 2010 as follows: "Just a sip of grill lighter may lead to life threatening lung damage"; c) lamp oils and grill lighters, labelled with R65 or H304, intended for supply to the general public are packaged in black opaque containers not exceeding 1 litre by 1 December 2010.6. No later than 1 June 2014, the Commission shall request the European Chemicals Agency to prepare a dossier, in accordance with Ar |

## National legislation The Netherlands

X-TACK7

|   | Waste identification (the<br>Netherlands) | LWCA (the Netherlands): KGA category 03 |
|---|---|---|
| Ī | Waterbezwaarlijkheid                      | 11                                      |

## **National legislation Germany**

X-TACK7

|  | WGK                                       | 1; Classification water polluting based on the components in compliance with Verwaltungsvorschrift wassergefährdender |  |
|--|---|---|--|
|  | Stoffe (VwVwS) of 27 July 2005 (Anhang 4) |   |  |
| 3-(trimethoxysilyl)propylamine               |   |   |  |
|  | TA-Luft                                   | 5.2.5   |  |
| N-(3-(trimethoxysilyl)propyl)ethylenediamine |   |   |  |

## **National legislation France**

X-TACK7

TA-Luft

No data available

## National legislation Belgium

X-TACK7

No data available

### Other relevant data

X-TACK7

No data available

## 15.2. Chemical safety assessment

No chemical safety assessment is required.

## SECTION 16: Other information

## Full text of any H-statements referred to under headings 2 and 3:

5.2.5

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

H318 Causes serious eye damage.

H332 Harmful if inhaled.

H411 Toxic to aquatic life with long lasting effects.

(\*) = INTERNAL CLASSIFICATION BY BIG

PBT-substances = persistent, bioaccumulative and toxic substances

CLP (EU-GHS) Classification, labelling and packaging (Globally Harmonised System in Europe)

Reason for revision: CLP-ATP4 Publication date: 2005-03-29
Date of revision: 2015-07-20

 Revision number: 0600
 Product number: 42121
 11 / 12

The information in this safety data sheet is based on data and samples provided to BIG. The sheet was written to the best of our ability and according to the state of knowledge at that time. The safety data sheet only constitutes a guideline for the safe handling, use, consumption, storage, transport and disposal of the substances/preparations/mixtures mentioned under point 1. New safety data sheets are written from time to time. Only the most recent versions may be used. Old versions must be destroyed. Unless indicated otherwise word for word on the safety data sheet, the information does not apply to substances/preparations/mixtures in purer form, mixed with other substances or in processes. The safety data sheet offers no quality specification for the substances/preparations/mixtures in question. Compliance with the instructions in this safety data sheet does not release the user from the obligation to take all measures dictated by common sense, regulations and recommendations or which are necessary and/or useful based on the real applicable circumstances. BIG does not guarantee the accuracy or exhaustiveness of the information provided and cannot be held liable for any changes by third parties. This safety data sheet is only to be used within the European Union, Switzerland, Iceland, Norway and Liechtenstein. Any use outside of this area is at your own risk. Use of this safety data sheet is subject to the licence and liability limiting conditions as stated in your BIG licence agreement or when this is failing the general conditions of BIG. All intellectual property rights to this sheet are the property of BIG and its distribution and reproduction are limited. Consult the mentioned agreement/conditions for details.

Reason for revision: CLP-ATP4 Publication date: 2005-03-29

Date of revision: 2015-07-20

Revision number: 0600 Product number: 42121 12 / 12