

This safety data sheet was created pursuant to the requirements of: Regulation (EC) No. 1907/2006 and Regulation (EC) No. 1272/2008

OB1 MULTI-SURFACE SEALANT AND ADHESIVE SILVER

Supercedes Date: 19-Dec-2019

Revision date 20-Jun-2022

Revision Number 3

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

1.1. Product identifier

Product Name OB1 MULTI-SURFACE SEALANT AND ADHESIVE SILVER

Pure substance/mixture Mixture

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

Recommended use Adhesives and/or sealants

Uses advised against

Not to be used in production of toys or childcare articles

Reason why uses advised against Restricted substance per REACH Annex XVII

1.3. Details of the supplier of the safety data sheet

Company Name

Bostik Limited Common Rd ST16 3EH Stafford UK

Tel: +44 (1785) 27 26 25 Fax: +44 (1785) 25 72 36

E-mail address SDS.box-EU@bostik.com

1.4. Emergency telephone number

United Kingdom +44 (1785) 272650

Ireland NPIC - National Poison Information Centre

Members of the Public: +353 (01) 8092166 (8.00 am to 10.00 pm - 7 days a week)

Healthcare Professionals: +353 (01) 8092566 (24 hour service)

Europe 112

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Regulation (EC) No 1272/2008

This mixture is classified as not hazardous according to regulation (EC) 1272/2008 [CLP]

2.2. Label elements

This mixture is classified as not hazardous according to regulation (EC) 1272/2008 [CLP]

Signal word

None

Hazard statements

This mixture is classified as not hazardous according to regulation (EC) 1272/2008 [CLP]

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EU Specific Hazard Statements

Supercedes Date: 19-Dec-2019

EUH208 - Contains Trimethoxyvinylsilane & N-(3-(trimethoxysilyl)propyl)ethylenediamine & Hydrocarbons, C9-unsaturated, polymerized & N-[3-(Dimethoxymethylsilyl)propyl]-ethylenediamine. May produce an allergic reaction EUH210 - Safety data sheet available on request

2.3. Other hazards

Small amounts of methanol (CAS 67-56-1) are formed by hydrolysis and released upon curing.

PBT & vPvB

This mixture contains no substance considered to be persistent, bioaccumulating or toxic (PBT). This mixture contains no substance considered to be very persistent nor very bioaccumulating (vPvB).

SECTION 3: Composition/information on ingredients

3.1 Substances

Not applicable

3.2 Mixtures

| Chemical name | EC No | CAS No | Weight-% | Classification according to Regulation (EC) No. 1272/2008 [CLP] | Specific concentration limit (SCL) | REACH registration number |
|--|-----------|------------|-----------|---|--|---------------------------------|
| Diisononyl phthalate | 249-079-5 | 28553-12-0 | >25 - <40 | [1] | - | 01-2119430798- 28-XXXX |
| Silica, amorphous | 231-545-4 | 7631-86-9 | 10 - <20 | [B] | - | 01-2119379499- 16-XXXX |
| Trimethoxyvinylsilane | 220-449-8 | 2768-02-7 | 1 - <5 | Skin Sens. 1B (H317) Acute Tox. 4 (H332) Flam. Liq. 3 (H226) | - | 01-2119513215- 52-XXXX |
| Aluminum | 231-072-3 | 7429-90-5 | 0.1 - <1 | Flam. Sol. 1 (H228) | - | 01-2119529243- 45-XXXX |
| N-(3-(trimethoxysilyl)pro pyl)ethylenediamine | 217-164-6 | 1760-24-3 | 0.1 - <1 | Eye Dam. 1 (H318) Skin Sens. 1 (H317) Acute Tox. 4 (H332) STOT SE 3 (H335) | - | 01-2119970215- 39-XXXX |
| Dioctyltin oxide | 212-791-1 | 870-08-6 | 0.1 - <1 | STOT SE 2 (H371) | - | 01-2119971268- 27-xxxx |
| Hydrocarbons, C9-unsaturated, polymerized | 615-276-3 | 71302-83-5 | 0.1 - <1 | Skin Sens. 1A (H317) Aquatic Chronic 3 (H412) | - | 01-2119555292- 40-XXXX |
| N-[3-(Dimethoxymethylsi lyl)propyl]-ethylenediami ne | 221-336-6 | 3069-29-2 | 0.1 - <1 | Acute Tox. 4 (H302) Skin Irrit. 2 (H315) | - | 01-2119963926- 21-xxxx |

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| Eye (Skin | ye Dam. 1 (H318) in Sens. 1A (H317) |
|------------------|--|

Full text of H- and EUH-phrases: see section 16

Note: ^indicates not classified, however, the substance is listed in section 3 as it has an OEL

This product does not contain candidate substances of very high concern at a concentration >=0.1% (Regulation (EC) No. 1907/2006 (REACH), Article 59)

SECTION 4: First aid measures

Supercedes Date: 19-Dec-2019

4.1. Description of first aid measures

General advice Show this safety data sheet to the doctor in attendance. If medical advice is needed,

have product container or label at hand.

Inhalation Remove to fresh air. If symptoms persist, call a doctor.

Eye contact Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.

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

Skin contact In the case of skin irritation or allergic reactions see a doctor. Wash skin with soap and

water.

Ingestion Call a doctor immediately. Rinse mouth thoroughly with water. Never give anything by

mouth to an unconscious person. Small amounts of toxic methanol are released by

hydrolysis.

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

Symptoms None known.

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

Note to doctors Treat symptomatically. Small amounts of methanol (CAS 67-56-1) are formed by

hydrolysis and released upon curing.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable Extinguishing Media Water spray, carbon dioxide (CO2), dry chemical, alcohol-resistant foam.

Unsuitable extinguishing media Full water jet.

5.2. Special hazards arising from the substance or mixture

Specific hazards arising from the

chemical

Thermal decomposition can lead to release of irritating gases and vapours.

Hazardous combustion products Carbon oxides. Carbon monoxide. Carbon dioxide (CO2). Silicon dioxide.

5.3. Advice for firefighters

Special protective equipment and Wear self contained breathing apparatus for fire fighting if necessary.

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precautions for fire-fighters

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions Use personal protective equipment as required. Ensure adequate ventilation. Do not get

in eyes, on skin, or on clothing.

For emergency responders Use personal protection recommended in Section 8.

6.2. Environmental precautions

Environmental precautions Prevent product from entering drains. Do not allow to enter into soil/subsoil. See Section

12 for additional Ecological Information.

6.3. Methods and material for containment and cleaning up

Methods for containmentDo not scatter spilled material with high pressure water streams.

Methods for cleaning up Take up mechanically, placing in appropriate containers for disposal.

Prevention of secondary hazards Clean contaminated objects and areas thoroughly observing environmental regulations.

6.4. Reference to other sections

Reference to other sections See section 8 for more information. See section 13 for more information.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling Ensure adequate ventilation.

General hygiene considerations Do not eat, drink or smoke when using this product. Wash hands before breaks and after

work

7.2. Conditions for safe storage, including any incompatibilities

Storage Conditions Protect from moisture. Keep away from food, drink and animal feedingstuffs.

Recommended storage

temperature

Keep at temperatures between 10 and 35 °C.

7.3. Specific end use(s)

Specific use(s)

Adhesives and/or sealants.

Risk Management Methods (RMM) The information required is contained in this Safety Data Sheet.

Other information Observe technical data sheet.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure Limits Small amounts of methanol (CAS 67-56-1) are formed by hydrolysis and released upon

curing

| Chemical name | European Union | United Kingdom |
|----------------------|----------------|--------------------------|
| Diisononyl phthalate | - | TWA: 5 mg/m ³ |

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| 28553-12-0 | | STEL: 15 mg/m ³ |
|--------------------------------|-------------------------------------|---|
| Silica, amorphous 7631-86-9 | TWA: 0.1 mg/m ³ | TWA: 6 mg/m³ TWA: 2.4 mg/m³ TWA: 0.1 mg/m³ STEL: 18 mg/m³ STEL: 7.2 mg/m³ STEL: 0.3 mg/m³ |
| Methyl alcohol 67-56-1 | TWA: 200 ppm TWA: 260 mg/m³ * | TWA: 200 ppm TWA: 266 mg/m³ STEL: 250 ppm STEL: 333 mg/m³ Sk* |
| Aluminum 7429-90-5 | - | TWA: 10 mg/m³ TWA: 4 mg/m³ STEL: 30 mg/m³ STEL: 12 mg/m³ |
| Dioctyltin oxide 870-08-6 | - | TWA: 0.1 mg/m³ STEL: 0.2 mg/m³ Sk* |

| Chemical name | European Union | Ireland | United Kingdom |
|----------------|----------------|----------------------------------|----------------|
| Methyl alcohol | - | 15 mg/L (urine - Methanol end of | - |
| 67-56-1 | | shift) | |

Derived No Effect Level (DNEL) No information available

| Derived No Effect Level (DNEL) | | | | | |
|--|-----------------------------------|--------------------------------|---------------|--|--|
| Diisononyl phthalate (28553-12 | Diisononyl phthalate (28553-12-0) | | | | |
| Туре | Exposure route | Derived No Effect Level (DNEL) | Safety factor | | |
| worker Long term Systemic health effects | Inhalation | 51.72 mg/m³ | | | |
| worker Long term Systemic health effects | Dermal | 366 mg/kg bw/d | | | |

| Trimethoxyvinylsilane (2768-02-7) | | | | |
|--|----------------|--------------------------------|---------------|--|
| Туре | Exposure route | Derived No Effect Level (DNEL) | Safety factor | |
| worker Systemic health effects Long term | Inhalation | 27,6 mg/m ³ | | |
| worker Systemic health effects Long term | Dermal | 3,9 mg/kg bw/d | | |

| N-(3-(trimethoxysilyl)propyl)ethylenediamine (1760-24-3) | | | | |
|--|----------------|--------------------------------|---------------|--|
| Туре | Exposure route | Derived No Effect Level (DNEL) | Safety factor | |
| worker Systemic health effects Long term | Inhalation | 35.5 mg/m³ | | |
| worker Systemic health effects Long term | Dermal | 5 mg/kg bw/d | | |

| Dioctyltin oxide (870-08-6) | | | | |
|-----------------------------|----------------|-------------------------|---------------|--|
| Type | Exposure route | Derived No Effect Level | Safety factor | |
| | | (DNEL) | - | |
| worker | Dermal | 0.05 mg/kg bw/d | | |
| Long term | | | | |

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| Systemic health effects | | | |
|-------------------------|------------|-------------------------|--|
| worker | Inhalation | 0.004 mg/m ³ | |
| Long term | | | |
| Systemic health effects | | | |

| N-[3-(Dimethoxymethylsilyl)propyl]-ethylenediamine (3069-29-2) | | | | |
|--|----------------|--------------------------------|---------------|--|
| Туре | Exposure route | Derived No Effect Level (DNEL) | Safety factor | |
| worker Long term Systemic health effects | Inhalation | 12 mg/m ³ | | |
| worker Long term Systemic health effects | Dermal | 1.7 mg/kg bw/d | | |

| Derived No Effect Level (DN | Derived No Effect Level (DNEL) | | | | |
|--|--------------------------------|--------------------------------|---------------|--|--|
| Trimethoxyvinylsilane (2768 | -02-7) | | | | |
| Type | Exposure route | Derived No Effect Level (DNEL) | Safety factor | | |
| Consumer Systemic health effects Long term | Inhalation | 18,9 mg/m³ | | | |
| Consumer Systemic health effects Long term | Dermal | 7,8 mg/kg bw/d | | | |
| Consumer Systemic health effects Long term | Oral | 0,3 mg/kg bw/d | | | |

| N-(3-(trimethoxysilyl)propyl)ethylenediamine (1760-24-3) | | | | |
|--|----------------|--------------------------------|---------------|--|
| Туре | Exposure route | Derived No Effect Level (DNEL) | Safety factor | |
| Consumer Systemic health effects Long term | Oral | 2.5 mg/kg bw/d | | |
| Consumer Systemic health effects Long term | Inhalation | 8.7 mg/m³ | | |
| Consumer Systemic health effects Long term | Dermal | 2.5 mg/kg bw/d | | |

| Dioctyltin oxide (870-08-6) | | | | |
|-----------------------------|----------------|--------------------------------|---------------|--|
| Туре | Exposure route | Derived No Effect Level (DNEL) | Safety factor | |
| Consumer Long term | Oral | 0.0005 mg/kg bw/d | | |
| Systemic health effects | | | | |
| Consumer | Dermal | 0.025 mg/kg bw/d | | |
| Long term | | | | |
| Systemic health effects | | | | |
| Consumer | Inhalation | 0.0009 mg/m ³ | | |
| Long term | | | | |
| Systemic health effects | | | | |

| N-[3-(Dimethoxymethylsilyl)propyl]-ethylenediamine (3069-29-2) | | | | |
|--|----------------|--------------------------------|---------------|--|
| Type | Exposure route | Derived No Effect Level (DNEL) | Safety factor | |
| Consumer | Inhalation | 2.9 mg/m³ | | |

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| Long term | | | |
|-------------------------|--------|-----------------|---|
| Systemic health effects | | | |
| Consumer | Dermal | 0.83 mg/kg bw/d | 1 |
| Long term | | | |
| Systemic health effects | | | |
| Consumer | Oral | 0.83 mg/kg bw/d | |
| Long term | | | |
| Systemic health effects | | | |

Predicted No Effect Concentration No information available. **(PNEC)**

| Predicted No Effect Concentration (PNEC) | |
|--|--|
| Trimethoxyvinylsilane (2768-02-7) | |
| Environmental compartment | Predicted No Effect Concentration (PNEC) |
| Freshwater | 0.34 mg/l |
| Marine water | 0.034 mg/l |
| Microorganisms in sewage treatment | 110 mg/l |

| N-(3-(trimethoxysilyl)propyl)ethylenediamine (1760-24-3) | | | |
|--|--|--|--|
| Environmental compartment | Predicted No Effect Concentration (PNEC) | | |
| Freshwater | 0.062 mg/l | | |
| Marine water | 0.0062 mg/l | | |
| Sewage treatment plant | 25 mg/l | | |

| Dioctyltin oxide (870-08-6) | |
|------------------------------------|--|
| Environmental compartment | Predicted No Effect Concentration (PNEC) |
| Freshwater sediment | 0.02798 mg/kg dry weight |
| Marine sediment | 0.002798 mg/kg dry weight |
| Microorganisms in sewage treatment | 100 mg/l |

| N-[3-(Dimethoxymethylsilyl)propyl]-ethylenediamine (3069-29-2) | | | |
|--|--|--|--|
| Environmental compartment | Predicted No Effect Concentration (PNEC) | | |
| Freshwater | 0.062 mg/l | | |
| Marine water | 0.006 mg/l | | |
| Sewage treatment plant | 25 mg/l | | |
| Freshwater sediment | 0.24 mg/kg dry weight | | |
| Marine sediment | 0.024 mg/kg dry weight | | |
| Soil | 0.01 mg/kg dry weight | | |

8.2. Exposure controls

Engineering controls Ensure adequate ventilation, especially in confined areas.

Personal protective equipment

Eye/face protection Wear safety glasses with side shields (or goggles). Eye protection must conform to

standard EN 166.

Hand protection Wear suitable gloves. Recommended Use:. Neoprene™. Nitrile rubber. Butyl rubber.

Glove thickness > 0.7mm. The breakthrough time for the mentioned glove material is in general greater than 480 min. Ensure that the breakthrough time of the glove material is not exceeded. Refer to glove supplier for information on breakthrough time for specific

gloves. Gloves must conform to standard EN 374

Skin and body protection None under normal use conditions.

Respiratory protection In case of inadequate ventilation wear respiratory protection. Wear a respirator

conforming to EN 140 with Type A/P2 filter or better. Ensure adequate ventilation,

especially in confined areas.

Recommended filter type: Organic gases and vapours filter conforming to EN 14387. White. Brown.

Environmental exposure controls Do not allow uncontrolled discharge of product into the environment.

SECTION 9: Physical and chemical properties

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9.1. Information on basic physical and chemical properties

Physical state Solid Appearance Paste Colour Silver

Odour Characteristic.

Odour threshold No information available

Remarks • Method **Property** Values

No data available Melting point / freezing point None known

270 °C Initial boiling point and boiling

range

Flammability Not applicable for liquids .

Flammability Limit in Air None known

Upper flammability or explosive No data available

Lower flammability or explosive No data available

limits

Flash point > 60 °C

Autoignition temperature No data available None known **Decomposition temperature** None known рΗ No data available None known pH (as aqueous solution) No data available None known Kinematic viscosity $> 21 \text{ mm}^2/\text{s}$ None known

Dynamic viscosity No data available Water solubility No data available

None known Solubility(ies) No data available None known Partition coefficient No data available None known Vapour pressure No data available None known

Relative density 1.06

Bulk Density No data available **Liquid Density** No data available Relative vapour density No data available

Particle characteristics

Particle Size No information available **Particle Size Distribution** No information available

9.2. Other information **VOC Content (%)**

9.2.1. Information with regards to physical hazard classes Not applicable

9.2.2. Other safety characteristics

No information available

SECTION 10: Stability and reactivity

10.1. Reactivity

Product cures with moisture. Reactivity

10.2. Chemical stability

Stable under normal conditions. Stability

Explosion data

Sensitivity to mechanical None.

impact

Sensitivity to static discharge None.

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None known

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10.3. Possibility of hazardous reactions

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Possibility of hazardous reactions None under normal processing.

10.4. Conditions to avoid

Conditions to avoid Protect from moisture. Exposure to air or moisture over prolonged periods. Do not freeze.

Keep away from open flames, hot surfaces and sources of ignition.

10.5. Incompatible materials

Incompatible materialsNone known based on information supplied.

10.6. Hazardous decomposition products

Hazardous decomposition

Small amounts of methanol (CAS 67-56-1) are formed by hydrolysis and released upon

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curing.

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Information on likely routes of exposure

Product Information

products

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

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

Skin contactBased on available data, the classification criteria are not met. May cause sensitisation in

susceptible persons.

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

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms No information available.

Acute toxicity

Numerical measures of toxicity

The following values are calculated based on chapter 3.1 of the GHS document

ATEmix (inhalation-vapour) 559.7888 mg/l

Component Information

| Chemical name | Oral LD50 | Dermal LD50 | Inhalation LC50 |
|----------------------------------|---|--------------------------------------|--|
| Diisononyl phthalate | >9750 mg/kg (Rattus) >3160 mg/Kg (Oryc cuniculus) | | >4.4 mg/L (Rattus) 4 h |
| Silica, amorphous | nous =7900 mg/kg (Rattus) > 5000 mg/kg (Orycles) cuniculus) | | >2.2 mg/L (Rattus) 1 h |
| Trimethoxyvinylsilane | LD50 = 7120 -7236 mg/kg (Rattus) OECD 401 | = 3540 mg/kg (Oryctolagus cuniculus) | LC50 (4hr) 16.8 mg/l (Rattus) OECD TG 403 |
| Aluminum | LD50 >10,000 mg/Kg (Rattus)(OECD 401) | - | > 0.888 mg/L (Rat) 4 h |
| N-(3-(trimethoxysilyl)propyl)eth | =2295 mg/kg (Rattus) | >2000 mg/Kg (Rattus) | LC50 4H (Aerosol)1.5 - 2.44 |

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| ylenediamine | | | mg/L air |
|--------------------------------|----------------------------|----------------------------|-------------------------------|
| Dioctyltin oxide | =2500 mg/kg (Rattus) | LD50 > 2000 mg/kg (Rattus) | - |
| | | OECD 402 | |
| Hydrocarbons, C9-unsaturated, | LD50 >2000 mg/kg Rat | LD50 > 2000 mg/kg (Rattus) | LC0 (4h) > 5.14 mg/L (Rattus) |
| polymerized | | OECD 402 | OECD 403 |
| N-[3-(Dimethoxymethylsilyl)pro | =200 - 2000 mg/Kg (Rattus) | >5000 mg/Kg (Oryctolagus | > 5.2 mg/L (Rat) 4 h |
| pyl]-ethylenediamine | (OECD 401) | cuniculus) | |
| | | (OECD 402) | |

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Skin corrosion/irritation

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

Trimethoxyvinylsilane (2768-02-7)

| Method | Species | Exposure route | Effective dose | Exposure time | Results |
|--------|---------|----------------|----------------|---------------|--------------|
| | Rabbit | Dermal | 0.5 mL | 24 hours | Non-irritant |

N-[3-(Dimethoxymethylsilyl)propyl]-ethylenediamine (3069-29-2)

| Method | Species | Exposure route | Effective dose | Exposure time | Results |
|----------------------|---------|----------------|----------------|---------------|----------|
| OECD Test No. 404: | Rabbit | Dermal | | | irritant |
| Acute Dermal | | | | | |
| Irritation/Corrosion | | | | | |

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

Trimethoxyvinylsilane (2768-02-7)

| Method | Species | Exposure route | Effective dose | Exposure time | Results |
|----------------------|---------|----------------|----------------|---------------|--------------|
| OECD Test No. 405: | Rabbit | eye | | 24 hours | Non-irritant |
| Acute Eye | | | | | |
| Irritation/Corrosion | | | | | |

N-[3-(Dimethoxymethylsilyl)propyl]-ethylenediamine (3069-29-2)

| Method | Species | Exposure route | Effective dose | Exposure time | Results |
|----------------------|---------|----------------|----------------|---------------|------------|
| OECD Test No. 405: | Rabbit | | | | Eye Damage |
| Acute Eye | | | | | |
| Irritation/Corrosion | | | | | |

Respiratory or skin sensitisation

OECD Test No. 406: Skin Sensitisation. No sensitisation responses were observed. No classification is proposed, based on conclusive negative data. May cause sensitisation in susceptible persons.

| Method | Species | Exposure route | Results |
|-------------------------|------------|----------------|----------------------------|
| OECD Test No. 406: Skin | Guinea pig | Dermal | No sensitisation responses |
| Sensitisation | | | were observed |

Trimethoxyvinylsilane (2768-02-7)

| Method | Species | Exposure route | Results |
|-----------------------------|------------|----------------|-------------|
| OECD Test No. 406: Skin | Guinea pig | Dermal | sensitising |
| Sensitisation, Buehler test | | | |

N-[3-(Dimethoxymethylsilyl)propyl]-ethylenediamine (3069-29-2)

| [- \ | | | | | |
|-------------------------|------------|----------------|-------------|--|--|
| Method | Species | Exposure route | Results | | |
| OECD Test No. 406: Skin | Guinea pig | | Sensitizing | | |
| Sensitisation | | | | | |

Germ cell mutagenicity

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

Component Information

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Trimethoxyvinylsilane (2768-02-7)

| Method | Species | Results |
|--------------------------------------|----------|---------------|
| OECD Test No. 471: Bacterial Reverse | in vitro | Not mutagenic |
| Mutation Test | | |

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

Reproductive toxicityBased on available data, the classification criteria are not met.

Trimethoxyvinylsilane (2768-02-7)

| Method | Species | Results |
|---|---------|------------------|
| OECD Test No. 422: Combined Repeated Dose | Rat | Not Classifiable |
| Toxicity Study with the | | |
| Reproduction/Developmental Toxicity Screening | | |
| Test | | |

STOT - single exposure Based on available data, the classification criteria are not met.

Dioctyltin oxide (870-08-6)

| Diocigitin oxide (070 00 0) | Blocky tail to kidd (or o do d) | | | | | | |
|-----------------------------|---------------------------------|----------------|----------------|---------------|-------------------|--|--|
| Method | Species | Exposure route | Effective dose | Exposure time | Results | | |
| OECD Test No. 422: | Rat | Oral | 5 mg/kg | 28 days | 0.3 - 0.5 mg/kg | | |
| Combined Repeated Dose | | | | | bw/d May cause | | |
| Toxicity Study with the | | | | | damage to the | | |
| Reproduction/Developme | | | | | following organs: | | |
| ntal Toxicity Screening | | | | | Immune system | | |
| Test | | | | | | | |

STOT - repeated exposureBased on available data, the classification criteria are not met.

Trimethoxyvinylsilane (2768-02-7)

| Method | Species | Exposure route | Effective dose | Exposure time | Results |
|------------------------|---------|-------------------|----------------|---------------|-------------|
| OECD Test No. 413: | Rat | Inhalation vapour | | 90 days | 0.058 NOAEL |
| Sub-chronic Inhalation | | | | | |
| Toxicity: 90-day Study | | | | | |

Dioctyltin oxide (870-08-6)

| Method | | Species | Exposure route | Effective dose | Exposure time Results | |
|--------|--|------------|----------------|----------------|-----------------------|---------------------|
| | | Rat Rabbit | | | 28 davs | 0.3 -0.5 ma/ka bw/d |

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

11.2. Information on other hazards

11.2.1. Endocrine disrupting properties

Endocrine disrupting properties

11.2.2. Other information

Other adverse effects No information available.

SECTION 12: Ecological information

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12.1. Toxicity

Ecotoxicity

| Chemical name | Algae/aquatic plants | Fish | Toxicity to microorganisms | Crustacea | M-Factor | M-Factor (long-term) |
|---|---|--|----------------------------|--|----------|-------------------------|
| Diisononyl phthalate 28553-12-0 | EC50 72 h > 500 mg/L (Desmodesmus subspicatus) | mg/L | | EC50: >0.06mg/L (48h, Daphnia magna) EC50: >500mg/L (48h, Daphnia | | |
| Silica, amorphous 7631-86-9 | EC50: =440mg/L (72h, | LC50: =5000mg/L (96h, | - | magna) EC50: =7600mg/L (48h, | | |
| Trimethoussinuleilana | Pseudokirchneri ella subcapitata) | Brachydanio rerio) | | Ceriodaphnia dubia) | | |
| Trimethoxyvinylsilane 2768-02-7 | EC 50 (72h) > 957 mg/l (Desmodesmus subspicatus) EU Method C.3 | mykiss) | - | EC50(48hr) 168.7mg/l (Daphnia magna) | | |
| N-(3-(trimethoxysilyl)pr opyl)ethylenediamine 1760-24-3 | - | LC50 (96H) =597 mg/L (Danio rerio)Semi-static | - | EC50 (48h) =81mg/L Daphnia magna Static | | |
| Dioctyltin oxide 870-08-6 | EC50 (3hr) >1.000 mg/l (bacteria) (Activated Sludge, Respiration Inhibition Test) | LC50 (96hr) >0,09 mg/l (Brachydanio rerio (zebra)) (Acute Toxicity Test) | - | EC50 (48Hr) >0,21 mg/l (Daphnia magna (Dappnia magna)) (Daphnia sp. Acute Immobilisation Test) | | |
| Hydrocarbons, C9-unsaturated, polymerized 71302-83-5 | EL50 (72h) >100 mg/L (Desmodesmus subspicatus) OECD 201 | LL50 (96h) = 25.8 mg/L (Danio rerio) OECD 203 | | EL50 (48h) =54 mg/L (Daphnia magna) OECD 202 | | |

12.2. Persistence and degradability

Persistence and degradability No information available.

Silica, amorphous (7631-86-9)

| Method | Exposure time | Value | Results |
|--------|---------------|-------|-----------------------------|
| | | | The methods for determining |
| | | | biodegradability are not |
| | | | applicable to inorganic |
| | | | substances |

Trimethoxyvinylsilane (2768-02-7)

| Method | Exposure time | Value | Results |
|------------------------------|---------------|-------|------------------|
| OECD Test No. 301F: Ready | 28 days | BOD | 51 % Not readily |
| Biodegradability: Manometric | - | | biodegradable |
| Respirometry Test (TG 301 F) | | | - |

Dioctyltin oxide (870-08-6)

| Method | Exposure time | Value | Results |
|---------------------------|---------------|----------------|-----------------------------|
| OECD Test No. 301F: Ready | 755 hours | biodegradation | Not readily biodegradable 2 |

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| | | |
|--|-------------|---|
| Biodegradability: Manometric Respirometry Test (TG 301 F) | | % |

12.3. Bioaccumulative potential

Bioaccumulation

Component Information

| Chemical name | Partition coefficient |
|--|-----------------------|
| Diisononyl phthalate | 9.7 |
| Trimethoxyvinylsilane | 1.1 |
| N-(3-(trimethoxysilyl)propyl)ethylenediamine | -0.3 |
| Dioctyltin oxide | 6 |
| Hydrocarbons, C9-unsaturated, polymerized | 6.3 |

12.4. Mobility in soil

Mobility in soil No information available.

12.5. Results of PBT and vPvB assessment

PBT and vPvB assessment

| Chemical name | PBT and vPvB assessment | |
|--|---|--|
| Diisononyl phthalate | The substance is not PBT / vPvB PBT assessment does | |
| | not apply | |
| Silica, amorphous | The substance is not PBT / vPvB PBT assessment does | |
| | not apply | |
| Trimethoxyvinylsilane | The substance is not PBT / vPvB | |
| Aluminum | The substance is not PBT / vPvB PBT assessment does | |
| | not apply | |
| N-(3-(trimethoxysilyl)propyl)ethylenediamine | The substance is not PBT / vPvB | |
| Dioctyltin oxide | The substance is not PBT / vPvB | |
| N-[3-(Dimethoxymethylsilyl)propyl]-ethylenediamine | The substance is not PBT / vPvB | |

12.6. Endocrine disrupting properties

Endocrine disrupting properties No information available.

12.7. Other adverse effects

No information available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste from residues/unused products

Dispose of contents/container in accordance with local, regional, national, and

international regulations as applicable.

Contaminated packaging Handle contaminated packages in the same way as the product itself.

European Waste Catalogue 08 04 10 waste adhesives and sealants other than those mentioned in 08 04 09

Other information Waste codes should be assigned by the user based on the application for which the

product was used.

SECTION 14: Transport information

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Land transport (ADR/RID)

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| 14.1 UN number or ID number | Not regulated |
|---------------------------------|----------------|
| 14.2 Proper Shipping Name | Not regulated |
| 14.3 Transport hazard class(es) | Not regulated |
| 14.4 Packing group | Not regulated |
| 14.5 Environmental hazards | Not applicable |
| 14.6 Special Provisions | None |

IMDG

14.1UN number or ID numberNot regulated14.2Proper Shipping NameNot regulated14.3Transport hazard class(es)Not regulated14.4Packing groupNot regulated14.5Marine pollutantNP

14.6 Special Provisions None

14.7 Maritime transport in bulk Not applicable

according to IMO instruments

Air transport (ICAO-TI / IATA-DGR)

14.1 UN number or ID numberNot regulated14.2 Proper Shipping NameNot regulated14.3 Transport hazard class(es)Not regulated14.4 Packing groupNot regulated14.5 Environmental hazardsNot applicable

14.6 Special Provisions None

Section 15: REGULATORY INFORMATION

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

European Union

Take note of Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work

Check whether measures in accordance with Directive 94/33/EC for the protection of young people at work must be taken.

Take note of Directive 92/85/EC on the protection of pregnant and breastfeeding women at work

Registration, Evaluation, Authorization, and Restriction of Chemicals (REACh) Regulation (EC 1907/2006)

SVHC: Substances of Very High Concern for Authorisation:

This product does not contain candidate substances of very high concern at a concentration >=0.1% (Regulation (EC) No. 1907/2006 (REACH), Article 59)

EU-REACH (1907/2006) - Annex XVII - Substances subject to Restriction

This product contains one or more substance(s) subject to restriction (Regulation (EC) No. 1907/2006 (REACH), Annex XVII).

| Chemical name | CAS No | Restricted substance per REACH |
|----------------------|------------|--------------------------------|
| | | Annex XVII |
| Diisononyl phthalate | 28553-12-0 | 52[a]. |
| Dioctyltin oxide | 870-08-6 | 20. |

52. Not to be used in toys or childcare articles above 0.1% which can be placed in the mouth by children.

Substance subject to authorisation per REACH Annex XIV

This product does not contain substances subject to authorisation (Regulation (EC) No. 1907/2006 (REACH), Annex XIV)

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Export Notification requirements

This product contains substances which are regulated pursuant to Regulation (EC) No. 649/2012 of the European parliament and of the council concerning the export and import of dangerous chemicals

| Chemical name | European Export/Import Restrictions per (EC) 689/2008 - Anne | |
|------------------|--|--|
| | Number | |
| Dioctyltin oxide | I.1 | |

Ozone-depleting substances (ODS) regulation (EC) 1005/2009

Not applicable

Persistent Organic Pollutants

Not applicable

REGULATION (EU) 2019/1148 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 20 June 2019 on the marketing and use of explosives precursors

This product contains

| Chemical name | Reporting of suspicious transactions, disappearances and thefts | Restricted |
|----------------------|---|------------|
| Aluminum - 7429-90-5 | X | |

National regulations

15.2. Chemical safety assessment

Chemical Safety Assessments have been carried out by the Reach registrants for substances registered at >10 tpa. No Chemical Safety Assessment has been carried out for this mixture

SECTION 16: Other information

Key or legend to abbreviations and acronyms used in the safety data sheet

Full text of H-Statements referred to under section 3

H226 - Flammable liquid and vapour

H302 - Harmful if swallowed

H315 - Causes skin irritation

H317 - May cause an allergic skin reaction

H318 - Causes serious eye damage

H332 - Harmful if inhaled

H335 - May cause respiratory irritation

H412 - Harmful to aquatic life with long lasting effects

Legend

TWA TWA (time-weighted average)
STEL STEL (Short Term Exposure Limit)

Ceiling Ceiling Limit Value
* Skin designation

SVHC Substance(s) of Very High Concern

PBT Persistent, Bioaccumulative, and Toxic (PBT) Chemicals vPvB Very Persistent and very Bioaccumulative (vPvB) Chemicals

STOT RE Specific target organ toxicity - Repeated exposure STOT SE Specific target organ toxicity - Single exposure

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EWC European Waste Catalogue

ADR European Agreement concerning the International Carriage of Dangerous Goods by

Road

IMDG International Maritime Dangerous Goods (IMDG)
IATA International Air Transport Association (IATA)

RID Regulations concerning the International Transport of Dangerous Goods by Rail

Key literature references and sources for data

No information available

Supercedes Date: 19-Dec-2019

Prepared By Product Safety & Regulatory Affairs

Revision date 20-Jun-2022

Indication of changes

Revision note Not applicable.

Training Advice No information available

Further information No information available

This material safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet

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