

SAFETY DATA SHEET
According to Annex II to REACH - Regulation 2015/830
GUN APPLIED VERTICAL BOND ADHESIVE

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

1.1. Product identifier

Product name: GUN APPLIED VERTICAL BOND ADHESIVE

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

Intended use: Adhesive for wood flooring bonding

| Identified Uses | Industrial | Professional | Consumer |
|---|---|---|----------|
| SEALANTS AND ADHESIVES FORMULATIONS IN INDUSTRY | SU: 10. ERC: 2. PROC: 3, 4, 5, 8a, 8b, 9. PC: 1. | - | - |
| INDUSTRIAL APPLICATIONS OF SEALANTS AND ADHESIVES | SU: 17, 19. ERC: 5, 8b. PROC: 10, 8a, 8b. PC: 1. | SU: 17, 19. ERC: 5, 8b. PROC: 10, 8a, 8b. PC: 1. | - |
| CHEMICAL SUBSTANCE USE IN LABORATORY, INDUSTRIAL | PROC: 15. PC: 1, 21. | - | - |

1.3. Details of the supplier of the safety data sheet

Company name: Hybond
Unit 1, Grange Business Park
Lancaster Road
Shrewsbury
SY1 3LG
Tel: 01743 861800 Fax: 01743 860064
Email: techsupport@hybond.org.uk

1.4. Emergency telephone number

Emergency tel: 01743 861800
Hours of opening: Available during office hours of Monday to Friday 08.30 – 17.00

Section 2: Hazards identification

2.1. Classification of the substance or mixture

The product is not classified as hazardous pursuant to the provisions set forth in EC Regulation 1272/2008 (CLP). However, since the product contains hazardous substances in concentrations such as to be declared in section no. 3, it requires a safety data sheet with appropriate information, compliant to (EU) Regulation 2015/830.

Hazard classification and indication: --

2.2. Label Elements

Hazard labelling pursuant to EC Regulation 1272/2008 (CLP) and subsequent amendments and supplements.

Hazard pictograms: --

Signal words: --

Revision Number: 3
 Revision Date: 01.06.2021
 Replaces Revision: 2 (Dated 23.10.2018)

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Hazard statements:

EUH210 Safety data sheet available on request.
EUH208 Contains: VINYLTRIMETHOXYSILANE.
 N-[3-(TRIMETHOXYSILYL)PROPYL]ETHYLENEDIAMINE.
 May produce an allergic reaction.

Precautionary statements: --

2.3. Other hazards

On the basis of available data, the product does not contain any PBT or vPvB in percentage greater than 0,1%.

Product reacts slowly with water (ambient humidity) turning into a rubbery solid and producing METHANOL.

Section 3: Composition / information on ingredients

3.2. Mixtures

Contains:

| Identification | x = Conc. % | Classification |
|----------------|-------------|----------------|
|----------------|-------------|----------------|

1272/2008 (CLP)N-[3-(TRIMETHOXYSILYL)PROPYL]ETHYLENEDIAMINE.

| | | | |
|-----------------|-----------------------|--------------|--|
| <i>CAS</i> | 1760-24-3 | 0,89 ≤ x < 1 | Acute Tox. 4 H332, STOT RE 2 H373, Eye Dam. 1 H318, Skin Sens. 1 H317 |
| <i>EC</i> | 217-164-6 | | |
| <i>INDEX</i> | | | |
| <i>Reg. no.</i> | 01-2119970215-39-XXXX | | |

VINYLTRIMETHOXYSILANE.

| | | | |
|-----------------|-----------------------|--------------|---|
| <i>CAS</i> | 2768-02-7 | 0,89 ≤ x < 1 | Flam. Liq. 3 H226, Acute Tox. 4 H332, Skin Sens. 1B H317 |
| <i>EC</i> | 220-449-8 | | |
| <i>INDEX</i> | | | |
| <i>Reg. no.</i> | 01-2119513215-52-0003 | | |

METHANOL

| | | | |
|--------------|--------------|--------------|---|
| <i>CAS</i> | 67-56-1 | 0 ≤ x < 0,05 | Flam. Liq. 2 H225, Acute Tox. 3 H301, Acute Tox. 3 H311, Acute Tox. 3 H331, STOT SE 1 H370 |
| <i>EC</i> | 200-659-6 | | |
| <i>INDEX</i> | 603-001-00-X | | |

The full wording of hazard (H) phrases is given in section 16 of the sheet.

Section 4: First aid measures

4.1. Description of first aid measures

EYES: remove immediately with a clean cloth or paper and wash affected area with soap and water.

SKIN: take off contaminated clothing. Wash immediately with plenty of water. If irritation persists, consult a doctor. Wash contaminated clothing before reuse.

INHALATION: In case of feeling unwell remove patient to fresh air and seek medical attention if breathing difficulty succeeding.

INGESTION: eject the product and rinse mouth with water

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

Information not available

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

Consult a doctor if symptoms are severe or in the case of persistent irritation of the skin.

Section 5: Firefighting measures

5.1. Extinguishing media

SUITABLE EXTINGUISHING EQUIPMENT

The extinguishing equipment should be of the conventional kind: carbon dioxide, foam, powder and water spray.

UNSUITABLE EXTINGUISHING EQUIPMENT

None in particular.

5.2. Special hazards arising from the substance or mixture

HAZARDS CAUSED BY EXPOSURE IN THE EVENT OF FIRE

Do not breathe combustion products.

5.3 Advice for fire-fighters

GENERAL INFORMATION

Use jets of water to cool the containers to prevent product decomposition and the development of substances potentially hazardous for health. Always wear full fire prevention gear. Collect extinguishing water to prevent it from draining into the sewer system. Dispose of contaminated water used for extinction and the remains of the fire according to applicable regulations.

SPECIAL PROTECTIVE EQUIPMENT FOR FIRE-FIGHTERS

Normal firefighting clothing i.e., fire kit (BS EN 469), gloves (BS EN 659) and boots (HO specification A29 and A30) in combination with self-contained open circuit positive pressure compressed air breathing apparatus (BS EN 137).

Section 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures:

Block the leakage if there is no hazard.

Wear suitable protective equipment (including personal protective equipment referred to under Section 8 of the safety data sheet) to prevent any contamination of skin, eyes and personal clothing. These indications apply for both processing staff and those involved in emergency procedures.

6.2 Environmental precautions:

The product must not penetrate into the sewer system or come into contact with surface water or ground water.

6.3 Methods and material for containment and cleaning up:

Collect the leaked product into a suitable container. Evaluate the compatibility of the container to be used, by checking section 10. Absorb the remainder with inert absorbent material.

Make sure the leakage site is well aired. Contaminated material should be disposed of in compliance with the provisions set forth in point 13.

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6.4 Reference to other sections:

Any information on personal protection and disposal is given in sections 8 and 13.

Section 7: Handling and storage

7.1 Precautions for safe handling:

Keep away from heat, sparks and naked flames; do not smoke or use matches or lighters. Without adequate ventilation, vapours may accumulate at ground level and, if ignited, catch fire even at a distance, with the danger of backfire. Avoid bunching of electrostatic charges. Do not eat, drink or smoke during use. Remove any contaminated clothes and personal protective equipment before entering places in which people eat. Avoid leakage of the product into the environment.

7.2 Conditions for safe storage, including any incompatibilities

Store only in the original container. Store the containers sealed, in a well-ventilated place, away from direct sunlight. Keep containers away from any incompatible materials, see section 10 for details.

Storage class TRGS 510 (Germany): 10

7.3 Specific end use(s):

Information not available

Section 8: Exposure Controls / Personal protection

8.1 Control parameters

Regulatory References:

| | | |
|-----|-----------------|---|
| BGR | България | НАРЕДБА № 13 ОТ 30 ДЕКЕМВРИ 2003 Г. ЗА ЗАЩИТА НА РАБОТЕЩИТЕ ОТ РИСКОВЕ, СВЪРЗАНИ С ЕКСПОЗИЦИЯ НА ХИМИЧНИ АГЕНТИ ПРИ РАБОТА (изм. ДВ. бр.5 от 17 Януари 2020г.) |
| CYP | Κύπρος | Οι περί Αζθάλειαρ και Υγείαρ ζηην Δπγαζία (Φημικοί Παπάγονηερ) (Τποποποιηηικοί) Κανονιζμοί ηος 2019. Οι περί Ασφάλειας και Υγείας στην Εργασία (Καρκινογόνοι και Μεταλλαξιογόνοι Παράγοντες) (Τροποποιηηικοί) Κανονισμοί του 2020 |
| CZE | Česká Republika | Nařízení vlády č. 41/2020 Sb. Nařízení vlády, kterým se mění nařízení vlády č. 361/2007 Sb., kterým se stanoví podmínky ochrany zdraví při práci, ve znění pozdějších předpisů |
| DEU | Deutschland | Technischen Regeln für Gefahrstoffe (TRGS 900) - Liste der Arbeitsplatzgrenzwerte und Kurzzeitwerte. MAK- und BAT-Werte-Liste 2020, Ständige Senatskommission zur Prüfungsgesundheitsschädlicher Arbeitsstoffe, Mitteilung 56 |
| DNK | Danmark | Bekendtgørelse om grænseværdier for stoffer og materialer - BEK nr 1458 af 13/12/2019 |
| ESP | España | Límites de exposición profesional para agentes químicos en España 2019 |
| FRA | France | Valeurs limites d'exposition professionnelle aux agents chimiques en France. ED 984 - INRS |
| FIN | Suomi | HTP-VÄRDEN 2020. Koncentrationer som befunnits skadliga. SOCIAL - OCH HÄLSOVÄRDSMINISTERIETS PUBLIKATIONER 2020:25 |
| GRC | Ελλάδα | Π.Δ. 26/2020 (ΦΕΚ 50/Α' 6.3.2020) Εναρμόνιση της ελληνικής νομοθεσίας προς τις διατάξεις των οδηγιών 2017/2398/ΕΕ, 2019/130/ΕΕ και 2019/983/ΕΕ «για την τροποποίηση της οδηγίας 2004/37/ΕΚ "σχετικά με την προστασία των εργαζομένων από τους κινδύνους που συνδέονται με την έκθεση σε καρκινογόνους ή μεταλλαξιγόνους παράγοντες κατά την εργασία"» |
| HUN | Magyarország | Az innovációért és technológiáért felelős miniszter 5/2020. (II. 6.) ITM rendelete a kémiai kóroki tényezők hatásának kitett munkavállalók egészségének és biztonságának védelméről |

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| HRV | Hrvatska | Pravilnik o izmjenama i dopunama Pravilnika o zaštiti radnika od izloženosti Opasnimkemičkim na radu, graničnim vrijednostima izloženosti i biološkim graničnim vrijednostima (NN 1/2021) |
| ITA | Italia | Decreto Legislativo 9 Aprile 2008, n.81 |
| NOR | Norge | Forskrift om endring i forskrift om tiltaksverdier og grenseverdier for fysiske og kjemiske faktorer i arbeidsmiljøet samt smitterisikogrupper for biologiske faktorer (forskrift om tiltaks- og grenseverdier), 21. august 2018 nr. 1255 |
| NLD | Nederland | Arbeidsomstandighedenregeling. Lijst van wettelijke grenswaarden op grond van de artikelen 4.3, eerste lid, en 4.16, eerste lid, van het Arbeidsomstandighedenbesluit |
| PRT | Portugal | Decreto-Lei n.º 1/2021 de 6 de janeiro, valores-limite de exposição profissional indicativos para os agentes químicos. Decreto-Lei n.º 35/2020 de 13 de julho, proteção dos trabalhadores contra os riscos ligados à exposição durante o trabalho a agentes cancerígenos ou mutagénicos |
| POL | Polska | Rozporządzenie Ministra Rodziny, Pracy i Polityki Społecznej z dnia 12 czerwca 2018 r. w sprawie najwyższych dopuszczalnych stężeń i natężeń czynników szkodliwych dla zdrowia w środowisku pracy |
| ROU | România | Hotararea 157/2020 pentru modificarea Hotărârii Guvernului nr. 1.218/2006 privind Stabilirea cerințelor minime de securitate și sănătate în muncă pentru asigurarea protecției lucrătorilor împotriva riscurilor legate de prezența agenților chimici, precum și pentru modificarea și completarea Hotărârii Guvernului nr. 1.093/2006 privind stabilirea cerințelor minime de securitate și sănătate pentru protecția lucrătorilor împotriva riscurilor legate de expunerea la agenți cancerigeni sau mutageni la locul de muncă |
| SWE | Sverige | Hygieniska gränsvärden, Arbetsmiljöverkets föreskrifter och allmänna råd om hygieniska gränsvärden (AFS 2018:1) |
| SVK | Slovensko | NARIADENIE VLÁDY Slovenskej republiky z 12. augusta 2020, ktorým sa mení a dopĺňa nariadenie vlády Slovenskej republiky č. 356/2006 Z. z. o ochrane zdravia zamestnancov predrizikami súvisiacimi s expozíciou karcinogénnym a mutagénnym faktorom pri práci v znení neskorších predpisov |
| SVN | Slovenija | Pravilnik o varovanju delavcev pred tveganji zaradi izpostavljenosti kemičnim snovem pri delu (Uradni list RS, št. 100/01, 39/05, 53/07, 102/10, 43/11 – ZVZD-1, 38/15, 78/18 in 78/19) |
| GBR | United Kingdom | EH40/2005 Workplace exposure limits (Fourth Edition 2020) |
| EU | OEL EU | Directive (EU) 2019/1831; Directive (EU) 2019/130; Directive (EU) 2019/983; Directive (EU) 2017/2398; Directive (EU) 2017/164; Directive 2009/161/EU; Directive 2006/15/EC; Directive 2004/37/EC; Directive 2000/39/EC; Directive 98/24/EC; Directive 91/322/EEC. |
| | TLV-ACGIH | ACGIH 2020 |

VINYLTRIMETHOXYSILANE

Predicted no-effect concentration - PNEC

| | | |
|--|-------|-------|
| Normal value in fresh water | 0,34 | mg/l |
| Normal value in marine water | 0,034 | mg/l |
| Normal value for fresh water sediment | 0,27 | mg/kg |
| Normal value for water, intermittent release | 3,4 | mg/l |
| Normal value of STP microorganisms | 110 | mg/l |
| Normal value for the terrestrial compartment | 0,046 | mg/kg |

Health - Derived no-effect level - DNEL / DMEL

| Route of exposure | Effects on consumers | | | | Effects on workers | | | |
|-------------------|----------------------|----------------|---------------|------------------|--------------------|----------------|---------------|------------------|
| | Acute local | Acute systemic | Chronic local | Chronic systemic | Acute local | Acute systemic | Chronic local | Chronic systemic |
| Oral | | | VND | 0,3 mg/kg/d | | | | |
| Inhalation | VND | 93,4 mg/m3 | VND | 1,04 mg/m3 | | | VND | 4,9 mg/m3 |
| Skin | VND | 26,9 mg/kg/d | VND | 0,3 mg/kg/d | | | VND | 0,69 mg/kg/d |

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N-[3-(TRIMETHOXYSILYL)PROPYL]ETHYLENEDIAMINE.

Predicted no-effect concentration - PNEC

| | | |
|--|--------|-------|
| Normal value in fresh water | 0,062 | mg/l |
| Normal value in marine water | 0,0062 | mg/l |
| Normal value for fresh water sediment | 0,22 | mg/kg |
| Normal value for marine water sediment | 0,022 | mg/kg |
| Normal value for water, intermittent release | 0,62 | mg/l |
| Normal value of STP microorganisms | 25 | mg/l |
| Normal value for the terrestrial compartment | 0,0085 | mg/kg |

Health - Derived no-effect level - DNEL / DMEL

| Route of exposure | Effects on consumers | | | | Effects on workers | | | |
|-------------------|----------------------|----------------|---------------|-----------------------|--------------------|----------------|---------------|------------------------|
| | Acute local | Acute systemic | Chronic local | Chronic systemic | Acute local | Acute systemic | Chronic local | Chronic systemic |
| Inhalation | NPI | | NPI | 8,7 mg/m ³ | NPI | | NPI | 35,3 mg/m ³ |
| Skin | | 17 mg/kg bw/d | | 2,5 mg/kg bw/d | | 5 mg/kg bw/d | | 5 mg/kg bw/d |

METHANOL

Threshold Limit Value

| Type | Country | TWA/8h | | STEL/15min | | Remarks / Observations |
|-----------|---------|-------------------|--------|-------------------|---------|------------------------|
| | | mg/m ³ | ppm | mg/m ³ | ppm | |
| TLV | BGR | 260 | 200 | | | SKIN |
| TLV | CYP | 260 | 200 | | | SKIN |
| TLV | CZE | 250 | 187,75 | 1000 | 751 | SKIN |
| AGW | DEU | 270 | 200 | 1080 | 800 | SKIN |
| MAK | DEU | 130 | 100 | 260 | 200 | SKIN |
| TLV | DNK | 260 | 200 | | | SKIN E |
| VLA | ESP | 266 | 200 | | | SKIN |
| VLEP | FRA | 260 | 200 | 1300 | 1000 | SKIN 11 |
| HTP | FIN | 270 | 200 | 330 | 250 | SKIN |
| TLV | GRC | 260 | 200 | 325 | 250 | SKIN |
| AK | HUN | 260 | | | | SKIN |
| GVI/KGVI | HRV | 260 | 200 | | | SKIN |
| VLEP | ITA | 260 | 200 | | | SKIN |
| TLV | NOR | 130 | 100 | | | SKIN |
| TGG | NLD | 133 | | | | SKIN |
| VLE | PRT | 260 | 200 | | | SKIN |
| NDS/NDSCh | POL | 100 | | 300 | | SKIN |
| TLV | ROU | 260 | 200 | | | SKIN |
| NGV/KGV | SWE | 250 | 200 | 350 (C) | 250 (C) | SKIN |
| NPEL | SVK | 260 | 200 | | | SKIN |
| MV | SVN | 260 | 200 | 1040 | 800 | SKIN |
| WEL | GBR | 266 | 200 | 333 | 250 | SKIN |
| OEL | EU | 260 | 200 | | | SKIN |
| TLV-ACGIH | | 262 | 200 | 328 | 250 | SKIN |

Legend:

(C) = CEILING ; INHAL = Inhalable Fraction ; RESP = Respirable Fraction ; THORA = Thoracic Fraction.
VND = hazard identified but no DNEL/PNEC available ; NEA = no exposure expected ; NPI = no hazard identified.

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8.2. Exposure controls

As the use of adequate technical equipment must always take priority over personal protective equipment, make sure that the workplace is well aired through effective local aspiration. When choosing personal protective equipment, ask your chemical substance supplier for advice. Personal protective equipment must be CE marked, showing that it complies with applicable standards.

HAND PROTECTION

Protect your hands with work gloves, category III (ref. standard EN 374). For the final choice of material, you need to assess the type of use. In case of contact for the short term or as protection against splashes, use gloves made of nitrile (0.3mm thickness, permeation time >480 min.). In the event of continued exposure use butyl rubber gloves (0.4mm thickness, permeation time > 480 min.). Contaminated gloves should be removed.

SKIN PROTECTION

Wear category I professional long-sleeved overalls and safety footwear (see Directive 89/686/EEC and standard EN ISO 20344). Wash body with soap and water after removing protective clothing.

EYE PROTECTION

Wear airtight protective goggles (see standard EN 166).

RESPIRATORY PROTECTION

In case of exceeding the threshold value (eg, TLV-TWA) of the substance or one or more of the substances present in the product, it is advisable to wear a mask with filter type A for organic vapors, the class (1, 2 or 3) must be chosen according to the limit concentration of use (1000, 5000 or 10000 ppm) (ref. standard EN 14387).

ENVIRONMENTAL EXPOSURE CONTROLS

The emissions generated by manufacturing processes, including those generated by ventilation equipment, should be checked to ensure compliance with environmental standards.

Section 9: Physical and Chemical Properties

9.1 Information on basic physical and chemical properties

| Properties | Value | Information |
|--------------------------------|----------------|---|
| Appearance | Paste | |
| Colour | Brown | |
| Odour | Typical | |
| Odour threshold | Not available | |
| pH | Not applicable | Reason for missing data: Insoluble in water. |
| Melting point / freezing point | Not applicable | Reason for missing data: Determination is not technically possible. |
| Initial boiling point | Not applicable | Reason for missing data: Determination is not technically possible. |
| Boiling range | Not applicable | Reason for missing data: Determination is not technically possible. |
| Flash point | Not applicable | |
| Evaporation rate | Not applicable | |
| Flammability (solid, gas) | Not flammable | Method: A10 regulation EC 440/2008 |
| Lower inflammability limit | Not determined | |
| Upper inflammability limit | Not determined | |

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| | | |
|--|--------------------|--|
| Lower explosive limit | Not applicable | |
| Upper explosive limit | Not applicable | |
| Vapour pressure | Not available | |
| Vapour density | Not applicable | |
| Relative density | 1,75-1,79 | Method: ISO 1183-1 A |
| Solubility | Insoluble in water | |
| Partition coefficient: n-octanol/water | Not applicable | |
| Auto-ignition temperature | Not available | |
| Decomposition temperature | Not applicable | |
| Viscosity | 75000 - 85000 cps | Method:UNI EN ISO 3219 - Rotational viscometer |
| Explosive properties | Not applicable | |
| Oxidising properties | Not available | |

9.2 Other information

VOC (Directive 2010/75/EC): 0

Section 10: Stability and reactivity

10.1 Reactivity

Product reacts slowly with water (ambient humidity) turning into a rubbery solid and producing METHANOL.

10.2 Chemical stability

Product stable under normal conditions of use and storage.

10.3 Possibility of hazardous reactions

Under conditions of normal use and storage not hazardous reactions are foreseeable.

10.4 Conditions to avoid

Humidity.

10.5 Incompatible materials:

Water.

10.6 Hazardous decomposition products:

Carbon monoxide, carbon dioxide, smoke, oxides of nitrogen.

Section 11: Toxicological information

In the absence of experimental data for the product itself, health hazards are evaluated according to the properties of the substances it contains, using the criteria specified in the applicable regulation for classification. It is therefore necessary to take into account the concentration of the individual hazardous substances indicated in section 3, to evaluate the toxicological effects of exposure to the product.

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11.1. Information on toxicological effects

Metabolism, toxicokinetics, mechanism of action and other information

Information not available

Information on likely routes of exposure

METHANOL

WORKERS: inhalation; contact with the skin.

POPULATION: ingestion of contaminated food or water; contact with the skin of products containing the substance.

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

METHANOL

The minimum lethal dose for humans by ingestion is considered to be in the range from 300 to 1000 mg/kg. Ingestion of 4-10 ml of the substance may cause permanent blindness in adult humans (IPCS).

Interactive effects

Information not available

ACUTE TOXICITY

| | |
|----------------------------------|---|
| ATE (Inhalation) of the mixture: | Not classified (no significant component) |
| ATE (Oral) of the mixture: | Not classified (no significant component) |
| ATE (Dermal) of the mixture: | Not classified (no significant component) |

VINYLTRIMETHOXYSILANE.

| | |
|-------------------|----------------------------|
| LD50 (Oral) | 7178 mg/kg Rattus sp. |
| LD50 (Dermal) | 3200 mg/kg Oryctolagus sp. |
| LC50 (Inhalation) | 16,8 mg/l/4h Rattus sp. |

N-[3-(TRIMETHOXYSILYL)PROPYL]ETHYLENEDIAMINE.

| | |
|-------------------|------------------------------|
| LD50 (Oral) | 2295 mg/kg Rattus sp. |
| LD50 (Dermal) | > 2000 mg/kg Oryctolagus sp. |
| LC50 (Inhalation) | 1,49 mg/l/4h Rattus sp. |

SKIN CORROSION / IRRITATION

Does not meet the classification criteria for this hazard class

SERIOUS EYE DAMAGE / IRRITATION

Does not meet the classification criteria for this hazard class

RESPIRATORY OR SKIN SENSITISATION

May produce an allergic reaction.

Contains:

VINYLTRIMETHOXYSILANE.

N-[3-(TRIMETHOXYSILYL)PROPYL]ETHYLENEDIAMINE.

GERM CELL MUTAGENICITY

Does not meet the classification criteria for this hazard class

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CARCINOGENICITY

Does not meet the classification criteria for this hazard class

REPRODUCTIVE TOXICITY

Does not meet the classification criteria for this hazard class

STOT - SINGLE EXPOSURE

Does not meet the classification criteria for this hazard class

STOT - REPEATED EXPOSURE

Does not meet the classification criteria for this hazard class

ASPIRATION HAZARD

Does not meet the classification criteria for this hazard class

Section 12: Ecological Information

Use this product according to good working practices. Avoid littering. Inform the competent authorities, should the product reach waterways or contaminate soil or vegetation.

12.1 Toxicity

VINYLTRIMETHOXYSILANE.

LC50 - for Fish 191 mg/l/96h *Oncorhynchus mykiss*
Chronic NOEC for Algae / Aquatic Plants 25 mg/l *Selenastrum capricornutum*

N-[3-(TRIMETHOXYSILYL)PROPYL]ETHYLENEDIAMINE.

LC50 - for Fish 344 mg/l/96h *Brachydanio rerio*
EC50 - for Crustacea 81 mg/l/48h *Daphnia magna*
EC50 - for Algae / Aquatic Plants 126 mg/l/72h *Scenedesmus subspicatus*

12.2 Persistence and degradability

VINYLTRIMETHOXYSILANE.

NOT rapidly degradable

N-[3-(TRIMETHOXYSILYL)PROPYL]ETHYLENEDIAMINE.

NOT rapidly degradable

METHANOL

Solubility in water 1000 - 10000 mg/l
Rapidly degradable

12.3 Bioaccumulative potential

METHANOL

Partition coefficient: n-octanol/water -0,77
BCF 0,2

12.4 Mobility in soil

Information not available



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12.5 Results of PBT and vPvB assessment

On the basis of available data, the product does not contain any PBT or vPvB in percentage greater than 0,1%.

12.6 Other adverse effects

Information not available

Section 13: Disposal Considerations

13.1. Waste treatment methods

Reuse, when possible. Neat product residues should be considered special non-hazardous waste. Disposal must be performed through an authorised waste management firm, in compliance with national and local regulations.

CONTAMINATED PACKAGING

Contaminated packaging must be recovered or disposed of in compliance with national waste management regulations.

Section 14: Transport information

The product is not dangerous under current provisions of the Code of International Carriage of Dangerous Goods by Road (ADR) and by Rail (RID), of the International Maritime Dangerous Goods Code (IMDG), and of the International Air Transport Association (IATA) regulations.

| | |
|---|--------------------------|
| 14.1 UN Number | Not applicable |
| 14.2 UN proper shipping name | Not applicable |
| 14.3 Transport hazard class(es) | Not applicable |
| 14.4 Packaging group | Not applicable |
| 14.5 Environmental hazards | Not applicable |
| 14.6 Special precautions for user | Not applicable |
| 14.7 Transport in bulk according to Annex II of Marpol and the IBC Code | Information not relevant |

Section 15: Regulatory information

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

Seveso Category - Directive 2012/18/EC: None

Restrictions relating to the product or contained substances pursuant to Annex XVII to EC Regulation 1907/2006

Product

Point 40

Contained substance

Point 20 BIS(NEODECANOYLOXY)DIOCTYLSTANNANE

Regulation (EC) No. 2019/1148 - on the marketing and use of explosives precursors

Not applicable

Substances in Candidate List (Art. 59 REACH)

On the basis of available data, the product does not contain any SVHC in percentage greater than 0,1%.

Substances subject to authorisation (Annex XIV REACH)

None

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Substances subject to exportation reporting pursuant to (EC) Reg. 649/2012:
None

Substances subject to the Rotterdam Convention:
None

Substances subject to the Stockholm Convention:
None

Healthcare controls
Information not available

German regulation on the classification of substances hazardous to water (AwSV, vom 18. April 2017)
WGK 1: Low hazard to waters

15.2. Chemical safety assessment

A chemical safety assessment has been performed for the following contained substances
VINYLTRIMETHOXYSILANE.
N-[3-(TRIMETHOXYSILYL)PROPYL]ETHYLENEDIAMINE.

Section 16: Other information

Text of hazard (H) indications mentioned in section 2-3 of the sheet:

| | |
|----------------------|--|
| Flam. Liq. 2 | Flammable liquid, category 2 |
| Flam. Liq. 3 | Flammable liquid, category 3 |
| Acute Tox. 3 | Acute toxicity, category 3 |
| STOT SE 1 | Specific target organ toxicity - single exposure, category 1 |
| Acute Tox. 4 | Acute toxicity, category 4 |
| STOT RE 2 | Specific target organ toxicity - repeated exposure, category 2 |
| Eye Dam. 1 | Serious eye damage, category 1 |
| Skin Sens. 1 | Skin sensitization, category 1 |
| Skin Sens. 1B | Skin sensitization, category 1B |
| H225 | Highly flammable liquid and vapour. |
| H226 | Flammable liquid and vapour. |
| H301 | Toxic if swallowed. |
| H311 | Toxic in contact with skin. |
| H331 | Toxic if inhaled. |
| H370 | Causes damage to organs. |
| H332 | Harmful if inhaled. |
| H373 | May cause damage to organs through prolonged or repeated exposure. |
| H318 | Causes serious eye damage. |
| H317 | May cause an allergic skin reaction. |
| EUH210 | Safety data sheet available on request. |

Use descriptor system:

| | | |
|------------|---|---|
| ERC | 2 | Formulation into mixture |
| ERC | 5 | Use at industrial site leading to inclusion into/onto article |

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| | | |
|-------------|----|--|
| ERC | 8b | Widespread use of reactive processing aid (no inclusion into or onto article, indoor) |
| PC | 1 | Adhesives, sealants |
| PC | 21 | Laboratory chemicals |
| PROC | 10 | Roller application or brushing |
| PROC | 15 | Use as laboratory reagent |
| PROC | 3 | Manufacture or formulation in the chemical industry in closed batch processes with occasional controlled exposure or processes with equivalent containment condition |
| PROC | 4 | Chemical production where opportunity for exposure arises |
| PROC | 5 | Mixing or blending in batch processes |
| PROC | 8a | Transfer of substance or mixture (charging and discharging) at non- dedicated facilities |
| PROC | 8b | Transfer of substance or mixture (charging and discharging) at dedicated facilities |
| PROC | 9 | Transfer of substance or mixture into small containers (dedicated filling line, including weighing) |
| SU | 10 | Formulation [mixing] of preparations and/or re-packaging (excluding alloys) |
| SU | 17 | General manufacturing, e.g. machinery, equipment, vehicles, other transport equipment |
| SU | 19 | Building and construction work |

LEGEND:

- ADR: European Agreement concerning the carriage of Dangerous goods by Road
- CAS NUMBER: Chemical Abstract Service Number
- CE50: Effective concentration (required to induce a 50% effect)
- CE NUMBER: Identifier in ESIS (European archive of existing substances)
- CLP: EC Regulation 1272/2008
- DNEL: Derived No Effect Level
- EmS: Emergency Schedule
- GHS: Globally Harmonized System of classification and labeling of chemicals
- IATA DGR: International Air Transport Association Dangerous Goods Regulation
- IC50: Immobilization Concentration 50%
- IMDG: International Maritime Code for dangerous goods
- IMO: International Maritime Organization
- INDEX NUMBER: Identifier in Annex VI of CLP
- LC50: Lethal Concentration 50%
- LD50: Lethal dose 50%
- OEL: Occupational Exposure Level
- PBT: Persistent bioaccumulative and toxic as REACH Regulation
- PEC: Predicted environmental Concentration
- PEL: Predicted exposure level
- PNEC: Predicted no effect concentration
- REACH: EC Regulation 1907/2006
- RID: Regulation concerning the international transport of dangerous goods by train
- TLV: Threshold Limit Value
- TLV CEILING: Concentration that should not be exceeded during any time of occupational exposure.
- TWA STEL: Short-term exposure limit
- TWA: Time-weighted average exposure limit
- VOC: Volatile organic Compounds
- vPvB: Very Persistent and very Bioaccumulative as for REACH Regulation
- WGK: Water hazard classes (German).

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GENERAL BIBLIOGRAPHY

1. Regulation (EC) 1907/2006 (REACH) of the European Parliament
 2. Regulation (EC) 1272/2008 (CLP) of the European Parliament
 3. Regulation (EU) 790/2009 (I Atp. CLP) of the European Parliament
 4. Regulation (EU) 2015/830 of the European Parliament
 5. Regulation (EU) 286/2011 (II Atp. CLP) of the European Parliament
 6. Regulation (EU) 618/2012 (III Atp. CLP) of the European Parliament
 7. Regulation (EU) 487/2013 (IV Atp. CLP) of the European Parliament
 8. Regulation (EU) 944/2013 (V Atp. CLP) of the European Parliament
 9. Regulation (EU) 605/2014 (VI Atp. CLP) of the European Parliament
 10. Regulation (EU) 2015/1221 (VII Atp. CLP) of the European Parliament
 11. Regulation (EU) 2016/918 (VIII Atp. CLP) of the European Parliament
 12. Regulation (EU) 2016/1179 (IX Atp. CLP)
 13. Regulation (EU) 2017/776 (X Atp. CLP)
 14. Regulation (EU) 2018/669 (XI Atp. CLP)
 15. Regulation (EU) 2018/1480 (XIII Atp. CLP)
 16. Regulation (EU) 2019/521 (XII Atp. CLP)
 17. Regulation (EU) 2019/1148
 18. Regulation (EU) 2020/217 (XIV Atp. CLP)
- The Merck Index. - 10th Edition
 - Handling Chemical Safety
 - INRS - Fiche Toxicologique (toxicological sheet)
 - Patty - Industrial Hygiene and Toxicology
 - N.I. Sax - Dangerous properties of Industrial Materials-7, 1989 Edition
 - IFA GESTIS website
 - ECHA website
 - Database of SDS models for chemicals - Ministry of Health and ISS (Istituto Superiore di Sanità) – Italy

CALCULATION METHODS FOR CLASSIFICATION

Chemical and physical hazards: Product classification derives from criteria established by the CLP Regulation, Annex I, Part 2. The data for evaluation of chemical-physical properties are reported in section 9.

Health hazards: Product classification is based on calculation methods as per Annex I of CLP, Part 3, unless determined otherwise in Section 11.

Environmental hazards: Product classification is based on calculation methods as per Annex I of CLP, Part 4, unless determined otherwise in Section 12.

Changes to previous review:

The following sections were modified:

01 / 02 / 03 / 07 / 08 / 09 / 11 / 12 / 15 / 16.

Legal disclaimer:

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END OF DATA SHEET