Safety Data Sheet - InnoElast® Type 2

1. Description of the Material / Preparation and Company Identification

Details about the product

::: Trade name:	InnoElast® Type 2
::: Application of the product or mixture	Sealant, Adhesive
::: Supplier	B.T. innovation GmbH Sudenburger Wuhne 60 D-39116 Magdeburg, Germany Tel.: +49 (0) 391-7352-0 Fax: +49 (0) 391-7352-54
::: Information can be obtained from	Technical division info@bt-innovation.de
::: Emergency telephone number	Telephone: +49 (0) 391-7352-0

2. Hazard(s) Identification

2.1 Classification of the substance or mixture

::: Classification according to regulation (EC) No.1272/2008	Not required
::: Classification according to directive 67/548/EEC or regulation 1999/45/EC	Not required

2.2 Labelling elements

::: Labelling according to regulation (EC) No.1272/2008 Labelling of specific mixtures EUH208	Contains reaction products of 12-Hydroxystearic acid with Ethylen-1,2-diamine. May produce an allergic reaction.
Signal word	None
2.3 Other hazards	None

3. Composition / information on ingredients

::: Chemical Characterisation

Hazardous ingredients:		
CAS: 2768-02-7 Reg. No. 01-2119513215-52 EC-No.: 220-449-8	Trimethoxy vinyl silane Flam. Liq. 3; H226, Eye Dam. 1; H318, Acute Tox. 4; H332	< 2.5%
CAS: 52829-07-9 Reg. No. 01-2119537297-32 EC-No.: 258-207-9	Bis (2, 2, 6, 6 - Tetramethyl - 4 - piperidyl) sebacate Eye Irrit. 2; H319, Aquatic Chronic 2 ; H411	< 1%

::: Further ingredients

Ingredients listed as candidates among the substances of very high concern (SVHC):		
CAS: 100545-48-0 Reg. No. 01-2119979085-27 EC-No.: 309-629-8	Reaction products of 12-Hydroxystearic acid with Ethylen-1,2-di-amine Skin Sens. 1; H317, Aquatic Chronic 3 ; H412	0.1- <1%

::: Additional advices

For the full text of the hazard notes mentioned in this section, see section 16.

4. First Aid Measures

4.1 Description of first aid measures

::: General advice — Consult a doctor. Show this safety data sheet or the label to the doctor in attendance.

::: After breathing in — Supply with fresh air, consult doctor in case of symptoms

::: After skin contact — Wash off with water and soap. In case of skin irritation / allergic reactions consult a doctor.

::: After eye contact — Rinse opened eye immediately under running water for 10 to 15 minutes, then consult doctor for treatment.

::: After swallowing — Immediately consult a doctor. After swallowing rinse the mouth with plenty of water (never with an unconscious person). Due to hydrolysis low amounts of toxic Methanol are produced.

::: Information for the doctor

4.2 Most important symptoms and effects, both acute and delayed — Not known

4.3 Identification of any immediate medical attention and special treatment needed — Small amounts of methanol are released during curing.

5. Fire Fighting Measures

::: Suitable extinguishing agents — Carbondioxide, extinguishing powder, water spray.
Fight large fires with water spray or alcohol resistant foam.

::: Unsuitable extinguishing agents — Water with a full water jet

::: Advice for firefighters — Prevent any penetration into sewers, open waters, and ground water.

::: Protective equipment — Wear appropriate breathing apparatus.

6. Accidental Release Measures

::: Person-related safety precautions	Wear personal protective equipment. Avoid contact with eyes and skin.
::: Environmental precautions	Prevent any penetration into sewers, open waters, and ground water.
::: Procedure for cleaning/adsorption	Take up mechanically (e.g. sand, sawdust, universal binder). Dispose material according to the local regulations.
::: Additional information	No dangerous materials are released. Hardens in contact with water.

7. Handling and Storage

7.1 Precautions for safe handling	Use required protective equipment. Avoid contact with skin, eyes and clothing.

7.2 Conditions for safe storage, including any incompatibilities

::: Requirements to storage areas and containers	No special measures required
::: Information about common storage	Storage class (TRGS 510): 10
::: Further information about storage conditions	Avoid moisture. Keep containers tightly closed and in a dry and well ventilated area.
7.3 Specific end use(s)	Sealant based on silane-modifed polymers. Pay attention to the technical data sheet

8. Exposure Controls and Personal Protection

8.1 Control parameters

::: Components with workplace control parameters

Methanol (as reaction product)	CAS-No.: 67-56-1
Limit value type (country of origin)	TRGS 900 (D)
Limit value	200 ppm / 270 mg/m³
Peak limit	4(II)
Comment	H, Y
Version	01.02.2006
Limit value type (country of origin)	TWA (EC)
Limit value	200 ppm / 260 mg/m³
Comment	H

::: Biological limit values

Methanol (as reaction product)	CAS-No.: 67-56-1
Limit value type (country of origin):	TRGS 903 (D) Methanol / urine (U) / exposition end respectively shift end; for long term exposure: after several earlier shifts
Limit values	30 mg/l
Version	01.09.2001

8.2 Exposure controls

Personal protective equipment

::: Eye protection	Tightly fitting protective glasses (DIN EN 166)
::: Hand protection	String, tight, consistent protective gloves made from an appropriate material. Select the glove material on consideration of the penetration time, rates of diffusion and degradation. Check prior the application.
::: Breathing protection	Not necessary in well ventilated rooms.
::: General protection and hygienic measures	Keep away from food and animal feeds. Remove soiled, soaked clothing at once. Wash hands before taking a break and at the end of working hours. Avoid contact with eyes and skin.

9. Physical and Chemical Properties

Form	paste-like
Colour	black
Odour	weak, characteristic
Self-ignitability	The product is not self-igniting.
Flash point	> 61°C
Danger of explosion	The product is not explosive.
Dynamic viscosity	ca. 9000 to 15000 Pa s
Density at 20° C	1.5 g/cm³
Solubility in / Miscibility with water	reacts with water
Boiling point / Boiling range	Not applicable
Melting point / Melting range	Not applicable

10. Stability and Reactivity

Reactivity	The product cures / hardens with moisture.
Chemical stability:	The product is stable at standard conditions.
Possibility of dangerous reactions	Not known
Thermal decomposition:	No decomposition if used according to specification.
Conditions to be avoided	None known
Materials to be avoided	None known
Dangerous decomposition products	No dangerous decomposition products known at appropriate storage and handling.

11. Toxicological Information

::: Information on toxicological effects

Irritation and corrosion	Primary irritation of skin and eyes
Practical experiences	Irritation of eyes and skin is possible.
Sensitization	The product contains sensitizing components. It may cause allergic reactions.

::: Toxicological data

	LD50 oral	LD50 dermal	LD50 inhalation
Trimethoxy vinyl silane	7120 mg/kg (rat)	3360 µL/kg (rabbit)	-
Bis (2, 2, 6, 6 - Tetramethyl - 4 - piperidyl) sebacate	>2000 mg/kg (rat)	3170 mg/kg (rat)	500 mg/kg (rat, 4h)
Reaction products of 12-Hydroxystearic acid with Ethylen-1,2-diamine	>2000 mg/kg (rat)	-	5,05 mg/kg (rat)

12. Ecological Information

::: Toxicity

Aquatic toxicity	The mixture has been evaluated according to the conventional method for environmental hazards. If classified as hazardous to the environment, please compare with details in chapter 2.
Persistence and degradability	No further relevant information available
Bioaccumulative potential	No further relevant information available
Mobility in soil	No further relevant information available
Result of PBT-and vPvB-assessment	Contains no SVHC-substance in a concentration of >=0.1% with PBT/ vPvB-properties
Other adverse effects	No further relevant information available.

::: Additional ecological information — The product should not be released uncontrolled into the environment.

13. Disposal Considerations

::: Recommendation: — Dispose only hardened product scrap with the household waste. Dispose not hardened product residues as hazardous waste.

::: European waste catalogue — 08 04 10 / Waste adhesives and sealants

::: Packaging — Packagings have to be discharged from remaining product. Empty packagings with hardened product parts can be forwarded for recycling. Packagings with not hardened product parts have to be discharged as the product

14. Transport Information

UN-Number	No dangerous goods according to transport regulations
UN-proper shipping name	No dangerous goods
Transport hazard class(es)	No dangerous goods according to transport regulations
Packing group	No dangerous goods according to transport regulations
Special precautions for user	Not applicable

15. Regulatory Information

::: Safety, health and environmental regulations / legislation specific for the mixture

National regulations	Act according to the national regulations / law!
Advices on employment restrictions	Consider possible employment restrictions according to maternity protection and youth labour protection law.
Technical instructions on air quality (TI-Air):	Percentage by weight (Point 5.2.5. I): < 1 %
Water hazard class	Class: 1 (slightly hazardous to water)
	Classification according to VwVwS

::: Additional regulations, restrictions and prohibition edicts

Ordinance on Industrial Safety and Health	
(German Betriebssicherheitsverordnung, BetrSichV):	
	No flammable liquid according to BetrSichV
Material safety assessment	No information available.

16. Other information

The data within this safety data sheet are based on our present knowledge. They shall not constitute a guarantee for any specific product feature nor justify warranty claims and shall not establish a legally valid contractual relationship. Any previous data sheet issues have now become invalid.

Relevant EUH phrases according to the CLP-Regulation

H226	Flammable liquid and vapour
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
H412	Harmful to aquatic life with long lasting effects.

Information can be obtained from: Technical division (Tel.: +49(0)391-7352-0)

Abbreviation and acronyms

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

BCF: Bioconcentration factors

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

CMR: Carcinogenic, mutagenic, reprotoxic

DNEL: Derived no-effect level

IMDG: International Maritime Code for Dangerous Goods

EAK: European Waste Catalogue / Europäische Abfallkatalog

IATA: International Air Transport Association

ICAO: International Civil Aviation Organization

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

GHS: Globally Harmonized System of Classification and Labelling of Chemicals

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

NOEC: No observed effect concentration

NOEL: No Observed Effect Concentration

OEL: Occupational exposure limit

PBT: Persistent, Bioaccumulative and Toxic

PNEC: Predicted no effect concentration

STOT: Specific target organ toxicity

SVHC: Substances of Very High Concern

VOC: Volatile Organic Compounds (USA, EU)

vPvB: very Persistent and very Bioaccumulative