

Safety data sheet
according to Regulation (EC) No 1907/2006, Article 31

Printing date 25.02.2025

Version 5

Revision: 25.02.2025

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

1.1 Product identifier

Trade name: INSEBO BondTec PU-Konstruktion 295

UFI: WMKH-E74R-SV1A-00XP

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

Application of the substance / mixture Polyurethane adhesive

1.3 Details of the supplier of the safety data sheet

Manufacturer/Supplier:

WS INSEBO GmbH

Industriestraße 24, A-2325 Himberg bei Wien

Tel.: +43 (0) 2235/86227-0

e-mail: office@insebo.com

1.4 Emergency telephone number Call local emergency information.

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008

Skin Irrit. 2 H315 Causes skin irritation.

Eye Irrit. 2 H319 Causes serious eye irritation.

Resp. Sens. 1 H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.

Skin Sens. 1 H317 May cause an allergic skin reaction.

Carc. 2 H351 Suspected of causing cancer.

STOT SE 3 H335 May cause respiratory irritation.

STOT RE 2 H373 May cause damage to organs through prolonged or repeated exposure.

2.2 Label elements

Labelling according to Regulation (EC) No 1272/2008

The product is classified and labelled according to the CLP regulation.

Hazard pictograms



GHS07 GHS08

Signal word Danger

Hazard-determining components of labelling:

4,4'-methylenediphenyl diisocyanate, oligomers

3-trimethoxysilylpropane-1-thiol

Hazard statements

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.

H317 May cause an allergic skin reaction.

H351 Suspected of causing cancer.

H335 May cause respiratory irritation.

H373 May cause damage to organs through prolonged or repeated exposure.

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Trade name: INSEBO BondTec PU-Konstruktion 295
Precautionary statements

- P101 If medical advice is needed, have product container or label at hand.
 P102 Keep out of reach of children.
 P260 Do not breathe vapours.
 P280 Wear protective gloves, eye protection.
 P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
 P405 Store locked up.
 P501 Dispose of contents/container in accordance with national regulations.

Additional safetyphrases according to Annex XVII of the Commission Regulation No.1907/2006:

As from 24 August 2023 adequate training is required before industrial or professional use.

2.3 Other hazards
Results of PBT and vPvB assessment

This mixture does not meet the PBT- or vPvB-criteria according to Regulation (EC) No 1907/2006.

Determination of endocrine-disrupting properties

The product contains no components considered to have endocrine disrupting properties according to REACH Article 57(f), Regulation (EU) 2017/2100 or Regulation (EU) 2018/605 at levels of 0.1% or higher.

SECTION 3: Composition/information on ingredients

3.2 Mixture
Description: Mixture of substances listed below with non-hazardous additions.

Dangerous components:

CAS: 25686-28-6 NLP: 500-040-3 Reg.No.: 01-2119457013-49	4,4'-methylenediphenyl diisocyanate, oligomers ----- Resp. Sens. 1, H334; Carc. 2, H351; STOT RE 2, H373; Acute Tox. 4, H332; Skin Irrit. 2, H315; Eye Irrit. 2, H319; Skin Sens. 1, H317; STOT SE 3, H335, EUH204	25 - 50%
CAS: 112945-52-5 EINECS: 231-545-4 Reg.No.: 01-2119379499-16	silica, amorphous, fumed substance with a Community workplace exposure limit	2.5 - 10%
CAS: 4420-74-0 EINECS: 224-588-5 Reg.No.: 01-2120763539-41	3-trimethoxysilylpropane-1-thiol ----- Aquatic Chronic 2, H411; Acute Tox. 4, H302; Skin Sens. 1, H317	< 2.5%
CAS: 13463-67-7 EINECS: 236-675-5 Reg.No.: 01-2119489379-17	titanium dioxide [$>10 \mu\text{m}$] substance with a Community workplace exposure limit	< 1%

Additional information:

Titanium dioxide (CAS 13463-67-7): based on testing, this substance is not subject to the labelling requirements of Regulation (EU) 2020/217 (14th ATP of CLP).

For the wording of the listed hazard phrases refer to section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures
General information:

Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.

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Trade name: INSEBO BondTec PU-Konstruktion 295**After inhalation:**

Supply fresh air or oxygen; call for doctor.

In case of unconsciousness place patient stably in side position for transportation.

After skin contact:

Remove contaminated clothing, wash the affected skin with plenty of water and soap. In case of irritation seek medical treatment.

After eye contact:

Rinse opened eyes immediately with plenty of water for at least 10-15 minutes.

If symptoms persist call a doctor.

After swallowing:

Seek medical advice immediately and show the container or label.

Do not induce vomiting without medical advice.

4.2 Most important symptoms and effects, both acute and delayed No further relevant information available.**4.3 Indication of any immediate medical attention and special treatment needed** Symptomatic treatment.**SECTION 5: Firefighting measures****5.1 Extinguishing media****Suitable extinguishing media:** Carbon dioxide (CO₂), dry chemical powder, foam or water spray**Unsuitable extinguishing media:** Water with full jet.**5.2 Special hazards arising from the substance or mixture**

Harmful vapours can be released at high temperatures or upon burning.

5.3 Advice for firefighters**Protective equipment:** In case of fire wear self-contained respiratory equipment and full protective suit.**Additional information**

Cool endangered receptacles with water spray. Contain runoff to prevent entry into water or drainage systems.

Dispose of fire debris and contaminated firefighting water according to the regulations.

SECTION 6: Accidental release measures**6.1 Personal precautions, protective equipment and emergency procedures**

Please notice instructions for person-related safety precautions, wear protective equipment (see 8.)

Avoid inhalation and contact with skin and eyes.

Keep unprotected persons away. Ensure adequate ventilation.

6.2 Environmental precautions:

Do not allow to enter sewers, surface or ground water.

Advise water authority in case of seepage into water course or sewage system.

6.3 Methods and material for containment and cleaning up: Allow to solidify and remove mechanically.**6.4 Reference to other sections**

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

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SECTION 7: Handling and storage

7.1 Precautions for safe handling

While handling pay attention to the usual precaution for chemicals. Comply with instructions for use.
Avoid any contact with skin, eyes and clothes.
Do not breathe vapours.
Provide good ventilation/exhaustion at the workplace.
Wash hands before break and at the end of work.

Information about fire - and explosion protection: No further relevant information available.

7.2 Conditions for safe storage, including any incompatibilities

Requirements to be met by storerooms and receptacles:

Store in tightly closed original packaging in a well ventilated, cool and dry place.

Information about storage in one common storage facility:

Do not store food, beverages and animal feeding stuff in the storage area.

Further information about storage conditions:

Keep out of the reach of children and domestic animals.
Protect from heat and direct sunlight.

7.3 Specific end use(s) Polyurethane adhesive

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Ingredients with limit values that require monitoring at the workplace:

CAS: 25686-28-6 4,4'-methylenediphenyl diisocyanate, oligomers

	Group entry diphenylmethane diisocyanate
MAK (Austria)	Short-term value: 0.1 mg/m ³ , 0.001 ppm; Long-term value: 0.05 mg/m ³ , 0.005 ppm see Annex III B
AGW (Germany)	Long-term value: 0.05 E mg/m ³ ; 1;=2=(I);DFG, H, Sah, Y, 12

CAS: 13463-67-7 titanium dioxide [$>10 \mu\text{m}$]

MAK (Austria)	Short-term value: 10 A mg/m ³ , Long-term value: 5 A mg/m ³ ; (Alveolarstaub)
AGW (Germany)	Long-term value: 1.25* 10** mg/m ³ ; 2(II);*alveolengängig**eintembar; AGS, DFG, Y

CAS: 112945-52-5 silica, amorphous, fumed

MAK (Austria)	Long-term value: 4E mg/m ³ ; (resp. CAS 7631-86-9)
MAK (Germany)	Long-term value: 0.02 A mg/m ³ ; vgl. Abschn. V

Regulatory information

MAK (Austria): GKV 2021, 330. Verordnung, 02.12.2024, Teil 2

AGW (Germany): TRGS 900

MAK (Germany): MAK- und BAT-Liste

DNELs:

Methylenediphenyl diisocyanate (CAS 101-68-8):

worker, short-term exposure - local and systemic effects, inhalation 0.1 mg/m³
worker, long-term exposure - local and systemic effects, inhalation 0.05 mg/m³
worker, short-term exposure - local effects, dermal 28.7 mg/cm²
worker, short-term exposure - systemic effects, dermal 50 mg/kg bw/day
consumer, short-term exposure - systemic effects, oral 20 mg/kg bw/day
consumer, short-term exposure - local and systemic effects, inhalation 0.05 mg/m³

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consumer, long-term exposure - local and systemic effects, inhalation 0.025 mg/m³
 consumer, short-term exposure - local effects, dermal 17.2 mg/cm²
 consumer, short-term exposure - systemic effects, dermal 25 mg/kg bw/day

PNECs:

Methylenediphenyl diisocyanate (CAS 101-68-8):

freshwater 1 mg/l, marine water 0.1 mg/l

intermittent releases 10 mg/l, STP 1 mg/l, soil 1 mg/kg

sediment (freshwater, marine water): exposure of sediment is not expected.

8.2 Exposure controls

Appropriate engineering controls Provide good ventilation or exhaust at work.

Individual protection measures, such as personal protective equipment

General protective and hygienic measures:

Avoid unnecessary contact with the product. Do not eat, drink or smoke at workplace and keep it tidy.

Remove contaminated clothing immediately and wash carefully before reuse.

Respiratory protection:

Use protective mask with an appropriate gas filter (i.e. type A1 according to standard EN 14387) in case of insufficient ventilation.

Hand protection



Chemical resistant gloves (EN 374)

Dispose of when contaminated inside, when perforated or when contamination outside cannot be removed.

Material of gloves

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material cannot be calculated in advance and has therefore to be checked prior to the application.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation.

Penetration time of glove material

The exact breakthrough time has to be found out by the manufacturer of the protective gloves and has to be observed.

Eye/face protection



Safety glasses (EN 166)

Body protection Protective work clothing

Environmental exposure controls

Do not allow to enter sewers/ surface or ground water. Inform respective authorities in case of seepage into water course or sewage system.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Form:	Viscous liquid
Colour:	Product-specific
Odour:	Characteristic
Melting point/freezing point:	No data available

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Trade name: INSEBO BondTec PU-Konstruktion 295

Boiling point or initial boiling point and boiling range:	No data available
Flammability:	Not applicable.
Lower and upper explosion limit:	No data available.
Flash point:	No data available
Auto-ignition temperature:	No data available.
Decomposition temperature:	No data available.
pH:	No data available
Viscosity	
dynamic:	No data available.
Solubility	
water:	Not miscible or difficult to mix.
Partition coefficient, n-octanol/water:	No data available.
Vapour pressure:	No data available.
Density:	≈ 1.1 g/cm ³
Relative gas density	No data available.

9.2 Other information

Explosive properties:	No data available
Oxidising properties:	No data available.

Information with regard to physical hazard classes Not relevant.

SECTION 10: Stability and reactivity

10.1 Reactivity Stable in standard stocking and use conditions.

10.2 Chemical stability Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions No further relevant information available.

10.4 Conditions to avoid Extreme temperatures and direct sun exposure.

10.5 Incompatible materials No further relevant information available.

10.6 Hazardous decomposition products Noxious vapours can be released at high temperatures or upon burning.

SECTION 11: Toxicological information

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

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

LD/LC50 values relevant for classification:

There are no product specific data on toxicology available.

CAS: 25686-28-6 4,4'-methylenediphenyl diisocyanate, oligomers

oral	LD50*	> 5,000 mg/kg (rat) (OECD 425)
dermal	LD50*	> 9,400 mg/kg (rat)
inhalative	LC50/4h*	0.31 mg/l (rat) (OECD 403)

Skin corrosion/irritation

Causes skin irritation.

Serious eye damage/irritation

Causes serious eye irritation.

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Respiratory or skin sensitisation

May cause allergy or asthma symptoms or breathing difficulties if inhaled.
May cause an allergic skin reaction.

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

Carcinogenicity

Suspected of causing cancer.

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

STOT-single exposure

May cause respiratory irritation.

STOT-repeated exposure

May cause damage to organs through prolonged or repeated exposure.

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

11.2 Information on other hazards

Endocrine disrupting properties None of the ingredients is listed.

SECTION 12: Ecological information

12.1 Toxicity

Aquatic toxicity:

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

CAS: 25686-28-6 4,4'-methylenediphenyl diisocyanate, oligomers

LC50/96h* (static)	> 1,000 mg/l (zebrafish, Danio rerio) (OECD 203)
EC50/24h*	> 1,000 mg/l (water flea, Daphnia magna) (OECD 202)
EC50/72h* (static)	> 1,640 mg/l (alga, Desmodesmus subspicatus) (OECD 201)
EC50/3h* (static)	> 100 mg/l (activated sludge) (OECD 209)
NOEC/21d*	≥ 10 mg/l (water flea, Daphnia magna) (OECD 211)

Additional information: * Test conducted with a similar substance.

12.2 Persistence and degradability

4,4'-Methylenediphenyl diisocyanate, oligomers (similar substance):

Not readily biodegradable (by OECD criteria).

0 % BOD of COD (28 d, OECD 302 C, aerobic).

Stability in Water: In contact with water the substance will hydrolyse slowly.

12.3 Bioaccumulative potential

4,4'-Methylenediphenyl diisocyanate, oligomers (similar substance):

Does not significantly accumulate in organisms.

Bioaccumulation potential: Bioconcentration factor(BCF): 92 - 200 (28 d, Cyprinus carpio, OECD 305 E)

12.4 Mobility in soil

4,4'-Methylenediphenyl diisocyanate, oligomers (similar substance): Adsorption to solid soil phase is not expected.

12.5 Results of PBT and vPvB assessment Not applicable.

12.6 Endocrine disrupting properties For information on endocrine disrupting properties see section 11.

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12.7 Other adverse effects No further relevant information available.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Recommendation

Do not dispose waste or remains together with domestic waste, do not empty into sink or toilet, hand over to hazardous waste disposers.

Small quantities of cured residue can be disposed of along with domestic waste according to local regulations.

European waste catalogue

15 01 10 : Packaging containing residues of or contaminated by dangerous substances

08 04 09: waste adhesives and sealants containing organic solvents or other dangerous substances

Uncleaned packaging

Recommendation:

Cartridges/buckets/pouches should be emptied completely and should preferably be recycled or reused in compliance with the local/national regulations. Cartridges/buckets/pouches not emptied appropriately or remains have to be disposed of like the product.

SECTION 14: Transport information

14.1 UN number or ID number

ADR, IMDG, IATA void

14.2 UN proper shipping name

ADR, IMDG, IATA void

14.3 Transport hazard class(es)

ADR, IMDG, IATA

Class void

14.4 Packing group

ADR, IMDG, IATA void

14.5 Environmental hazards:

not applicable

14.6 Special precautions for user

not required

14.7 Maritime transport in bulk according to IMO

instruments not applicable

UN "Model Regulation":

void

SECTION 15: Regulatory information

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

Seveso category Not applicable.

Restrictions according to Annex XVII of the Regulation (EC) No 1907/2006 Conditions of restriction: 74

Classification according to VbF: No data available.

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Trade name: INSEBO BondTec PU-Konstruktion 295**Water hazard class:** Water hazard class (German Regulation) 1 (self-assessment): slightly hazardous for water.**15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

Relevant phrases

H302 Harmful if swallowed.
H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H319 Causes serious eye irritation.
H332 Harmful if inhaled.
H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H335 May cause respiratory irritation.
H351 Suspected of causing cancer.
H373 May cause damage to organs through prolonged or repeated exposure.
H411 Toxic to aquatic life with long lasting effects.
EUH204 Contains isocyanates. May produce an allergic reaction.

Further information:

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) No 1272/2008: Calculation method

Date of previous version: 14.12.2023

Abbreviations and acronyms:

CLP: REGULATION (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures
UFI: Unique Formula Identifier
CAS: Chemical Abstracts Service (division of the American Chemical Society)
EINECS: European Inventory of Existing Commercial Chemical Substances
GHS: Globally Harmonized System of Classification and Labelling of Chemicals
MAK: maximum concentration of a chemical substance in the workplace
AGW: occupational exposure limit
DNEL: Derived No-Effect Level
PNEC: Predicted No-Effect Concentration
EC50: maximal effective concentration, 50%
LC50: lethal concentration, 50%
LD50: lethal dose, 50%
NOEC: no observed effect concentration
OECD: Organisation for Economic Co-operation and Development
BOD: biochemical oxygen demand
COD: chemical oxygen demand
PBT: persistent, bioaccumulative and toxic properties
vPvB: very persistent and very bioaccumulative properties
ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road
IMDG: International Maritime Code for Dangerous Goods
IATA: International Air Transport Association
VbF: Ordinance on the storage of combustible liquids, Austria
REACH: REGULATION (EC) No 1907/2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals
Acute Tox. 4: Acute toxicity – Category 4
Skin Irrit. 2: Skin corrosion/irritation – Category 2
Eye Irrit. 2: Serious eye damage/eye irritation – Category 2
Resp. Sens. 1: Respiratory sensitisation – Category 1
Skin Sens. 1: Skin sensitisation – Category 1
Carc. 2: Carcinogenicity – Category 2
STOT SE 3: Specific target organ toxicity (single exposure) – Category 3
STOT RE 2: Specific target organ toxicity (repeated exposure) – Category 2

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Aquatic Chronic 2: Hazardous to the aquatic environment - long-term aquatic hazard – Category 2

Sources: Safety data sheets of the components

Data compared to the previous version altered: Section 1,3,8,11,15,16