

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

- **Product identifier**
- **Trade name:** INTRASIT PU-Injekt 12P, component B
- **Article number:** 50245 B
- **Relevant identified uses of the substance or mixture and uses advised against**
- **Application of the substance / the preparation**
Solvent-free, two-component elastified special injection resin for non-shrinking crack injection in concrete and masonry
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
Heinrich Hahne GmbH & Co. KG
Heinrich-Hahne-Weg 11
45711 Datteln Tel.: 02363/5663-0
- **Further information obtainable from:**
Abteilung: Produktsicherheit
Tel.: 02363 5663-0
EMail: info@hahne-bautenschutz.de
- **Emergency telephone number:**
Giftinformationszentrum Nord (GIZ Nord) Universität Göttingen,
Tel.: 0551-19240

2 Hazards identification

- **Classification of the substance or mixture**
- **Classification according to Regulation (EC) No 1272/2008**



GHS08 health hazard

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



GHS07

Skin Irrit. 2 H315 Causes skin irritation.
Eye Irrit. 2 H319 Causes serious eye irritation.
Skin Sens. 1 H317 May cause an allergic skin reaction.
STOT SE 3 H335 May cause respiratory irritation.

- **Classification according to Directive 67/548/EEC or Directive 1999/45/EC Xn Harmful**
- **Information concerning particular hazards for human and environment:**
R 20 Harmful by inhalation.
R 36/37/38 Irritating to eyes, respiratory system and skin.
R 40 Evidence of a carcinogenic effect.
R 42/43 May cause sensitisation by inhalation and skin contact.
R 48/20 Harmful: danger of serious damage to health by prolonged exposure through inhalation.
Contains isocyanates. May produce an allergic reaction.
- **Classification system:**
The classification is according to the latest editions of the EU-lists, and extended by company and literature data.
- **Label elements**
- **Labelling according to EU guidelines:**
The product has been classified and marked in accordance with EU Directives / Ordinance on Hazardous Materials.

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· **Code letter and hazard designation of product:**



Xn Harmful

· **Hazard-determining components of labelling:** diphenylmethane-4,4'-di-isocyanate

· **Risk phrases:**

- 20 Harmful by inhalation.
- 36/37/38 Irritating to eyes, respiratory system and skin.
- 40 Evidence of a carcinogenic effect.
- 42/43 May cause sensitisation by inhalation and skin contact.
- 48/20 Harmful: danger of serious damage to health by prolonged exposure through inhalation.

· **Safety phrases:**

- 23 Do not breathe gas/fumes/vapour/spray (appropriate wording to be specified by the manufacturer).
- 26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
- 36/37 Wear suitable protective gloves and protective clothing.
- 45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

· **Other hazards**

The product contains no demonstrable organic halogen compounds (AOX), nitrates, heavy metal compounds and formaldehyde.

· **Results of PBT and vPvB assessment**






- **PBT:** Not applicable.
- **vPvB:** Not applicable.

3 Composition/information on ingredients

· **Chemical characterization: Mixtures**

· **Description:** Isocyanate component for polyurethane resin.

· **Dangerous components:**

9016-87-9	diphenylmethanediisocyanate, isomeres and homologues	50-100%
	 Xn R20-40-48;  Xn R42/43;  Xi R36/37/38  Resp. Sens. 1, H334;  Acute Tox. 4, H332; Skin Irrit. 2, H315; Eye Irrit. 2, H319; Skin Sens. 1, H317; STOT SE 3, H335	

· **Additional information:** For the wording of the listed risk phrases refer to section 16.

4 First aid measures

· **Description of first aid measures**

· **General information:** If symptoms occur or when in doubt, seek medical advice.

· **After inhalation:**

Supply fresh air and to be sure call for a doctor.

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

· **After skin contact:** Immediately wash with water and soap and rinse thoroughly.

· **After eye contact:**

Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

· **After swallowing:** Drink plenty of water and provide fresh air. Call for a doctor immediately.

· **Information for doctor:**

· **Most important symptoms and effects, both acute and delayed** No further relevant information available.

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- **Indication of any immediate medical attention and special treatment needed**
No further relevant information available.

5 Firefighting measures

- **Extinguishing media**
- **Suitable extinguishing agents:**
Use fire extinguishing methods suitable to surrounding conditions.
Foam (alcohol resistant), carbon dioxide, powder, spray (water).
- **For safety reasons unsuitable extinguishing agents:** Waterjet.
- **Special hazards arising from the substance or mixture**
Exposure to decomposition products may cause a health hazard.
- **Advice for firefighters**
- **Protective equipment:** Wear protective clothing. If necessary respiratory equipment.
- **Additional information** Do not allow the quenching water into the sewage system.

6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures**
Wear protective equipment. Keep spectators away.
- **Environmental precautions:** Do not allow to enter sewers/ surface or ground water.
- **Methods and material for containment and cleaning up:**
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Dispose contaminated material as waste according to item 13.
- **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.

7 Handling and storage

- **Handling:**
- **Precautions for safe handling** Ensure good ventilation/exhaustion at the workplace.
- **Information about fire - and explosion protection:** No special measures required.
- **Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** Keep containers tightly closed at 5 °C to 30 °C.
- **Information about storage in one common storage facility:** Keep away from foodstuffs, beverages and food.
- **Further information about storage conditions:**
Always store in original container. Keep away from heat and direct sunlight.
- **Specific end use(s)** No further relevant information available.

8 Exposure controls/personal protection

- **Additional information about design of technical facilities:** No further data; see item 7.
- **Control parameters**

· **Ingredients with limit values that require monitoring at the workplace:**

101-68-8 diphenylmethane-4,4'-di-isocyanate (50-100%)

WEL	Short-term value: 0.07 mg/m ³
	Long-term value: 0.02 mg/m ³
	Sen; as -NCO

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- **Additional information:** The lists valid during the making were used as basis.
- **Exposure controls**
- **Personal protective equipment:**
- **General protective and hygienic measures:**
Keep away from foodstuffs, beverages and feed.
Immediately remove all soiled and contaminated clothing
Wash hands before breaks and at the end of work.
Avoid contact with the eyes and skin.
- **Respiratory protection:** Breathing apparatus only if aerosol or mist formation required.
- **Protection of hands:**
Protective gloves
The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation
- **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 can not be calculated in advance and has therefore to be checked prior to the application.
Suitable materials for protective gloves, EN 374-3:
Polychloroprene - CR: thickness > = 0.5 mm, breakthrough time > = 480 min
Nitrile rubber - NBR: thickness > = 0.35 mm, breakthrough time > = 480 min
Butyl rubber - IIR: thickness > = 0.5 mm, breakthrough time > = 480 min
Fluorocarbon - FKM: thickness > = 0.4 mm breakthrough time > = 480 min
- **Penetration time of glove material**
The exact break trough time has to be found out by the manufacturer of the protective gloves and has to be observed.
- **Eye protection:** Tightly sealed goggles
- **Body protection:** Protective work clothing.

9 Physical and chemical properties

- **Information on basic physical and chemical properties**
- **General Information**
- **Appearance:**

Form:	Fluid
Colour:	brownish
Odour:	Characteristic
- **Change in condition**

Melting point/Melting range:	Undetermined.
Boiling point/Boiling range:	208°C
- **Flash point:** > 160°C
- **Ignition temperature:** 520°C
- **Self-igniting:** Product is not selfigniting.
- **Danger of explosion:** Product does not present an explosion hazard.
- **Density at 20°C:** 1.15 g/cm³
- **Solubility in / Miscibility with water:** Not miscible or difficult to mix.
- **Viscosity:**

Dynamic at 20°C:	75 mPas
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· Solvent content:	
Organic solvents:	0.0 %
· Solids content: 100.0 %	
· Other information No further relevant information available.	

10 Stability and reactivity

- **Reactivity**
- **Chemical stability**
- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **Possibility of hazardous reactions**
Reacts exothermically with oxidizing agents, amines, strong bases, alcohols, and the elimination of carbon dioxide with water and acid.
- **Conditions to avoid** No further relevant information available.
- **Incompatible materials:**
Before highly acidic or alkaline materials, and acid materials in order to avoid exothermic reactions.
- **Hazardous decomposition products:**
At high temperatures, carbon dioxide, carbon monoxide, oxides of nitrogen.

11 Toxicological information

- **Information on toxicological effects**
 - **Acute toxicity:**
- | | | |
|---|----------|-----------------------------|
| · LD/LC50 values relevant for classification: | | |
| 9016-87-9 diphenylmethanediisocyanate, isomeres and homologues | | |
| Oral | LD50 | >15000 mg/kg (rat) |
| Inhalative | LC50/4 h | 490 mg/m ³ (rat) |
- **Primary irritant effect:**
 - **on the skin:** Irritant to skin and mucous membranes.
 - **on the eye:** Irritating effect.
 - **Sensitization:**
Sensitization possible through inhalation.
Sensitization possible through skin contact.
 - **Additional toxicological information:**
The product shows the following dangers according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version:
Harmful
Irritant

12 Ecological information

- **Toxicity**
- **Aquatic toxicity:** No further relevant information available.
- **Persistence and degradability** No further relevant information available.
- **Other information:**
Biodegradation:
Diisocyanate, isomers and homologues
0% d 28, i.e. unworkable
Method: respirometer test
Toxicity to fish: LC > 1000 mg / l
Test species: Danio rerio (zebrafish) Duration of test: 96 h
Acute daphnia: EC50 > 1000 mg / l

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Test species: *Daphnia magna* (water flea) Duration of test: 24 h

Acute bacterial toxicity: EC50 > 100 mg / l

Tested on: Activated Sludge Test time: 3 hours

- **Behaviour in environmental systems:**
- **Bioaccumulative potential** No further relevant information available.
- **Mobility in soil** No further relevant information available.
- **Additional ecological information:**
- **General notes:**
Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water
Do not empty into drains.
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **Other adverse effects** No further relevant information available.

13 Disposal considerations

- **Waste treatment methods**
- **Recommendation**
Must not be disposed together with household garbage. Do not allow product to reach sewage system.
No longer usable components and let harden in the prescribed mixing. Disposal according to official regulations.

· **European waste catalogue**

08 04 09	waste adhesives and sealants containing organic solvents or other dangerous substances
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- **Uncleaned packaging:**
- **Recommendation:** Disposal must be made according to official regulations.

14 Transport information

· UN-Number	Void
· ADR, ADN, IMDG, IATA	Void
· UN proper shipping name	Void
· ADR, ADN, IMDG, IATA	Void
· Transport hazard class(es)	Void
· ADR, ADN, IMDG, IATA	Void
· Class	Void
· Packing group	Void
· ADR, IMDG, IATA	Void
· Environmental hazards:	No
· Marine pollutant:	No
· Special precautions for user	Not applicable.
· Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code	Not applicable.
· Transport/Additional information:	This preparation is not classified as dangerous according to international transport regulations.
· UN "Model Regulation":	-

GB

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15 Regulatory information

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

· *National regulations:*

· *Technical instructions (air):*

Class	Share in %
I	60.0

· *Waterhazard class: Water hazard class 1 (Self-assessment): slightly hazardous for water.*

· *Chemical safety assessment: A Chemical Safety Assessment has not been carried out.*

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**

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.

R20 Harmful by inhalation.

R36/37/38 Irritating to eyes, respiratory system and skin.

R40 Limited evidence of a carcinogenic effect.

R42/43 May cause sensitisation by inhalation and skin contact.

R48 Danger of serious damage to health by prolonged exposure.

· **Abbreviations and acronyms:**

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

ICAO: International Civil Aviation Organization

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

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonized System of Classification and Labelling of Chemicals

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent