

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

- **1.1 Product identifier**
- **Trade name:** INTRASIT PU Aquastop 11P
- **Article number:** 50370 B
- **1.2 Relevant identified uses of the substance or mixture and uses advised against**
No further relevant information available.
- **Application of the substance / the mixture** Highly reactive injection resin for pressing water-bearing cracks.
- **1.3 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
E-Mail: info@hahne-bautenschutz.de
- **1.4 Emergency telephone number:**
Giftinformationszentrum Nord (GIZ Nord) Universität Göttingen,
Tel.: 0551-19240

SECTION 2: Hazards identification

- **2.1 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.
 Carc. 2 H351 Suspected of causing cancer.
 STOT RE 2 H373 May cause damage to organs through prolonged or repeated exposure.



GHS07

- Acute Tox. 4 H332 Harmful if inhaled.
 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**
- **Hazard description:** 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 Limited 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.

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- **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:**
diphenylmethanediisocyanate, isomeres and homologues
- **Hazard statements**
H332 Harmful if inhaled.
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.
- **Precautionary statements**
P260 Do not breathe dust/fume/gas/mist/vapours/spray.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P305+P351+P338 **IF IN EYES:** Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P304+P340 **IF INHALED:** Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P312 Call a POISON CENTER or doctor/physician if you feel unwell.
P308+P313 **IF exposed or concerned:** Get medical advice/attention.
- **Additional information:**
Contains isocyanates. May produce an allergic reaction.
- **2.3 Other hazards**
The product does not contain any organic halogen compounds (AOX), nitrates, heavy metal compounds and formaldehyde.
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.

SECTION 3: Composition/information on ingredients







- **3.2 Chemical characterisation: Mixtures**
- **Description:** Mixture of substances listed below with nonhazardous additions.

· **Dangerous components:**

CAS: 9016-87-9	diphenylmethanediisocyanate, isomeres and homologues  Xn R20-40-48;  Xn R42/43;  Xi R36/37/38  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	50-100%
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CAS: 25322-69-4	Polyetherpolyol  Xn R22  Acute Tox. 4, H302	10-25%
CAS: 368640-62-9	Diisopropylnaphtalin R53 Aquatic Chronic 4, H413	10-25%
CAS: 6425-39-4	2,2'-Dimorpholinodiethylether  Xi R36/38  Skin Irrit. 2, H315; Eye Irrit. 2, H319	< 2.5%
CAS: 98-88-4 EINECS: 202-710-8	benzoyl chloride  C R34  Skin Corr. 1B, H314	< 2.5%

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

SECTION 4: First aid measures

- **4.1 Description of first aid measures**
- **General information:** When symptoms occur from or in cases of doubt seek medical attention.
- **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.
- **4.2 Most important symptoms and effects, both acute and delayed** No further relevant information available.
- **Information for doctor:**
Symptomatic treatment, no known specific antidote.
Pulmonary edema prophylaxis: dexamethasone metered-dose aerosol.
- **4.3 Indication of any immediate medical attention and special treatment needed**
No further relevant information available.

SECTION 5: Firefighting measures

- **5.1 Extinguishing media**
- **Suitable extinguishing agents:** Foam (alcohol resistant), carbon dioxide, powder, water spray (water).
- **For safety reasons unsuitable extinguishing agents:** Water jet.
- **5.2 Special hazards arising from the substance or mixture**
Exposure to decomposition product may cause a health hazard.
- **5.3 Advice for firefighters**
- **Protective equipment:** Wear protective clothing. If necessary, Breathing apparatus may be required.
- **Additional information** Do not discharge into drains fire water.

SECTION 6: Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures**
Wear protective equipment. Wear protective equipment.
- **6.2 Environmental precautions:** Do not allow to enter sewers/ surface or ground water.
- **6.3 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.
Ensure adequate ventilation.

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- **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.

SECTION 7: Handling and storage

- **7.1 Precautions for safe handling**
Ensure good ventilation/exhaustion at the workplace.
Prevent formation of aerosols.
- **Information about fire - and explosion protection:** No special measures required.
- **7.2 Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** Do not keep below +10 °C.
- **Information about storage in one common storage facility:**
Do not store together with: acids, amines or amine-containing mixtures.
Keep away from foodstuffs, beverages and feed.
- **Further information about storage conditions:**
Always store in original containers. Protect from heat and direct sunlight.
- **7.3 Specific end use(s)** No further relevant information available.

SECTION 8: Exposure controls/personal protection

- **8.1 Control parameters**
- **Ingredients with limit values that require monitoring at the workplace:**
The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

9016-87-9 diphenylmethanediisocyanate, isomeres and homologues (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.
- **8.2 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:**
In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.
- **Protection of hands:**
Protective gloves
The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.
Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation
- **Material of gloves**

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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 > 480min.

Nitrile rubber - NBR: thickness > 0.35 mm; Breakthrough time > 480min.

Butyl rubber - IIR: thickness > 0.5 mm; Breakthrough time > 480min.

Fluorine rubber - FKM: thickness > 0.4 mm; Breakthrough time > 480min.

· **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.

SECTION 9: Physical and chemical properties

· **9.1 Information on basic physical and chemical properties**

· **General Information**

· **Appearance:**

Form: liquid

Colour: brownish

· **Odour:** Weak, characteristic

· **Odour threshold:** Not determined.

· **pH-value:** Not determined.

· **Change in condition**

Melting point/Melting range: Undetermined.

Boiling point/Boiling range: 260 °C

· **Flash point:** > 200 °C

· **Flammability (solid, gaseous):** Not applicable.

· **Ignition temperature:** 600 °C

· **Decomposition temperature:** Not determined.

· **Self-igniting:** Product is not selfigniting.

· **Danger of explosion:** Product does not present an explosion hazard.

· **Vapour pressure:** Not determined.

· **Density at 20 °C:** 1.14 g/cm³

· **Solubility in / Miscibility with water:**

Not miscible or difficult to mix.

· **Partition coefficient (n-octanol/water):** Not determined.

· **Viscosity:**

Dynamic at 20 °C: 425 mPas

Kinematic: Not determined.

· **Solvent content:**

Organic solvents: 0.0 %

· **9.2 Other information**

No further relevant information available.

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SECTION 10: Stability and reactivity

- **10.3 Possibility of hazardous reactions**
Reacts exothermically with oxidizing agents, amines, strong bases, and alcohols with elimination of carbon dioxide with water and carboxylic acids.
- **10.4 Conditions to avoid** No further relevant information available.
- **10.5 Incompatible materials:**
Prior to strongly acidic and alkaline materials as well as oxidants hold to avoid exothermic reactions.
- **10.6 Hazardous decomposition products:**
At high temperatures, carbon dioxide, carbon monoxide, oxides of nitrogen.

SECTION 11: Toxicological information

- **11.1 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/l (rat)

- **Primary irritant effect:**
- **on the skin:** Irritant to skin and mucous membranes.
- **on the eye:** Irritating effect.
- **Sensitisation:**
Sensitisation possible through inhalation.
Sensitisation possible through skin contact.
- **Other information (about experimental toxicology):** There are no data available on the preparation itself.
- **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
- **CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)**
This does not meet the criteria for CMR category 1 or 2

SECTION 12: Ecological information

- **12.1 Toxicity**
- **Aquatic toxicity:** No further relevant information available.
- **12.2 Persistence and degradability** No further relevant information available.
- **Other information:**
Biodegradation:
Diphenylmethane diisocyanate, isomers and homologues
0% 28 d, that is, unworkable
Method: respirometer test
Toxicity to fish: LC0 > 1.000 mg / l
Test species: *Brachydanio rerio* (zebrafish) Test duration: 96 h
Acute Toxicity to daphnia: EC50 > 1,000 mg / l
Test species: *Daphnia magna* (water flea) Duration of test: 24 h
Acute Toxicity to bacteria: EC50 > 100 mg / l
Tested on: activated sludge Duration of test: 3 h
- **12.3 Bioaccumulative potential** No further relevant information available.
- **12.4 Mobility in soil** No further relevant information available.

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- **Additional ecological information:**
- **General notes:**
Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water
Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
Do not discharge into drains and waterways.
- **12.5 Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **12.6 Other adverse effects** No further relevant information available.

SECTION 13: Disposal considerations

- **13.1 Waste treatment methods**
- **Recommendation**
Must not be disposed together with household garbage. Do not empty into drains.
No longer usable components in the prescribed mixing and allowed to cure.
Disposal in accordance with local 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.

SECTION 14: Transport information

- | | |
|---|---|
| · 14.1 UN-Number | - |
| · 14.2 UN proper shipping name | - |
| · 14.3 Transport hazard class(es) | - |
| · 14.4 Packing group | - |
| · 14.5 Environmental hazards: | Not applicable. |
| · 14.6 Special precautions for user | Not applicable. |
| · 14.7 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. |

SECTION 15: Regulatory information

- **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**
 - **National regulations:**
 - **Technical instructions (air):**
- | Class | Share in % |
|-------|------------|
| I | 65.0 |
- **Waterhazard class:** Water hazard class 1 (Self-assessment): slightly hazardous for water.

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· **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.
- H314 Causes severe skin burns and eye damage.
- 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.
- H413 May cause long lasting harmful effects to aquatic life.
- R20 Harmful by inhalation.
- R22 Harmful if swallowed.
- R34 Causes burns.
- R36/37/38 Irritating to eyes, respiratory system and skin.
- R36/38 Irritating to eyes 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.
- R53 May cause long-term adverse effects in the aquatic environment.

· **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 Organisation
- GHS: Globally Harmonised System of Classification and Labelling of Chemicals
- EINECS: European Inventory of Existing Commercial Chemical Substances
- ELINCS: European List of Notified Chemical Substances
- CAS: Chemical Abstracts Service (division of the American Chemical Society)
- LC50: Lethal concentration, 50 percent
- LD50: Lethal dose, 50 percent
- Acute Tox. 4: Acute toxicity, Hazard Category 4
- Skin Corr. 1B: Skin corrosion/irritation, Hazard Category 1B
- Skin Irrit. 2: Skin corrosion/irritation, Hazard Category 2
- Eye Irrit. 2: Serious eye damage/eye irritation, Hazard Category 2
- Resp. Sens. 1: Sensitisation - Respirat., Hazard Category 1
- Skin Sens. 1: Sensitisation - Skin, Hazard Category 1
- Carc. 2: Carcinogenicity, Hazard Category 2
- STOT SE 3: Specific target organ toxicity - Single exposure, Hazard Category 3
- STOT RE 2: Specific target organ toxicity - Repeated exposure, Hazard Category 2
- Aquatic Chronic 4: Hazardous to the aquatic environment - Chronic Hazard, Category 4