



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

1.1 Product identifier

Trade name BONDAN ST42 – Component B

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

General use Adhesive.

1.3 Details of the supplier of the safety data sheet

Drei Bond GmbH · Carl-Zeiss-Ring 13 · 85737 Ismaning  
t +49 (0)89 96 24 27-0 · f +49 (0)89 96 24 27-19  
Department responsible for information: [info@bondan.de](mailto:info@bondan.de) · t +49 89 962427-0

1.4 Emergency telephone number

Drei Bond GmbH	Tel. +49 (0)89 96 24 27-0
Carl-Zeiss-Ring 13	During office hours
85737 Ismaning	Mo – Do 9:00 am – 05:00 pm
	Fr 8:00 am – 3:00 pm

**2 Hazards identification**

2.1 Classification of the substance or mixture

Classification according to EC regulation 1272/2008 (CLP)

Physical hazards	Not Classified
Health hazards	Skin Corr. 1B - H314 Eye Dam. 1 - H318 Skin Sens. 1 - H317
Environmental hazards	Aquatic Chronic 3 - H412

## 2.2 Label elements

### Labelling CLP:



Signal word

**Danger**

### Hazard statements

H314

Causes severe skin burns and eye damage.

H317

May cause an allergic skin reaction.

H412

Harmful to aquatic life with long lasting effects.

### Precautionary statements

P101

If medical advice is needed, have product container or label at hand.

P102

Keep out of reach of children.

P280

Wear protective gloves/protective clothing/eye protection/face protection.

P301+P330+P331

IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

P303+P361+P353

IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water / shower.

P305+P351+P338

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing.

P310

Immediately call a POISON CENTER or doctor.

P501

Dispose of contents/container in accordance with local/regional/national/international regulations.

### Special labelling

Contains: MERCAPTAN-TERMINATED POLYMER; AMINES, POLYETHYLENEPOLY-, TRIETHYLENETETRAMINE FRACTION



Supplementary precautionary statements

P264	Wash contaminated skin thoroughly after handling.
P272	Contaminated work clothing should not be allowed out of the workplace.
P273	Avoid release to the environment.
P302+P352a	IF ON SKIN: Wash with plenty of soap and water.
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P308+P313	IF exposed or concerned: Get medical advice/ attention.
P333+P313	If skin irritation or rash occurs: Get medical advice/attention.
P337+P313	If eye irritation persists: Get medical advice/ attention.
P362+P364	Take off contaminated clothing and wash it before reuse.
P363	Wash contaminated clothing before reuse.
P405	Store locked up.

2.3 Other hazards

None under normal conditions. This substance is not classified as PBT or vPvB according to current EU criteria.

**3 Composition/information on ingredients**

3.2 Mixtures

Hazardous ingredients

Ingredient	Designation	Content	Classification
CAS number: 72244-98-5 EC number: 615-735-8 REACH registration number: –	MERCAPTAN-TERMINATED POLYMER	60 - 100 %	Skin Sens. 1B - H317 Aquatic Chronic 3 - H412
CAS number: 90640-67-8 EC number: 292-588-2 REACH registration number: 01-2119487919-13-XXXX	AMINES, POLYETHYLENEPOLY-, TRIETHYLENETETRAMINE FRACTION	5 - 10 %	Acute Tox. 4 - H302 Acute Tox. 4 - H312 Skin Corr. 1B - H314 Eye Dam. 1 - H318 Skin Sens. 1 - H317 Aquatic Chronic 3 - H412



CAS number: – REACH registration exemption – POLYMER	AMINES, POLYETHYLENEPOLY-, TRIETHYLENETETRAMINE FRACTION POLYMER ADDUCT	1 - 5 %	Acute Tox. 4 - H302 Acute Tox. 4 - H312 Skin Corr. 1B - H314 Eye Dam. 1 - H318 Skin Sens. 1 - H317 Aquatic Chronic 3 - H412
CAS number: 6674-22-2 EC number: 229-713-7 REACH registration number: 01-2119977097-24-XXXX	1,8-DIAZABICYCLO [5.4.0]UNDEC-7-ENE	< 1 %	Acute Tox. 3 - H301 Skin Corr. 1B - H314 Eye Dam. 1 - H318

The full text for all hazard statements is displayed in Section 16.

## 4 First aid measures

### 4.1 Description of first aid measures

Inhalation	Move the exposed person to fresh air. Get medical attention if any discomfort continues.
Ingestion	Never give anything by mouth to an unconscious person. Rinse mouth thoroughly with water. Give plenty of water to drink. DO NOT induce vomiting. Get medical attention immediately.
Skin contact	Remove contaminated clothing. Wash skin thoroughly with soap and water. If symptoms develop, obtain medical attention.
Eye contact	Remove any contact lenses and open eyelids wide apart. Rinse immediately with plenty of water for 15 minutes holding the eyelids open. Get medical attention. Show this Safety Data Sheet to the medical personnel.

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

Inhalation	Irritation of nose, throat and airways.
Ingestion	May cause chemical burns in mouth and throat.
Skin contact	Chemical burns, mild dermatitis, allergic skin rash.



	Eye contact	May cause serious eye damage.
4.3	Indication of any immediate medical attention and special treatment needed	
	Notes for the doctor	No specific recommendations. Treat symptomatically.

**5 Fire-fighting measures**

**5.1 Extinguishing media**

Suitable extinguishing media	Extinguish with foam, carbon dioxide, dry powder or water fog.
Unsuitable extinguishing media	Do not use water jet as an extinguisher, as this will spread the fire.

**5.2 Special hazards arising from the substance or mixture**

Specific hazards	No unusual fire or explosion hazards noted.
Hazardous combustion Products	Burning produces irritating, toxic and obnoxious fumes. Nitrous gases (NO <sub>x</sub> ). Carbon monoxide, carbon dioxide, and unknown hydrocarbons.

**5.3 Advice for firefighters**

**Special protective equipment for firefighters**

Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing.

**6 Accidental release measures**

**6.1 Personal precautions, protective equipment and emergency procedures**

Wear protective clothing as described in Section 8 of this safety data sheet.

**6.2 Environmental precautions**

Do not discharge into drains or watercourses or onto the ground.



6.3 Methods and material for containment and cleaning up

Absorb spillage with sand or other inert absorbent. Transfer to suitable, labelled containers for disposal. Wash area with soap and water.

6.4 Reference to other sections

For personal protection, see Section 8. For waste disposal, see section 13.

**7 Handling and storage**

7.1 Precautions for safe handling

Avoid contact with skin and eyes. Do not eat, drink or smoke when using this product.

7.2 Conditions for safe storage, including any incompatibilities

Storage precautions	Store in closed original container at temperatures between 5°C and 25°C.
---------------------	--------------------------------------------------------------------------

Storage class	Corrosive storage.
---------------	--------------------

7.3 Specific end use(s)

adhesive; sealant

**8 Exposure controls/personal protection**

8.1 Control parameters

Ingredient comments	No exposure limits known for ingredient(s).
---------------------	---------------------------------------------

**AMINES, POLYETHYLENEPOLY-, TRIETHYLENETETRAMINE FRACTION (CAS: 90640-67-8)**

DNEL

Workers - Inhalation; Long term systemic effects: 1 mg/m<sup>3</sup>

Workers - Inhalation; Short term systemic effects: 5380 mg/m<sup>3</sup>

Workers - Dermal; Long term systemic effects: 0.57 mg/kg/day

Workers - Dermal; Long term local effects: 28 µg/cm<sup>2</sup>



PNEC

Fresh water; 0.0068 mg/l  
marine water; 0.0068 mg/l  
Sediment (Freshwater); 3.43 mg/kg  
Sediment (Marinewater); 0.343 mg/kg  
STP; 9.73 mg/l

**AMINES, POLYETHYLENEPOLY-, TRIETHYLENETETRAMINE FRACTION POLYMER ADDUCT**

DNEL

Workers - Inhalation; Long term local effects: 6940 mg/m<sup>3</sup>  
Workers - Inhalation; Long term systemic effects: 1.29 mg/m<sup>3</sup>  
Workers - Dermal; Long term local effects: 0.036 mg/cm<sup>2</sup>

PNEC

Fresh water; 0.0068 mg/l  
marine water; 0.0068 mg/l  
Sediment (Freshwater); 3.43 mg/kg  
Sediment (Marinewater); 0.343 mg/kg  
STP; 9.73 mg/l

**1,8-DIAZABICYCLO[5.4.0]UNDEC-7-ENE (CAS: 6674-22-2)**

DNEL

Workers - Inhalation; Long term systemic effects: 4.4 mg/m<sup>3</sup>  
Workers - Dermal; Long term systemic effects: 1.25 mg/kg/day

PNEC

- Fresh water; 0.24 mg/l  
- marine water; 0.024 mg/l  
- STP; 13 mg/l  
- Sediment (Freshwater); 137 mg/kg  
- Sediment (Marinewater); 13.7 mg/kg

## 8.2 Exposure controls

### Protection equipment



#### Appropriate engineering controls

Normal (mechanical) room ventilation should be adequate for small volumes. For higher volume activities, or if needed for worker comfort, local mechanical exhaust should be provided.

#### Eye/face protection

Use approved safety goggles or face shield. Personal eye protection should conform to EN 166.

#### Hand protection

It is recommended that chemical-resistant, impervious gloves are worn. Gloves should conform to EN 374. For exposure up to 4 hours, wear gloves made of the following material: Nitrile rubber. Thickness:  $\geq 0.4$  mm The selected gloves should have a breakthrough time of at least 0.5 hours. For exposure up to 8 hours, wear gloves made of the following material: Nitrile rubber. Thickness:  $\geq 0.4$  mm The selected gloves should have a breakthrough time of at least 8 hours. The breakthrough time for any glove material may be different for different glove manufacturers. The most suitable glove should be chosen in consultation with the glove supplier/manufacturer, who can provide information about the breakthrough time of the glove material. Considering the data specified by the glove manufacturer, check during use that the gloves are retaining their protective properties and change them as soon as any deterioration is detected.

#### Other skin and body protection

Uniforms, coveralls, or a lab coat should be worn.





Hygiene measures	Wash at the end of each work shift and before eating, smoking and using the toilet. When using do not eat, drink or smoke. Wash promptly if skin becomes contaminated. Use of good industrial hygiene practices is required.
Respiratory protection	Ensure adequate ventilation of the working area. Respiratory protection may be required if excessive airborne contamination occurs. Respiratory protection complying with an approved standard should be worn if a risk assessment indicates inhalation of contaminants is possible. Organic vapour filter, Type A (EN14387).

## 9 Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

Appearance	liquid
Colour	colourless
Odour	amine-like
Odour threshold	not determined
pH	not determined
Melting point	not determined
Initial boiling point and range	not determined
Flash point	> 100 °C
Evaporation rate	not available
Vapour pressure	not determined
Vapour density	not determined
Relative density	1.1
Solubility(ies)	Slightly soluble in water. Soluble in the following materials: Organic solvents.
Auto-ignition temperature	not determined
Decomposition Temperature	not determined
Viscosity	≈ 22500 mPa·s @ 25°C
Explosive properties	not determined
Oxidising properties	not applicable



## 10 Stability and reactivity

### 10.1 Reactivity

Under normal conditions of storage and use, no hazardous reactions will occur.

### 10.2 Chemical stability

Stable at normal ambient temperatures.

### 10.3 Possibility of hazardous reactions

Reactions with the following materials may generate heat: Epoxy resins

### 10.4 Conditions to avoid

Avoid excessive heat for prolonged periods of time.

### 10.5 Incompatible materials

Avoid contact with the following materials: Acids; oxidising agents

### 10.6 Hazardous decomposition products

Thermal decomposition could produce carbon monoxide, carbon dioxide, and unidentified organic compounds.

## 11 Toxicological information

### 11.1 Information on toxicological effects

#### Toxicological effects

The mixture is classified based on the available hazard information for the ingredients as defined in the classification criteria for mixtures for each hazard class or differentiation in Annex I to Regulation 1272/2008/EC. Relevant available health/ecological information for the substances listed under Section 3 is provided in the following.

#### Skin sensitisation

#### Skin sensitization

May cause sensitisation by skin contact.

Aspiration hazard

Aspiration hazard None under normal conditions.

## Inhalation

Unlikely to be hazardous by inhalation because of the low vapour pressure of the product at ambient temperature. In high concentrations, vapours may irritate throat and respiratory system and cause coughing.

## Ingestion

Causes burns. May cause chemical burns in mouth and throat. May cause stomach pain or vomiting.

## Skin contact

This product is strongly irritating. Prolonged contact may cause burns.

## Eye contact

Causes serious eye damage.

Toxicological effects on ingredients**MERCAPTAN-TERMINATED POLYMER**Acute toxicity - oral

Acute toxicity oral (LD<sub>50</sub> mg/kg) 2,600.0  
Species Rat

Acute toxicity - dermal

Acute toxicity dermal (LD<sub>50</sub> mg/kg) 10,200.0  
Species Rabbit

**AMINES, POLYETHYLENEPOLY-, TRIETHYLENETETRAMINE FRACTION**Acute toxicity - oral

Acute toxicity oral (LD<sub>50</sub> mg/kg) 1,716.0  
Species Rat

Acute toxicity - dermal

Acute toxicity dermal (LD<sub>50</sub> mg/kg) 1,465.0  
Species Rabbit

Acute toxicity - inhalation

Notes (inhalation LC<sub>50</sub>) no information available



Skin corrosion/irritation

Skin corrosion/irritation

Causes severe burns.

Serious eye damage/irritation

Serious eye damage/irritation

Causes serious eye damage.

Respiratory sensitisation

Respiratory sensitization

May cause allergic reaction.

Skin sensitisation

Skin sensitisation

May cause an allergic skin reaction.

Germ cell mutagenicity

Genotoxicity - in vitro

Based on available data the classification criteria are not met.

Carcinogenicity

Carcinogenicity

Based on available data the classification criteria are not met.

Reproductive toxicity

Reproductive toxicity - fertility

Based on available data the classification criteria are not met.

Specific target organ toxicity - single exposure

STOT - single exposure

Based on available data the classification criteria are not met.

Specific target organ toxicity - repeated exposure

STOT - repeated exposure

Based on available data the classification criteria are not met.

Aspiration hazard

Aspiration hazard

Based on available data the classification criteria are not met.



**AMINES, POLYETHYLENEPOLY-, TRIETHYLENETETRAMINE FRACTION POLYMER ADDUCT**

Acute toxicity - oral

Acute toxicity oral (LD<sub>50</sub> mg/kg) 2,140.0  
Species Rat

Acute toxicity - dermal

Acute toxicity dermal (LD<sub>50</sub> mg/kg) 1,260.0  
Species Rabbit

**1,8-DIAZABICYCLO[5.4.0]UNDEC-7-ENE**

Acute toxicity - oral

Acute toxicity oral (LD<sub>50</sub> mg/kg) 300.0  
Species Rat

Acute toxicity - dermal

Acute toxicity dermal (LD<sub>50</sub> mg/kg) 1,233.0  
Species Rabbit

Acute toxicity - inhalation

Notes (inhalation LC<sub>50</sub>) no information available

Skin corrosion/irritation

Skin corrosion/irritation Corrosive to skin.

Serious eye damage/irritation

Serious eye damage/irritation Causes serious eye irritation. Rabbit: Corrosive

Skin sensitisation

Skin sensitisation no information available

Germ cell mutagenicity

Genotoxicity - in vitro Gene mutation: Negative

Carcinogenicity

Carcinogenicity no information available

Reproductive toxicity

Reproductive toxicity - fertility Screening - NOAEL 150 mg/kg/day, Oral, Rat F1



Reproductive toxicity - Developmental toxicity: - NOAEL: 150 mg/kg/day, Oral, Rat  
Development

Specific target organ toxicity - single exposure

STOT - single exposure no information available

Specific target organ toxicity - repeated exposure

STOT - repeated exposure no information available

Aspiration hazard

Aspiration hazard no information available

**12 Ecological information**

Harmful to aquatic life with long lasting effects.

**12.1 Toxicity**

The mixture is classified based on the available hazard information for the ingredients as defined in the classification criteria for mixtures for each hazard class or differentiation in Annex I to Regulation 1272/2008/EC. Relevant available health/ecological information for the substances listed under Section 3 is provided in the following.

Ecological information on ingredients

**AMINES, POLYETHYLENEPOLY-, TRIETHYLENETETRAMINE FRACTION**

Acute aquatic toxicity

Acute toxicity - fish LC<sub>50</sub>, 96 hours: 330 mg/l, Pimephales promelas (Fat-head Minnow)

Acute toxicity - aquatic EC<sub>50</sub>, 48 hours: 31.1 mg/l, Daphnia magna  
Invertebrates

Acute toxicity - aquatic plants EC<sub>50</sub>, 48 hours: 3.7 mg/l, Scenedesmus subspicatus

**AMINES, POLYETHYLENEPOLY-, TRIETHYLENETETRAMINE FRACTION POLYMER ADDUCT**

Acute aquatic toxicity

Acute toxicity - fish LC<sub>50</sub>, 96 hours: 420 mg/l, Poecilia reticulata (Guppy)



Acute toxicity - aquatic Invertebrates                      EC<sub>50</sub>, 48 hours: 24.1 mg/l, Daphnia magna

**1,8-DIAZABICYCLO[5.4.0]UNDEC-7-ENE**

Acute aquatic toxicity

Acute toxicity - fish                      LC<sub>50</sub>, 96 hours: 100 - 220 mg/l, Leuciscus idus (Golden orfe)

Acute toxicity - aquatic Invertebrates                      EC<sub>50</sub>, 48 hours: 50 mg/l, Daphnia magna

Acute toxicity - microorganisms                      EC<sub>50</sub>, 17 hours: 330 mg/l, Pseudomonas putida

12.2. Persistence and degradability

There is no data on the degradability of this product.

Ecological information on ingredients

**1,8-DIAZABICYCLO[5.4.0]UNDEC-7-ENE**

Chemical oxygen demand                      230 mg O<sub>2</sub>/l

12.3 Bioaccumulative potential

There is no data available on bioaccumulation.

12.4 Mobility in soil

There is no data available.

12.5 Results of PBT and vPvB assessment

This substance is not classified as PBT or vPvB according to current EU criteria.

12.6 Other adverse effects

none known

## 13 Disposal considerations

### 13.1 Waste treatment methods

#### General information

Waste disposal should be in accordance with existing Community, National and local regulations Empty containers may contain product residue; follow SDS and label warnings even after they have been emptied.

#### Disposal methods

Do not empty into drains, dispose of this material and its container at hazardous or special waste collection point.

#### Waste class

08 04 09\* waste adhesives and sealants containing organic solvents or other dangerous substances.

## 14 Transport information

### 14.1 UN number

2735

### 14.2 UN proper shipping name

POLYAMINES, LIQUID, CORROSIVE, N.O.S.

### 14.3 Transport hazard class(es)

8

#### Transport labels



### 14.4 Packing group

III





14.5 Environmental hazards

Environmentally hazardous substance/marine pollutant: No

14.6 Special precautions for user

EmS F-A, S-B

Tunnel restriction code (E)

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

not applicable

**15 Regulatory information**

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

National regulations

The Chemicals (Hazard Information and Packaging for Supply) Regulations 2009 (SI 2009 No. 716).

Control of Substances Hazardous to Health Regulations 2002 (as amended).

EU legislation Regulation (EC)

Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures (as amended).

COMMISSION REGULATION (EU) 2015/830 of 28 May 2015 amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH).

Guidance

Workplace Exposure Limits EH40.

CHIP for everyone HSG228.

Safety Data Sheets for Substances and Preparations.

Approved Classification and Labelling Guide (Sixth edition) L131.

15.2 Chemical Safety Assessment

No chemical safety assessment has been carried out.



## 16 Other information

Revision date: 25.02.2021

Supersedes date: 18.12.2020

### **Wording of the hazard statements under paragraph 2 and 3:**

H301 Toxic if swallowed.

H302 Harmful if swallowed.

H312 Harmful in contact with skin.

H314 Causes severe skin burns and eye damage.

H317 May cause an allergic skin reaction.

H318 Causes serious eye damage.

H412 Harmful to aquatic life with long lasting effects.

### **Department issuing data sheet:**

Contact person: see section 1: Dept. responsible for information

For abbreviations and acronyms, see: ECHA Guidance on information requirements and chemical safety assessment, chapter R.20 (Table of terms and abbreviations).

The information in this data sheet has been established to our best knowledge and was up-to-date at time of revision. It does not represent a guarantee for the properties of the product described in terms of the legal warranty regulations.

*(The data on the hazardous ingredients were taken from the most recent safety data sheet from the supplier.)*