

**SECTION 1: Identification of the substance/mixture and of the company/undertaking****1.1. Product identifier**

GF Dytex Special Adhesive

**Contains:**

Dichloromethane

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

Intended use:

Pipe adhesive

**1.3. Details of the supplier of the safety data sheet**

Georg Fischer Piping Systems Ltd

Ebnatstrasse 111

CH - 8201 Schaffhausen - Switzerland

Phone: +41 52 631 11 11

**1.4. Emergency telephone number**

24 Hours Emergency Tel: Swiss Toxicological Information Centre (7 days)

+41 44 251 51 51 or

145 (Switzerland and Liechtenstein).

**SECTION 2: Hazards identification****2.1. Classification of the substance or mixture****Classification (CLP):**

Skin irritation	Category 2
H315 Causes skin irritation.	
Serious eye irritation	Category 2
H319 Causes serious eye irritation.	
Specific target organ toxicity - single exposure	Category 3
H336 May cause drowsiness or dizziness.	
Carcinogenicity	Category 2
H351 Suspected of causing cancer.	

**2.2. Label elements****Label elements (CLP):****Hazard pictogram:****Signal word:**

Warning

**Hazard statement:**

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H336 May cause drowsiness or dizziness.

H351 Suspected of causing cancer.

**Supplemental information**

Contains Di-n-octyltinbis(2ethylhexylmercaptoacetate). May produce an allergic reaction.

**Precautionary statement:**

P201 Obtain special instructions before use.

**Prevention**

P261 Avoid breathing mist/spray.

P271 Use only outdoors or in a well-ventilated area.

P280 Wear eye protection/face protection.

**Precautionary statement:**

P302+P352 IF ON SKIN: Wash with plenty of water.

**Response**

P308+P311 If exposed or concerned: Call a POISON CENTER/doctor.

**2.3. Other hazards**

Pregnant women should absolutely avoid inhalation and skin contact.

Solvents contained in the product evaporate during processing and their vapors can form explosive/highly inflammable air/vapor mixtures.

Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very Bioaccumulative (vPvB) criteria.

**SECTION 3: Composition/information on ingredients****3.2. Mixtures****General chemical description:**

Adhesive

**Base substances of preparation:**

Post-chlorinated PVC in dichloromethane

**Declaration of the ingredients according to CLP (EC) No 1272/2008:**

Hazardous components CAS-No.	EC Number REACH-Reg No.	content	Classification
Dichloromethane 75-09-2	200-838-9 01-2119480404-41	> 50 %	Skin Irrit. 2 H315 Eye Irrit. 2 H319 STOT SE 3 H336 Carc. 2 H351
Di-n- octyltinbis(2ethylhexylmercaptoacetate) 15571-58-1	239-622-4 01-2119486133-40	< 0,5 %	Acute Tox. 4; Oral H302 Skin Sens. 1; Dermal H317 Repr. 1B H360D STOT RE 1; Oral H372 Aquatic Acute 1 H400 Aquatic Chronic 1 H410 ===== EU. REACH Candidate List of Substances of Very High Concern for Authorization (SVHC)

Substances without classification may have community workplace exposure limits available.

**SECTION 4: First aid measures****4.1. Description of first aid measures****General information:**

In case of adverse health effects seek medical advice.

**Inhalation:**

Move to fresh air, consult doctor if complaint persists.

**Skin contact:**

Rinse with running water and soap. Skin care. Remove contaminated clothes immediately.

**Eye contact:**

Immediately flush eyes with soft jet of water or eye rinse solution for at least 5 minutes. If pains remains (intensive smarting, sensivity to light, visual disturbance) continue flushing and contact/seek doctor or hospital.

**Ingestion:**

Rinse mouth and throat. Drink 1-2 glasses of water. Seek medical advice.

**4.2. Most important symptoms and effects, both acute and delayed**

EYE: Irritation, conjunctivitis.

SKIN: Redness, inflammation.

RESPIRATORY: Irritation, coughing, shortness of breath, chest tightness.

INGESTION: Nausea, vomiting, diarrhea, abdominal pain.

Vapors may cause drowsiness and dizziness.

**4.3. Indication of any immediate medical attention and special treatment needed**

See section: Description of first aid measures

## SECTION 5: Firefighting measures

### 5.1. Extinguishing media

#### Suitable extinguishing media:

Carbon dioxide, foam, powder, water spray jet, fine water spray.

#### Extinguishing media which must not be used for safety reasons:

High pressure waterjet.

### 5.2. Special hazards arising from the substance or mixture

In the event of a fire, carbon monoxide (CO) and carbon dioxide (CO<sub>2</sub>) can be released.  
Hydrogen chloride.

### 5.3. Advice for firefighters

Wear self-contained breathing apparatus.

Wear protective equipment.

#### Additional information:

Cool endangered containers with water spray jet.

## SECTION 6: Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation.

Wear protective equipment.

Danger of slipping on spilled product.

Avoid contact with skin and eyes.

### 6.2. Environmental precautions

Do not empty into drains / surface water / ground water.

### 6.3. Methods and material for containment and cleaning up

Remove with liquid-absorbing material (sand, peat, sawdust).

Dispose of contaminated material as waste according to Section 13.

### 6.4. Reference to other sections

See advice in section 8.

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

Ventilate working rooms thoroughly. Avoid naked flames, sparking and sources of ignition. Switch off electrical devices. Do not smoke, do not weld. Do not empty waste into waste water drains.

During processing and drying after adhesion, ventilate well. Avoid all sources of fire such as stoves and ovens. Switch off all electrical devices such as parabolic heaters, hot plates, storage heaters etc. in good time for them to have cooled down before commencing work. Avoid all sparks, including those occurring at electrical switches and devices.

#### Hygiene measures:

Do not eat, drink or smoke while working.

Wash hands before work breaks and after finishing work.

### 7.2. Conditions for safe storage, including any incompatibilities

Store in sealed original container.

Temperatures between + 5 °C and + 35 °C

Store in a cool place in closed original container.

Do not store together with highly alkaline products.

Do not store together with food or other consumables (coffee, tea, tobacco, etc.).

### 7.3. Specific end use(s)

Pipe adhesive

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters Occupational Exposure Limits Valid for Germany

Ingredient [Regulated substance]	ppm	mg/m <sup>3</sup>	Value type	Short term exposure limit category / Remarks	Regulatory list
Dichloromethane 75-09-2	75	260	Exposure limit(s):	4	TRGS 900
Dichloromethane 75-09-2			Short Term Exposure Classification:	Category II: substances with a resorptive effect.	TRGS 900

### Predicted No-Effect Concentration (PNEC):

Name on list	Environmental Compartment	Exposure period	Value				Remarks
			mg/l	ppm	mg/kg	others	
Dichloromethane 75-09-2	aqua (freshwater)					0,54 mg/L	
Dichloromethane 75-09-2	aqua (marine water)					0,194 mg/L	
Dichloromethane 75-09-2	aqua (intermittent releases)					0,27 mg/L	
Dichloromethane 75-09-2	sediment (freshwater)					4,47 mg/kg	
Dichloromethane 75-09-2	sediment (marine water)					1,61 mg/kg	
Dichloromethane 75-09-2	soil					0,583 mg/kg	
Dichloromethane 75-09-2	sewage treatment plant (STP)					26 mg/L	

### Derived No-Effect Level (DNEL):

Name on list	Application Area	Route of Exposure	Health Effect	Exposure Time	Value	Remarks
Dichloromethane 75-09-2	Workers	Inhalation	Acute/short term exposure - systemic effects		353 mg/m <sup>3</sup>	
Dichloromethane 75-09-2	Workers	dermal	Long term exposure - systemic effects		2395 mg/kg bw/day	
Dichloromethane 75-09-2	Workers	dermal	Long term exposure - local effects		88,3 mg/cm <sup>2</sup>	
Dichloromethane 75-09-2	Workers	oral	Long term exposure - local effects		0,06 mg/kg bw/day	
Dichloromethane 75-09-2	general population	Inhalation	Acute/short term exposure - systemic effects		706 mg/m <sup>3</sup>	
Dichloromethane 75-09-2	general population	dermal	Long term exposure - systemic effects		4750 mg/kg bw/day	
Dichloromethane 75-09-2	general population	Inhalation	Long term exposure - systemic effects		353 mg/m <sup>3</sup>	

### Biological Exposure Indices:

Ingredient [Regulated substance]	Parameters	Biological specimen	Sampling time	Conc.	Basis of biol. exposure index	Remark	Additional Information
Dichloromethane 75-09-2	dichloromethane	Blood	Sampling time: End of shift.	1 mg/l	DE BAT		
Dichloromethane 75-09-2	Co-Hb	Blood	Sampling time: End of shift.	5 %	DE BAT		

**8.2. Exposure controls:**

## Respiratory protection:

Suitable breathing mask when there is inadequate ventilation.

Filter : AX (EN 14387)

This recommendation should be matched to local conditions.

## Hand protection:

For shorttime contact (e.g. as protection against splashes) protective gloves made from nitrile / chloroprene rubber are recommended according to EN 374.

Perforation time > 10 minutes

material thickness > 0.6 mm

In the case of longer and repeated contact please note that in practice the penetration times may be considerably shorter than those determined according to EN 374. The protective gloves must always be checked for their suitability for use at the specific workplace (e.g. mechanical and thermal stress, product compatibility, antistatic effects, etc.). The gloves must be replaced immediately at the first signs of wear and tear. The information provided by the manufacturers and given in the relevant trade association regulations for industrial safety must always be observed. We recommend that a hand care plan is drawn up in cooperation with a glove manufacturer and the trade association in accordance with the local operating conditions.

## Eye protection:

Goggles which can be tightly sealed.

## Skin protection:

Suitable protective clothing.

**SECTION 9: Physical and chemical properties****9.1. Information on basic physical and chemical properties**

Appearance	liquidlow viscosity brownish, clear of solvent
Odor	
Odour threshold	No data available / Not applicable
pH	No data available / Not applicable
Initial boiling point	41 °C (105.8 °F)
Flash point	Not applicable
Decomposition temperature	No data available / Not applicable
apour pressure	No data available / Not applicable
Bulk density	No data available / Not applicable
Viscosity	170 - 320 mPa.s
(Brookfield; 20 °C (68 °F)	
Viscosity (kinematic)	No data available / Not applicable
Explosive properties	No data available / Not applicable
Solubility (qualitative)	Insoluble
(23 °C (73.4 °F)Solvent: Water	
Solidification temperature	No data available / Not applicable
Melting point	No data available / Not applicable
Flammability	No data available / Not applicable
Auto-ignition temperature	No data available / Not applicable
Explosive limits	
lower	13 %(V)
upper	22 %(V)
	The product is not explosive. The formation of explosive vapor/air mixtures is possible.
Partition coefficient: n-octanol/water	No data available / Not applicable
Evaporation rate	No data available / Not applicable
Vapor density	No data available / Not applicable
Oxidising properties	No data available / Not applicable

**9.2. Other information**

No data available / Not applicable

**SECTION 10: Stability and reactivity****10.1. Reactivity**

None if used for intended purpose.

**10.2. Chemical stability**

Stable under recommended storage conditions.

**10.3. Possibility of hazardous reactions**

See section reactivity.

**10.4. Conditions to avoid**

None if used for intended purpose.

**10.5. Incompatible materials**

None if used properly.

**10.6. Hazardous decomposition products**

In the event of a fire, hydrochloric acid gas may be released.

In the event of a fire, carbon monoxide (CO) and carbon dioxide (CO<sub>2</sub>) are released.

**SECTION 11: Toxicological information****11.1. Information on toxicological effects****General toxicological information:**

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 (EC) No 1272/2008. Relevant available health/ecological information for the substances listed under Section 3 is provided in the following.

May cause damage to organs through prolonged or repeated exposure.

**Inhalative toxicity:**

May cause respiratory irritation.

Vapors may cause drowsiness and dizziness.

The toxicity of the product is due to its narcotic effect after inhalation.

In the event of protracted or repeated exposure, damage to health cannot be excluded.

**Skin irritation:**

Causes skin irritation.

**Eye irritation:**

Causes serious eye irritation.

**Sensitizing:**

An allergic reaction cannot be excluded after repeated skin contact.

**Carcinogenicity:**

Suspected of causing cancer

**Acute oral toxicity:**

Hazardous components CAS-No.	Value type	Value	Route of application	Exposure time	Species	Method
Dichloromethane 75-09-2	LD50	2.120 mg/kg	oral		rat	
Di-n-octyltinbis(2ethylhexylmethylacrylate)	LD50	2.000 mg/kg	oral		rat	OECD Guideline 401 (Acute Oral Toxicity)

**Acute dermal toxicity:**

Hazardous components CAS-No.	Value type	Value	Route of application	Exposure time	Species	Method
Dichloromethane 75-09-2	LD50	> 2.000 mg/kg	dermal		rat	OECD Guideline 402 (Acute Dermal Toxicity)
Di-n-octyltinbis(2ethylhexylmethylacrylate)	LD50	> 2.000 mg/kg	dermal		rat	OECD Guideline 402 (Acute Dermal Toxicity)

**Skin corrosion/irritation:**

Hazardous components CAS-No.	Result	Exposure time	Species	Method
Dichloromethane 75-09-2	irritating	4 h	rabbit	OECD Guideline 404 (Acute Dermal Irritation / Corrosion)
Di-n-octyltinbis(2ethylhexylmethylacrylate)	not irritating	4 h	rabbit	OECD Guideline 404 (Acute Dermal Irritation / Corrosion)

**Serious eye damage/irritation:**

Hazardous components CAS-No.	Result	Exposure time	Species	Method
Dichloromethane 75-09-2	irritating		rabbit	

**Respiratory or skin sensitization:**

Hazardous components CAS-No.	Result	Test type	Species	Method
Dichloromethane 75-09-2	not sensitising	Mouse local lymphnode assay (LLNA)	mouse	OECD Guideline 429 (Skin Sensitisation: Local Lymph Node Assay)
Di-n- octyltinbis(2ethylhexylme rcaptoacetate) 15571-58-1	sensitising	Guinea pig maximisation test	guinea pig	OECD Guideline 406 (Skin Sensitisation)

**Germ cell mutagenicity:**

Hazardous components CAS-No.	Result	Type of study / Route of administration	Metabolic activation / Exposure time	Species	Method
Dichloromethane 75-09-2	positive	bacterial reverse mutation assay (e.g Ames test)	with and without		OECD Guideline 471 (Bacterial Reverse Mutation Assay)
Di-n- octyltinbis(2ethylhexylme rcaptoacetate) 15571-58-1	ambiguous	bacterial reverse mutation assay (e.g Ames test)	with and without		

**Carcinogenicity:**

Hazardous components CAS-No.	Result	Species	Sex	Exposure timeFrequency of treatment	Route of application	Method
Dichloromethane 75-09-2	carcinogenic	rat	male/female	102 w 6 h/d, 5 d/w	inhalation: vapour	OECD Guideline 451 (Carcinogenicity Studies)

**Repeated dose toxicity**

Hazardous components CAS-No.	Result	Route of application	Exposure time / Frequency of treatment	Species	Method
Di-n- octyltinbis(2ethylhexylme rcaptoacetate) 15571-58-1	NOAEL=25 ppm	oral: feed	90 daysdaily	rat	

**SECTION 12: Ecological information****General ecological information:**

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 (EC) No 1272/2008. Relevant available health/ecological information for the substances listed under Section 3 is provided in the following.

Do not empty into drains, soil or bodies of water.

**12.1. Toxicity**

Hazardous components CAS-No.	Value type	Value	Acute Toxicity Study	Exposure time	Species	Method
Dichloromethane 75-09-2	LC50	193 mg/l	Fish	96 h	Pimephales promelas	OECD Guideline 203 (Fish, Acute Toxicity Test)
Dichloromethane 75-09-2	EC50	220 mg/l	Daphnia	48 h	Daphnia magna	OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)
Dichloromethane 75-09-2	EC50	> 660 mg/l	Algae	96 h	Selenastrum capricornutum (new name: Pseudokirchnerella subcapitata)	OECD Guideline 201 (Alga, Growth Inhibition Test)
Dichloromethane 75-09-2	EC10	> 500 mg/l	Bacteria	16 h		
Di-n- octyltinbis(2ethylhexylmercap toacetate) 15571-58-1	LC50	> 93,2 mg/l	Fish	96 h	Brachydanio rerio (new name: Danio rerio)	EU Method C.1 (Acute Toxicity for Fish)
Di-n- octyltinbis(2ethylhexylmercap toacetate) 15571-58-1	EC50	0,17 - 0,18 mg/l	Daphnia	48 h	Daphnia magna	EU Method C.2 (Acute Toxicity for Daphnia)
Di-n- octyltinbis(2ethylhexylmercap toacetate) 15571-58-1	NOEC	0,04 mg/l	Algae	72 h	Scenedesmus subspicatus (new name: Desmodesmus subspicatus)	OECD Guideline 201 (Alga, Growth Inhibition Test)
	EC50	0,12 mg/l	Algae	72 h	Scenedesmus subspicatus (new name: Desmodesmus subspicatus)	OECD Guideline 201 (Alga, Growth Inhibition Test)
Di-n- octyltinbis(2ethylhexylmercap toacetate) 15571-58-1	EC 50	> 100 mg/l	Bacteria	3 h		OECD Guideline 209 (Activated Sludge, Respiration Inhibition Test)

**12.2. Persistence and degradability**

Hazardous components CAS-No.	Result	Route of application	Degradability	Method
Dichloromethane 75-09-2	inherently biodegradable	aerobic	5 - 26 %	OECD Guideline 301 C (Ready Biodegradability: Modified MITI Test (I))
Di-n- octyltinbis(2ethylhexylmercap toacetate) 15571-58-1		aerobic	19 %	OECD Guideline 301 C (Ready Biodegradability: Modified MITI Test (I))

**12.3. Bioaccumulative potential / 12.4. Mobility in soil**

Hazardous components CAS-No.	LogKow	Bioconcentration factor (BCF)	Exposure time	Species	Temperature	Method
Dichloromethane 75-09-2	1,25					
Di-n- octyltinbis(2ethylhexylmercap toacetate) 15571-58-1		99	30 d	Oncorhynchus mykiss		OECD Guideline 305 B (Bioaccumulation: Semi- static Fish Test)
Di-n- octyltinbis(2ethylhexylmercap toacetate) 15571-58-1	15,35					

**12.5. Results of PBT and vPvB assessment**

Hazardous components CAS-No.	PBT/vPvB
Dichloromethane 75-09-2	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very Bioaccumulative (vPvB) criteria.
Di-n-octyltinbis(2ethylhexylmercaptoacetate) 15571-58-1	Not fulfilling PBT (persistent/bioaccumulative/toxic) criteria

**12.6. Other adverse effects**

No data available.



### SECTION 13: Disposal considerations

#### 13.1. Waste treatment methods

Product disposal:

Dispose of waste and residues in accordance with local authority requirements.

Disposal of uncleaned packages:

Use packages for recycling only when totally empty.

Waste code

08 04 09 Waste adhesives and sealants containing organic solvents or other dangerous substances.

### SECTION 14: Transport information

#### 14.1. UN number

ADR	1593
RID	1593
ADN	1593
IMDG	1593
IATA	1593

#### 14.2. UN proper shipping name

ADR	DICHLOROMETHANE (solution)
RID	DICHLOROMETHANE (solution)
ADN	DICHLOROMETHANE (solution)
IMDG	DICHLOROMETHANE (solution)
IATA	Dichloromethane (solution)

#### 14.3. Transport hazard class(es)

ADR	6.1
RID	6.1
ADN	6.1
IMDG	6.1
IATA	6.1

#### 14.4. Packing group

ADR	III
RID	III
ADN	III
IMDG	III
IATA	III

#### 14.5. Environmental hazards

ADR	not applicable
RID	not applicable
ADN	not applicable
IMDG	not applicable
IATA	not applicable

#### 14.6. Special precautions for user

ADR	not applicable
	Tunnelcode: (E)
RID	not applicable
ADN	not applicable
IMDG	not applicable
IATA	not applicable

#### 14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

not applicable

### SECTION 15: Regulatory information

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

VOC content 88,7 %  
(VOCV 814.018 VOC regulation  
CH)

#### 15.2. Chemical safety assessment

A chemical safety assessment has not been carried out.

**National regulations/information (Germany):**

WGK:	2, water-endangering product. (German VwVwS of May 17, 1999 )Classification in conformity with the calculation method
Storage class according to TRGS 510:	6.1D
General remarks (DE):	This product is in scope of the German regulation "Chemikalien Verbot Verordnung"

**SECTION 16: Other information**

**Further information:**

The product is intended for industrial use.

This information is based on our current level of knowledge and relates to the product in the state in which it is delivered. It is intended to describe our products from the point of view of safety requirements and is not intended to guarantee any particular properties.

**Label elements (DPD):**

Xn - Harmful



**Risk phrases:**

R36/37/38 Irritating to eyes, respiratory system and skin.  
R40 Limited evidence of a carcinogenic effect.  
R48/22 Harmful: danger of serious damage to health by prolonged exposure if swallowed.  
R67 Vapours may cause drowsiness and dizziness.

**Safety phrases:**

S21 When using do not smoke.  
S23 Do not breathe vapour.  
S24/25 Avoid contact with skin and eyes.  
S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.  
S36/37 Wear suitable protective clothing and gloves.  
S51 Use only in well-ventilated areas.

**Contains:**

Dichloromethane

**Contains**

Di-n-octyltinbis(2ethylhexylmercaptoacetate). May produce an allergic reaction.