



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

### 1.1 Product identifier

Trade name: **Polyamin Test Reagenz C**

CAS Number:

75-09-2

EC number:

200-838-9

Index number:

602-004-00-3

Registration number 01-2119480404-41

UFI: 99XQ-R4QU-100V-241W

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

No further relevant information available.

### Application of the substance / the preparation:

Reagent for analysis

EuPCS: PC-TEC-19 Reagents and laboratory chemical

### 1.3 Details of the supplier of the safety data sheet

#### Manufacturer/Supplier:

Gebrüder Heyl

Analysentechnik GmbH & Co. KG

Orleansstraße 75 b

D-31135 Hildesheim

Phone +49 (0) 5121 2893390

Fax +49 (0) 5121 2893367

E-mail [info@heyl.de](mailto:info@heyl.de)

Internet [www.heyl.de](http://www.heyl.de)

Further information obtainable from: product safety department

### 1.4 Emergency telephone number:

Giftinformationszentrum Nord

Phone +49 (0) 551 19240

## SECTION 2: Hazards identification

### 2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008



GHS08 health hazard

Carc. 2 H351 Suspected of causing cancer.



GHS07

Skin Irrit. 2 H315 Causes skin irritation.

Eye Irrit. 2 H319 Causes serious eye irritation.

STOT SE 3 H336 May cause drowsiness or dizziness.

### 2.2 Label elements

Labelling according to Regulation (EC) No 1272/2008

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

#### Hazard pictograms



GHS07 GHS08

Signal word **Warning**

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· **Hazard-determining components of labelling:**

dichloromethane

· **Hazard statements**

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H351 Suspected of causing cancer.

H336 May cause drowsiness or dizziness.

· **Precautionary statements**

P201 Obtain special instructions before use.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

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

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P308+P313 IF exposed or concerned: Get medical advice/attention.

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

· **Labelling of packages where the contents do not exceed 125 ml**

· **Hazard pictograms**



GHS07 GHS08

· **Signal word** Warning

· **Hazard-determining components of labelling:**

dichloromethane

· **Hazard statements**

H351 Suspected of causing cancer.

· **Precautionary statements**

P308+P313 IF exposed or concerned: Get medical advice/attention.

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

· **2.3 Other hazards**

· **Results of PBT and vPvB assessment**

· **PBT:** Not applicable.

· **vPvB:** Not applicable.

**SECTION 3: Composition/information on ingredients**

· **3.1 Substances**

· **CAS No. Description**

75-09-2 dichloromethane

· **Identification number(s)**

· **EC number:** 200-838-9

· **Index number:** 602-004-00-3

· **SVHC** Not applicable.

**SECTION 4: First aid measures**

· **4.1 Description of first aid measures**

· **General information:** Immediately remove any clothing soiled by the product.

· **After inhalation:**

Take affected persons into fresh air and keep quiet.

Supply fresh air or oxygen; call for doctor.

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

· **After skin contact:**

*Immediately wash with water and soap and rinse thoroughly.*

*If skin irritation continues, consult a doctor.*

· **After eye contact:**

*Rinse opened eye for several minutes under running water.*

*Seek medical treatment.*

· **After swallowing:**

*A person vomiting while laying on their back should be turned onto their side.*

*Rinse out mouth and then drink plenty of water.*

*Do not induce vomiting; call for medical help immediately.*

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

*Breathing difficulty*

*Dizziness*

*Unconsciousness*

*Coughing*

*Nausea*

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

*If swallowed or in case of vomiting, danger of entering the lungs.*

## SECTION 5: Firefighting measures

· **5.1 Extinguishing media**

· **Suitable extinguishing agents:** *Use fire extinguishing methods suitable to surrounding conditions.*

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

*In case of fire, the following can be released:*

*Hydrogen chloride (HCl)*

*Phosgene gas*

· **5.3 Advice for firefighters**

· **Protective equipment:** *Wear self-contained respiratory protective device.*

## SECTION 6: Accidental release measures

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

*Wear protective equipment. Keep unprotected persons away.*

*Ensure adequate ventilation*

· **6.2 Environmental precautions:** *Do not allow to enter sewers/ surface or ground water.*

· **6.3 Methods and material for containment and cleaning up:**

*Ensure adequate ventilation.*

*Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).*

*Dispose of the material collected according to regulations.*

· **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:**

*Fumes can combine with air to form an explosive mixture.*

*Keep ignition sources away - Do not smoke.*

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- **7.2 Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** Store only in the original receptacle.
- **Information about storage in one common storage facility:** Store away from foodstuffs.
- **Further information about storage conditions:**  
 Store under lock and key and with access restricted to technical experts or their assistants only.  
 Keep container tightly sealed.  
 Protect from heat and direct sunlight.  
 Store receptacle in a well ventilated area.
- **Recommended storage temperature:** 15 - 25 °C
- **7.3 Specific end use(s)** No further relevant information available.

**SECTION 8: Exposure controls/personal protection**

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

**8.1 Control parameters**

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

**CAS: 75-09-2 dichloromethane**

|              |                                                   |
|--------------|---------------------------------------------------|
| <b>IOELV</b> | Short-term value: 706 mg/m <sup>3</sup> , 200 ppm |
|              | Long-term value: 353 mg/m <sup>3</sup> , 100 ppm  |
|              | Skin                                              |

- **Regulatory information** IOELV: (EU) 2017/164
- **Additional information:** The lists valid during the making were used as basis.
- **8.2 Exposure controls**
- **Personal protective equipment:**
- **General protective and hygienic measures:**  
 The usual precautionary measures are to be adhered to when handling chemicals.  
 Keep away from foodstuffs, beverages and feed.  
 Immediately remove all soiled and contaminated clothing  
 Wash hands before breaks and at the end of work.  
 Store protective clothing separately.  
 Avoid contact with the eyes and skin.  
 Do not eat, drink, smoke or sniff while working.
- **Respiratory protection:**  
 Use suitable respiratory protective device when aerosol or mist is formed. Filter: Type AX
- **Protection of hands:**



Protective gloves

- Wear gloves according to EN 374.
- 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
- Check protective gloves prior to each use for their proper condition.
- Preventive skin protection by use of skin-protecting agents is recommended.
- After use of gloves apply skin-cleaning agents and skin cosmetics.
- **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.
- **Penetration time of glove material**  
 The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

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· **As protection from splashes gloves made of the following materials are suitable:**

Fluorocarbon rubber (Viton)  
 Recommended thickness of the material:  $\geq 0.7$  mm  
 Value for the permeation: Level = 4 (> 120 min)

· **Eye protection:**

Safety glasses according to EN 166



Tightly sealed goggles according to EN 166

· **Body protection:** Protective work clothing

## SECTION 9: Physical and chemical properties

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

· **General Information**

· **Appearance:**

Form: Fluid

Colour: Colourless

· **Odour:** Characteristic

· **Odour threshold:** Not determined.

· **pH-value:** Not determined.

· **Change in condition**

Melting point/freezing point: -95.1 °C

Initial boiling point and boiling range: 40 °C

· **Flash point:** Undetermined.

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

· **Ignition temperature:** 605 °C  
 Not determined.

· **Decomposition temperature:** Not determined.

· **Auto-ignition temperature:** Not determined.

· **Explosive properties:** Product is not explosive. However, formation of explosive air/vapour mixtures are possible.

· **Explosion limits:**

Lower: 13 Vol %

Upper: 22 Vol %

· **Vapour pressure at 20 °C:** 453 hPa

· **Density at 20 °C:** 1.33 g/cm<sup>3</sup>

· **Relative density** Not determined.

· **Vapour density** Not determined.

· **Evaporation rate** Not determined.

· **Solubility in / Miscibility with water at 20 °C:**

20 g/l

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

· **Viscosity:**

Dynamic at 20 °C: 0.43 mPas

Kinematic: Not determined.

Organic solvents: 100.0 %

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**· 9.2 Other information**

No further relevant information available.

**SECTION 10: Stability and reactivity**

- **10.1 Reactivity** No further relevant information available.
- **10.2 Chemical stability**
- **Thermal decomposition / conditions to be avoided:**  
 To avoid thermal decomposition do not overheat.
- **10.3 Possibility of hazardous reactions**  
 Reacts with alkaline metals.  
 Reacts with powdered metals.  
 Reacts with earth alkaline metals.  
 Reacts with amines.
- **10.4 Conditions to avoid** No further relevant information available.
- **10.5 Incompatible materials:** No further relevant information available.
- **10.6 Hazardous decomposition products:**  
 Hydrogen chloride (HCl)  
 Phosgen

**SECTION 11: Toxicological information**

- **11.1 Information on toxicological effects**
- **Acute toxicity** Based on available data, the classification criteria are not met.

**· LD/LC50 values relevant for classification:**

**CAS: 75-09-2 dichloromethane**

|            |          |                     |
|------------|----------|---------------------|
| Oral       | LD50     | > 2,000 mg/kg (rat) |
| Dermal     | LD50     | > 2,000 mg/kg (rat) |
| Inhalative | LC50/7 h | 49 mg/l (mouse)     |

- **Primary irritant effect:**
- **Skin corrosion/irritation**  
 Causes skin irritation.
- **Serious eye damage/irritation**  
 Causes serious eye irritation.
- **Respiratory or skin sensitisation** Based on available data, the classification criteria are not met.
- **CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)**
- **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 drowsiness or dizziness.
- **STOT-repeated exposure** Based on available data, the classification criteria are not met.
- **Aspiration hazard** Based on available data, the classification criteria are not met.

**SECTION 12: Ecological information**

- **12.1 Toxicity**
- **Aquatic toxicity:** No further relevant information available.
- **12.2 Persistence and degradability** No further relevant information available.
- **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 2 (German Regulation) (Assessment by list): hazardous for water  
 Do not allow product to reach ground water, water course or sewage system.  
 Danger to drinking water if even small quantities leak into the ground.
- **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 allow product to reach sewage system.  
 Disposal must be made according to official regulations.
- **Uncleaned packaging:**
- **Recommendation:**  
 Packagings that may not be cleansed are to be disposed of in the same manner as the product.  
 Disposal must be made according to official regulations.

### SECTION 14: Transport information

- |                                                                                                                                                                  |                                                                                      |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|
| · <b>14.1 UN-Number</b><br>· <b>ADR, IMDG, IATA</b>                                                                                                              | UN1593                                                                               |
| · <b>14.2 UN proper shipping name</b><br>· <b>ADR</b><br>· <b>IMDG, IATA</b>                                                                                     | 1593 DICHLOROMETHANE<br>DICHLOROMETHANE                                              |
| · <b>14.3 Transport hazard class(es)</b><br>· <b>ADR, IMDG, IATA</b>                                                                                             |                                                                                      |
|                                                                               |                                                                                      |
| · <b>Class</b><br>· <b>Label</b>                                                                                                                                 | 6.1 Toxic substances.<br>6.1                                                         |
| · <b>14.4 Packing group</b><br>· <b>ADR, IMDG, IATA</b>                                                                                                          | III                                                                                  |
| · <b>14.5 Environmental hazards:</b><br>· <b>Marine pollutant:</b>                                                                                               | No                                                                                   |
| · <b>14.6 Special precautions for user</b><br>· <b>Danger code (Kemler):</b><br>· <b>EMS Number:</b><br>· <b>Segregation groups</b><br>· <b>Stowage Category</b> | Warning: Toxic substances.<br>60<br>F-A, S-A<br>Liquid halogenated hydrocarbons<br>A |
| · <b>14.7 Transport in bulk according to Annex II of Marpol and the IBC Code</b>                                                                                 | Not applicable.                                                                      |
| · <b>Transport/Additional information:</b>                                                                                                                       | Void                                                                                 |

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|                                   |                                                                                                                  |
|-----------------------------------|------------------------------------------------------------------------------------------------------------------|
| · <b>ADR</b>                      |                                                                                                                  |
| · <b>Limited quantities (LQ)</b>  | 5L                                                                                                               |
| · <b>Excepted quantities (EQ)</b> | Code: E1<br>Maximum net quantity per inner packaging: 30 ml<br>Maximum net quantity per outer packaging: 1000 ml |
| · <b>Transport category</b>       | 2                                                                                                                |
| · <b>Tunnel restriction code</b>  | E                                                                                                                |
| <hr/>                             |                                                                                                                  |
| · <b>IMDG</b>                     |                                                                                                                  |
| · <b>Limited quantities (LQ)</b>  | 5L                                                                                                               |
| · <b>Excepted quantities (EQ)</b> | Code: E1<br>Maximum net quantity per inner packaging: 30 ml<br>Maximum net quantity per outer packaging: 1000 ml |
| · <b>UN "Model Regulation":</b>   | UN 1593 DICHLOROMETHANE, 6.1, III                                                                                |

**SECTION 15: Regulatory information**

- **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **Directive 2012/18/EU**
- **Named dangerous substances - ANNEX I** Substance is not listed.
- **REGULATION (EC) No 1907/2006 ANNEX XVII** Conditions of restriction: 3, 59
- **National regulations:**
- **Information about limitation of use:**  
*Employment restrictions concerning juveniles must be observed.*  
*Employment restrictions concerning pregnant and lactating women must be observed.*
- **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.*

- **Department issuing SDS:** product safety department.
- **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*  
*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 Harmonised System of Classification and Labelling of Chemicals*  
*EINECS: European Inventory of Existing Commercial Chemical Substances*  
*CAS: Chemical Abstracts Service (division of the American Chemical Society)*  
*LC50: Lethal concentration, 50 percent*  
*LD50: Lethal dose, 50 percent*  
*PBT: Persistent, Bioaccumulative and Toxic*  
*SVHC: Substances of Very High Concern*  
*vPvB: very Persistent and very Bioaccumulative*  
*Skin Irrit. 2: Skin corrosion/irritation – Category 2*  
*Eye Irrit. 2: Serious eye damage/eye irritation – Category 2*  
*Carc. 2: Carcinogenicity – Category 2*  
*STOT SE 3: Specific target organ toxicity (single exposure) – Category 3*
- **\* Data compared to the previous version altered.**