

## **Safety Data Sheet**

according to Regulation (EC) No 1907/2006

# Trichloressigsäure-Lösung 240 g/l zur Analyse

Revision date: 14.02.2025 Product code: 32595 Page 1 of 11

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

### 1.1. Product identifier

Trichloressigsäure-Lösung 240 g/l zur Analyse

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

#### Use of the substance/mixture

Laboratory chemicals

Industrial uses: Uses of substances as such or in preparations at industrial sites

Professional uses: Public domain (administration, education, entertainment, services, craftsmen)

### Uses advised against

Do not use for private purposes (household).

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

Company name: AnalytiChem GmbH

ACD

Street: Stempelstraße 6
Place: D-47167 Duisburg

Telephone: 0203/5194-0 Telefax: 0203/5194-290

E-mail: info@analytichem.de

Contact person: Abteilung Produktsicherheit Telephone: 0203/5194-107/117

E-mail: produktsicherheit@analytichem.de

Internet: www.analytichem.de

Responsible Department: Abteilung Produktsicherheit

**1.4. Emergency telephone** For Hazardous Materials [or Dangerous Goods] Incidents Spill, Leak, Fire,

<u>number:</u> Exposure, or Accident Call CHEMTREC Day or Night Within USA and Canada:

1-800-424-9300 Outside USA and Canada: +1 703-741-5970 (collect calls

accepted)

#### **Further Information**

This product is a mixture. REACH Registration Number see section 3.

### **SECTION 2: Hazards identification**

### 2.1. Classification of the substance or mixture

## Regulation (EC) No 1272/2008

Skin Corr. 1A; H314 Eye Dam. 1; H318 STOT SE 3; H335 Aquatic Chronic 2; H411

Full text of hazard statements: see SECTION 16.

### 2.2. Label elements

# Regulation (EC) No 1272/2008

## Hazard components for labelling

trichloroacetic acid

Signal word: Danger

Pictograms:







#### **Hazard statements**

H314 Causes severe skin burns and eye damage.



## **Safety Data Sheet**

according to Regulation (EC) No 1907/2006

# Trichloressigsäure-Lösung 240 g/l zur Analyse

Revision date: 14.02.2025 Product code: 32595 Page 2 of 11

H335 May cause respiratory irritation.

H411 Toxic to aquatic life with long lasting effects.

**Precautionary statements** 

P260 Do not breathe dust/fume/gas/mist/vapours/spray.

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

protection.

P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with

water or 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/doctor.

2.3. Other hazards

No data available

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

### 3.2. Mixtures

### **Chemical characterization**

Mixtures in aqueous solution

### Relevant ingredients

CAS No	Chemical name	Chemical name		
	EC No	Index No	REACH No	
	Classification (Regulat	Classification (Regulation (EC) No 1272/2008)		
76-03-9	trichloroacetic acid			5 - < 10 %
	200-927-2	607-004-00-7	01-2119485186-30	
	Skin Corr. 1A, STOT SE 3, Aquatic Acute 1, Aquatic Chronic 1; H314 H335 H400 H410			

Full text of H and EUH statements: see section 16.

### Specific Conc. Limits, M-factors and ATE

- P					
CAS No	EC No	Chemical name			
	Specific Conc. Limits, M-factors and ATE				
76-03-9	3-9 200-927-2 trichloroacetic acid		5 - < 10 %		
	oral: LD50 = 4970 mg/kg STOT SE 3; H335: >= 1 - 100				

#### **Further Information**

This product does not contain substances of very high concern according to Regulation (EC) No 1907/2006 (REACH), Article 57 above the respective regulatory concentration limit of = 0.1 % (w/w).

# **SECTION 4: First aid measures**

### 4.1. Description of first aid measures

#### **General information**

First aider: Pay attention to self-protection!

### After inhalation

Provide fresh air.

Call a physician immediately.

### After contact with skin

Wash immediately with: Water

Take off immediately all contaminated clothing and wash it before reuse.

Call a physician immediately.

## After contact with eyes

In case of contact with eyes flush immediately with plenty of flowing water for 10 to 15 minutes holding eyelids



# **Safety Data Sheet**

according to Regulation (EC) No 1907/2006

# Trichloressigsäure-Lösung 240 g/l zur Analyse

Revision date: 14.02.2025 Product code: 32595 Page 3 of 11

apart and consult an ophthalmologist.

Remove contact lenses, if present and easy to do. Continue rinsing.

Protect uninjured eye.

#### After ingestion

Rinse mouth immediately and drink plenty of water.

Call a physician immediately.

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

Causes burns.

Irritant

Cough

Dyspnoea

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

No data available

# **SECTION 5: Firefighting measures**

#### 5.1. Extinguishing media

### Suitable extinguishing media

Co-ordinate fire-fighting measures to the fire surroundings.

### Unsuitable extinguishing media

no restriction

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

Non-combustible liquids

Hazardous combustion products

In case of fire may be liberated:

Hydrogen chloride (HCI)

Phosgene

### 5.3. Advice for firefighters

In case of fire: Wear self-contained breathing apparatus.

In case of fire and/or explosion do not breathe fumes.

Avoid contact with skin, eyes and clothes.

#### **Additional information**

Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

Move undamaged containers from immediate hazard area if it can be done safely.

Use water spray jet to protect personnel and to cool endangered containers.

#### **SECTION 6: Accidental release measures**

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

## For non-emergency personnel

Provide adequate ventilation.

Use personal protection equipment.

Avoid contact with skin, eyes and clothes.

Remove persons to safety.

Emergency procedures

Consult an expert

Do not breathe dust/fume/gas/mist/vapours/spray.

#### For emergency responders

Precautionary statements For emergency responders: Personal protection equipment: see section 8

### 6.2. Environmental precautions

Do not allow to enter into surface water or drains.

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



## **Safety Data Sheet**

according to Regulation (EC) No 1907/2006

# Trichloressigsäure-Lösung 240 g/l zur Analyse

Revision date: 14.02.2025 Product code: 32595 Page 4 of 11

#### For containment

Cover drains.

Prevent spread over a wide area (e.g. by containment or oil barriers).

Collect in closed and suitable containers for disposal.

Absorb with liquid-binding material (sand, diatomaceous earth, acid- or universal binding agents).

#### For cleaning up

Clean contaminated articles and floor according to the environmental legislation.

### Other information

Provide adequate ventilation.

Do not breathe dust/fume/gas/mist/vapours/spray.

Wear breathing apparatus if exposed to vapours/dusts/aerosols.

#### 6.4. Reference to other sections

Safe handling: see section 7

Personal protection equipment: see section 8

Disposal: see section 13

### **SECTION 7: Handling and storage**

### 7.1. Precautions for safe handling

### Advice on safe handling

Read label before use. Handle and open container with care.

When using do not eat, drink, smoke, sniff. Use personal protection equipment.

Provide adequate ventilation. Avoid contact with skin, eyes and clothes.

Do not breathe vapour/aerosol. Use extractor hood (laboratory).

#### Advice on protection against fire and explosion

Usual measures for fire prevention.

### Advice on general occupational hygiene

Keep away from food, drink and animal feedingstuffs. Remove contaminated, saturated clothing immediately. Draw up and observe skin protection programme. Wash hands and face before breaks and after work and take a shower if necessary. When using do not eat or drink. Avoid: aerosol or mist formation Do not breathe vapour/aerosol.

# Further information on handling

Draw up and observe skin protection programme.

Wash hands and face before breaks and after work and take a shower if necessary.

Take off immediately all contaminated clothing and wash it before reuse.

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

## Requirements for storage rooms and vessels

Corrosive to metals.

Unsuitable container/equipment material: Metal

# Hints on joint storage

national regulations

Keep cool. Protect from sunlight.

### Further information on storage conditions

Keep container tightly closed.

### 7.3. Specific end use(s)

Laboratory chemicals

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

### 8.1. Control parameters



# **Safety Data Sheet**

according to Regulation (EC) No 1907/2006

# Trichloressigsäure-Lösung 240 g/l zur Analyse

Revision date: 14.02.2025 Product code: 32595 Page 5 of 11

### Occupational exposure limits

CAS No	Substance	ppm	mg/m³	fib/cm³	Category	Origin
76-03-9	Trichloroacetic acid	0.5	-		TWA (8 h)	

### **DNEL/DMEL values**

CAS No	Substance			
DNEL type		Exposure route	Effect	Value
76-03-9	trichloroacetic acid			
Worker DNEL,	long-term	inhalation	systemic	124,3 mg/m³
Worker DNEL,	acute	inhalation	systemic	124,3 mg/m³
Worker DNEL,	long-term	dermal	systemic	1,41 mg/kg bw/day
Worker DNEL, acute		dermal	systemic	1,41 mg/kg bw/day
Consumer DNI	EL, long-term	inhalation	systemic	61,3 mg/m³
Consumer DN	EL, acute	inhalation	systemic	61,3 mg/m³
Consumer DNEL, long-term		dermal	systemic	0,705 mg/kg bw/day
Consumer DNEL, acute		dermal	systemic	0,705 mg/kg bw/day
Consumer DNEL, long-term		oral	systemic	0,705 mg/kg bw/day
Consumer DNEL, acute		oral	systemic	0,705 mg/kg bw/day

### **PNEC values**

CAS No	Substance	
Environmen	Environmental compartment	
76-03-9	trichloroacetic acid	
Freshwater		0,00017 mg/l
Freshwater	(intermittent releases)	0,0027 mg/l
Marine water		0,000017 mg/l
Freshwater sediment		0,000143 mg/kg
Marine sediment		0,000014 mg/kg
Secondary poisoning		23,5 mg/kg
Micro-organisms in sewage treatment plants (STP)		100 mg/l
Soil 0,		0,0046 mg/kg

# 8.2. Exposure controls

# Appropriate engineering controls

Technical measures and the application of suitable work processes have priority over personal protection equipment.

If handled uncovered, arrangements with local exhaust ventilation have to be used.

### Individual protection measures, such as personal protective equipment

### Eye/face protection

goggles

Wear eye/face protection.

# **Hand protection**

Protective gloves are recommended Company KCL GmbH, D-36124 Eichenzell, email: vertrieb@kcl.de With



# **Safety Data Sheet**

according to Regulation (EC) No 1907/2006

# Trichloressigsäure-Lösung 240 g/l zur Analyse

Revision date: 14.02.2025 Product code: 32595 Page 6 of 11

specification (test according to EN374):

By long-term hand contact

Recommended glove articles: KCL 720 Camapren®

Recommended material: CR (polychloroprene, chloroprene rubber) 0,65 mm

Wearing time with permanent contact: > 480 min

By short-term hand contact

Recommended glove articles: KCL 720 Camapren®

Recommended material: CR (polychloroprene, chloroprene rubber) 0,65 mm

Wearing time with occasional contact (splashes): > 480 min

The breakthrough times stated above were determined by KCL in laboratory tests acc. to EN374 with samples of the recommended glove types. This recommendation applies only to the product stated in the safety data sheet<(>,<)> supplied by us and for the designated use. When dissolving in or mixing with other substances and under conditions deviating from those stated in EN374 please contact the supplier of CE-approved gloves (e.g. KCL GmbH, D-36124 Eichenzell, Internet: www.kcl.de).

### Skin protection

Wear suitable protective clothing. Take off immediately all contaminated clothing.

Wash hands before breaks and after work.

The choice of body protection depends on the concentration and quantity of hazardous substances. The chemical resistance of protective agents must be clarified with their suppliers.

#### Respiratory protection

Wear breathing apparatus if exposed to vapours/dusts/aerosols.

The entrepeneur has to ensure that maintenance, cleaning and testing of respiratory protective devices are carried out according to the instructions of the producer. These measures have to be properly documented.

### **Environmental exposure controls**

Do not allow to enter into surface water or drains.

# SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

Physical state: Liquid
Colour: clear
Odour: stinging

Melting point/freezing point:

Boiling point or initial boiling point and

No data available

No data available

boiling range:

No data available Flammability: Lower explosion limits: No data available No data available Upper explosion limits: Flash point: No data available Auto-ignition temperature: No data available Decomposition temperature: No data available pH-Value: acidic No data available Viscosity / kinematic: Water solubility: completely miscible

Solubility in other solvents

No data available

Partition coefficient n-octanol/water:

Vapour pressure:

No data available

No data available

Vapour pressure:

No data available

Density:

No data available

No data available



# **Safety Data Sheet**

according to Regulation (EC) No 1907/2006

# Trichloressigsäure-Lösung 240 g/l zur Analyse

Revision date: 14.02.2025 Product code: 32595 Page 7 of 11

Bulk density: No data available Relative vapour density: No data available

### 9.2. Other information

### Information with regard to physical hazard classes

Explosive properties

No data available

Sustaining combustion:

No data available

Self-ignition temperature

Solid: No data available
Gas: No data available

Oxidizing properties

Oxidizing

### Other safety characteristics

Evaporation rate:

Solvent separation test:

No data available
Solvent content:

No data available
Solid content:

No data available
Sublimation point:

No data available
Softening point:

No data available
Pour point:

No data available

No data available:

Viscosity / dynamic:

Flow time:

No data available

No data available

Further Information Corrosive to metals.

### **SECTION 10: Stability and reactivity**

### 10.1. Reactivity

Corrosive to metals.

#### 10.2. Chemical stability

The product is stable under storage at normal ambient temperatures.

### 10.3. Possibility of hazardous reactions

Alkali (lye) Oxidising agent

### 10.4. Conditions to avoid

Heat

### 10.5. Incompatible materials

Metal

## 10.6. Hazardous decomposition products

In case of fire may be liberated: SECTION 5: Firefighting measures

### **Further information**

No data available

# **SECTION 11: Toxicological information**

### 11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

# **Acute toxicity**

Based on available data, the classification criteria are not met.

If swallowed danger of perforation of the esophagus and the stomach (strong corrosive effects).



# **Safety Data Sheet**

according to Regulation (EC) No 1907/2006

# Trichloressigsäure-Lösung 240 g/l zur Analyse

Revision date: 14.02.2025 Product code: 32595 Page 8 of 11

#### **ATEmix** calculated

ATE (oral) > 2000 mg/kg; ATE (dermal) > 2000 mg/kg; ATE (inhalation vapour) > 20 mg/l; ATE (inhalation dust/mist) > 5 mg/l

CAS No	Chemical name				
	Exposure route	Dose	Species	Source	Method
76-03-9	trichloroacetic acid				
	oral	LD50 4970 mg/kg	Mouse	` '	The acute toxicity was determined for tr

#### Irritation and corrosivity

Skin corrosion/irritation: Causes severe skin burns and eye damage. Serious eye damage/eye irritation: Causes serious eye damage.

#### Sensitising effects

Based on available data, the classification criteria are not met.

### Carcinogenic/mutagenic/toxic effects for reproduction

Germ cell mutagenicity: Based on available data, the classification criteria are not met.

Carcinogenicity: Based on available data, the classification criteria are not met.

Reproductive toxicity: Based on available data, the classification criteria are not met.

#### STOT-single exposure

May cause respiratory irritation. (trichloroacetic acid)

#### 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.

#### Specific effects in experiment on an animal

There are no data available on the preparation/mixture itself.

### Additional information on tests

There are no data available on the preparation/mixture itself.

### **Practical experience**

There are no data available on the preparation/mixture itself.

### 11.2. Information on other hazards

#### Other information

There are no data available on the preparation/mixture itself.

#### **Further information**

There are no data available on the preparation/mixture itself.

### **SECTION 12: Ecological information**

### 12.1. Toxicity

Toxic to aquatic life with long lasting effects.

CAS No	Chemical name				
	Aquatic toxicity	Dose	[h]   [d] Species	Source	Method
76-03-9	trichloroacetic acid				
	Acute algae toxicity	ErC50 > 100 mg/l	,	J 37	OECD Guideline 201

#### 12.2. Persistence and degradability

There are no data available on the mixture itself.

#### 12.3. Bioaccumulative potential



## **Safety Data Sheet**

according to Regulation (EC) No 1907/2006

# Trichloressigsäure-Lösung 240 g/l zur Analyse

Revision date: 14.02.2025 Product code: 32595 Page 9 of 11

There are no data available on the mixture itself.

#### Partition coefficient n-octanol/water

CAS No	Chemical name	Log Pow
76-03-9	trichloroacetic acid	1,33

#### **BCF**

CAS No	Chemical name	BCF	Species	Source
76-03-9	trichloroacetic acid	3,162	not applicable	Calculation (2008)

#### 12.4. Mobility in soil

There are no data available on the mixture itself.

### 12.5. Results of PBT and vPvB assessment

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.

#### 12.6. Endocrine disrupting properties

This product does not contain a substance that has endocrine disrupting properties with respect to non-target organisms as no components meets the criteria.

## 12.7. Other adverse effects

Discharge into the environment must be avoided.

#### **Further information**

Do not allow to enter into surface water or drains.

### **SECTION 13: Disposal considerations**

### 13.1. Waste treatment methods

### **Disposal recommendations**

Waste disposal according to directive 2008/98/EC, covering waste and dangerous waste.

Send to a physico-chemical treatment facility under observation of official regulations.

Do not empty into drains.

### Contaminated packaging

Handle contaminated packages in the same way as the substance itself.

The allocation of waste identity numbers/waste descriptions must be carried out according to the EEC, specific to the industry and process.

### **SECTION 14: Transport information**

# Land transport (ADR/RID)

14.1. UN number or ID number:	UN 2564
-------------------------------	---------

14.2. UN proper shipping name: TRICHLOROACETIC ACID SOLUTION

14.3. Transport hazard class(es): 14.4. Packing group: Ш Hazard label: 8 Classification code: C3 Limited quantity: 1 I F2 Excepted quantity: Transport category: 2 Hazard No: 80 Ε Tunnel restriction code:

### Inland waterways transport (ADN)

14.1. UN number or ID number: UN 2564

14.2. UN proper shipping name: TRICHLOROACETIC ACID SOLUTION

14.3. Transport hazard class(es):814.4. Packing group:IIHazard label:8



## **Safety Data Sheet**

according to Regulation (EC) No 1907/2006

Trichloressigsäure-Lösung 240 g/l zur Analyse

Revision date: 14.02.2025 Product code: 32595 Page 10 of 11

Classification code: C3
Limited quantity: 1 L
Excepted quantity: E2

Marine transport (IMDG)

14.1. UN number or ID number: UN 2564

14.2. UN proper shipping name: TRICHLOROACETIC ACID SOLUTION

14.3. Transport hazard class(es):814.4. Packing group:IIHazard label:8Special Provisions:-Limited quantity:1 LExcepted quantity:E2EmS:F-A, S-B

Air transport (ICAO-TI/IATA-DGR)

14.1. UN number or ID number: UN 2564

14.2. UN proper shipping name: TRICHLOROACETIC ACID SOLUTION

14.3. Transport hazard class(es):814.4. Packing group:IIHazard label:8Special Provisions:A3 A803Limited quantity Passenger:0.5 LPassenger LQ:Y840Excepted quantity:E2

IATA-packing instructions - Passenger:851IATA-max. quantity - Passenger:1 LIATA-packing instructions - Cargo:855IATA-max. quantity - Cargo:30 L

14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: Yes

Danger releasing substance: trichloroacetic acid

### **SECTION 15: Regulatory information**

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

### **EU** regulatory information

Restrictions on use (REACH, annex XVII):

Entry 3, Entry 75

### National regulatory information

Employment restrictions: Observe restrictions to employment for juveniles according to the 'juvenile

work protection guideline' (94/33/EC). Observe employment restrictions under the Maternity Protection Directive (92/85/EEC) for expectant or

nursing mothers.

Water hazard class (D): 2 - obviously hazardous to water

### **SECTION 16: Other information**

# Changes

This data sheet contains changes from the previous version in section(s): 12.



# **Safety Data Sheet**

according to Regulation (EC) No 1907/2006

# Trichloressigsäure-Lösung 240 g/l zur Analyse

Revision date: 14.02.2025 Product code: 32595 Page 11 of 11

# Abbreviations and acronyms

Skin Corr: Skin corrosion Eye Dam: Eye damage

STOT SE: Specific target organ toxicity - single exposure

Aquatic Acute: Acute aquatic hazard Aquatic Chronic: Chronic aquatic hazard

#### Classification for mixtures and used evaluation method according to Regulation (EC) No 1272/2008 [CLP]

Gladdinoation for mixtared and ad	oldcomodition for mixtures and doca evaluation method decorating to regulation (ES) No 12122200 [CE1]				
Classification	Classification procedure				
Skin Corr. 1A; H314	Calculation method				
Eye Dam. 1; H318	Calculation method				
STOT SE 3; H335	Calculation method				
Aquatic Chronic 2; H411	Calculation method				

#### Relevant H and EUH statements (number and full text)

H314 Causes severe skin burns and eye damage.
H318 Causes serious eye damage.

H335 May cause respiratory irritation.
H400 Very toxic to aquatic life.

H410 Very toxic to aquatic life with long lasting effects.H411 Toxic to aquatic life with long lasting effects.

### **Further Information**

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material. The information is based on the present level of our knowledge. It does not, however, give assurance of product properties and establishes no contract legal rights.

The receiver of our product is singularly responsible for adhering to existing laws and regulations.

Provide appropriate information, instructions and training to users

(The data for the relevant ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)