

**Trichloroacetic acid 40%**

Revision date: 15.12.2017

Product code: T9

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

Trichloroacetic acid 40%

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

Use as laboratory reagent

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

Company name: Waldeck GmbH & Co KG  
Street: Havixbecker Str. 62  
Place: D-48161 Münster  
Post-office box: 410180  
D-48065 Münster  
Telephone: +49(0)180/2247662      Telefax: +49(0)180/1247662  
Responsible Department: Labor  
Mo. – Do.: 08.00 – 17.00 Uhr, Fr.: 08.00 – 15.00 Uhr  
+49(0)180/2247662

**1.4. Emergency telephone number:****SECTION 2: Hazards identification****2.1. Classification of the substance or mixture****Regulation (EC) No. 1272/2008**

Hazard categories:

Skin corrosion/irritation: Skin Corr. 1

Serious eye damage/eye irritation: Eye Dam. 1

Specific target organ toxicity - single exposure: STOT SE 3

Hazardous to the aquatic environment: Aquatic Acute 1

Hazardous to the aquatic environment: Aquatic Chronic 1

Hazard Statements:

Causes severe skin burns and eye damage.

Causes serious eye damage.

May cause respiratory irritation.

Very toxic to aquatic life.

Very toxic to aquatic life with long lasting effects.

**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.

H335 May cause respiratory irritation.

H410 Very toxic to aquatic life with long lasting effects.

**Precautionary statements**

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

according to Regulation (EC) No 1907/2006

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P273	Avoid release to the environment.
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 or shower.
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P310	Immediately call a POISON CENTER/doctor.
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.
P403+P233	Store in a well-ventilated place. Keep container tightly closed.
P405	Store locked up.

**2.3. Other hazards**

No information available.

**SECTION 3: Composition/information on ingredients****3.2. Mixtures****Hazardous components**

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	Classification according to Regulation (EC) No. 1272/2008 [CLP]			
76-03-9	trichloroacetic acid			40 - < 45 %
	200-927-2	607-004-00-7		
	Skin Corr. 1A, Aquatic Acute 1, Aquatic Chronic 1; H314 H400 H410			

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

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

In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible). First aider: Pay attention to self-protection! Remove affected person from the danger area and lay down.

**After inhalation**

Provide fresh air. Medical treatment necessary.

**After contact with skin**

After contact with skin, wash immediately with polyethylene glycol, followed by plenty of water. Take off immediately all contaminated clothing and wash it before reuse. If skin irritation occurs: Get medical advice/attention.

**After contact with eyes**

In case of contact with eyes flush immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart and consult an ophthalmologist.

**After ingestion**

Rinse mouth immediately and drink plenty of water. Do NOT induce vomiting. Adverse human health effects and symptoms: Gastric perforation. Call a physician immediately. Do not allow a neutralisation agent to be drunk.

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

No information available.

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

Treat symptomatically.

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**SECTION 5: Firefighting measures****5.1. Extinguishing media****Suitable extinguishing media**

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

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

In case of fire may be liberated: Hazardous combustion products

**5.3. Advice for firefighters**

Wear a self-contained breathing apparatus and chemical protective clothing. Full protection suit.

**Additional information**

Suppress gases/vapours/mists with water spray jet. Collect contaminated fire extinguishing water separately.

Do not allow entering drains or surface water.

**SECTION 6: Accidental release measures****6.1. Personal precautions, protective equipment and emergency procedures**

Do not breathe gas/fumes/vapour/spray. Avoid contact with skin, eyes and clothes. Use personal protection equipment.

**6.2. Environmental precautions**

Do not allow to enter into surface water or drains.

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

Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding agents). Treat the recovered material as prescribed in the section on waste disposal.

**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**

If handled uncovered, arrangements with local exhaust ventilation have to be used. Do not breathe gas/fumes/vapour/spray.

**Advice on protection against fire and explosion**

No special fire protection measures are necessary.

**7.2. Conditions for safe storage, including any incompatibilities****Requirements for storage rooms and vessels**

Keep container tightly closed. Keep locked up. Store in a place accessible by authorized persons only. Provide adequate ventilation as well as local exhaustion at critical locations.

**Advice on storage compatibility**

No special measures are necessary.

**Further information on storage conditions**

storage temperature: at room temperature

**7.3. Specific end use(s)**

Use as laboratory reagent

**SECTION 8: Exposure controls/personal protection****8.1. Control parameters**

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**8.2. Exposure controls****Appropriate engineering controls**

If handled uncovered, arrangements with local exhaust ventilation have to be used. Do not breathe gas/fumes/vapour/spray.

**Protective and hygiene measures**

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.

**Eye/face protection**

Suitable eye protection: goggles.

**Hand protection**

When handling with chemical substances, protective gloves must be worn with the CE-label including the four control digits. The quality of the protective gloves resistant to chemicals must be chosen as a function of the specific working place concentration and quantity of hazardous substances. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.

**Skin protection**

Wear suitable protective clothing.

**Respiratory protection**

In case of inadequate ventilation wear respiratory protection.

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

Physical state:	liquid
Colour:	colourless
Odour:	characteristic
pH-Value:	<1

**Changes in the physical state**

Melting point:	not determined
Initial boiling point and boiling range:	not determined
Flash point:	not determined

**Flammability**

Solid:	not applicable
Gas:	not applicable

Lower explosion limits:	not determined
Upper explosion limits:	not determined

**Auto-ignition temperature**

Solid:	not applicable
Gas:	not applicable

Decomposition temperature:	not determined
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**Oxidizing properties**

Not oxidizing.

Vapour pressure:	not determined
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Density: not determined  
Water solubility: easily soluble  
**Solubility in other solvents**  
not determined  
Partition coefficient: not determined  
Vapour density: not determined  
Evaporation rate: not determined

**9.2. Other information**

Solid content: not determined

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

Possibility of hazardous reactions.

**10.2. Chemical stability**

The product is stable under storage at normal ambient temperatures.

**10.3. Possibility of hazardous reactions**

Exothermic reaction with: Base, Peroxide, Oxidising agent.

**10.4. Conditions to avoid**

none

**10.5. Incompatible materials**

Keep away from: Base, Oxidising agent, Peroxide.

**10.6. Hazardous decomposition products**

No known hazardous decomposition products.

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

CAS No	Chemical name				
	Exposure route	Dose	Species	Source	Method
76-03-9	trichloroacetic acid				
	oral	LD50 mg/kg	3320	Rat	

**Additional information on tests**

This mixture is classified as hazardous according to regulation (EC) No. 1272/2008 [CLP].

**SECTION 12: Ecological information****12.1. Toxicity**

Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

**12.2. Persistence and degradability**

The product has not been tested.

**12.3. Bioaccumulative potential**

The product has not been tested.

**12.4. Mobility in soil**

The product has not been tested.

according to Regulation (EC) No 1907/2006

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

The product has not been tested.

**12.6. Other adverse effects**

No information available.

**Further information**

Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil.

**SECTION 13: Disposal considerations****13.1. Waste treatment methods****Advice on disposal**

Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil. Dispose of waste according to applicable legislation.

**Contaminated packaging**

Non-contaminated packages may be recycled. Handle contaminated packages in the same way as the substance itself.

**SECTION 14: Transport information****Land transport (ADR/RID)**

<b><u>14.1. UN number:</u></b>	UN 2564
<b><u>14.2. UN proper shipping name:</u></b>	TRICHLOROACETIC ACID SOLUTION
<b><u>14.3. Transport hazard class(es):</u></b>	8
<b><u>14.4. Packing group:</u></b>	II
Hazard label:	8



Classification code:	C3
Limited quantity:	1 L
Excepted quantity:	E2
Transport category:	2
Hazard No:	80
Tunnel restriction code:	E

**Inland waterways transport (ADN)**

<b><u>14.1. UN number:</u></b>	UN 2564
<b><u>14.2. UN proper shipping name:</u></b>	TRICHLOROACETIC ACID SOLUTION
<b><u>14.3. Transport hazard class(es):</u></b>	8
<b><u>14.4. Packing group:</u></b>	II
Hazard label:	8



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

**Marine transport (IMDG)**

<b><u>14.1. UN number:</u></b>	UN 2564
<b><u>14.2. UN proper shipping name:</u></b>	TRICHLOROACETIC ACID SOLUTION

according to Regulation (EC) No 1907/2006

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**14.3. Transport hazard class(es):**

8

**14.4. Packing group:**

II

Hazard label:

8



Special Provisions:

-

Limited quantity:

1 L

Excepted quantity:

E2

EmS:

F-A, S-B

**Air transport (ICAO-TI/IATA-DGR)****14.1. UN number:**

UN 2564

**14.2. UN proper shipping name:**

TRICHLOROACETIC ACID SOLUTION

**14.3. Transport hazard class(es):**

8

**14.4. Packing group:**

II

Hazard label:

8



Special Provisions:

A3 A803

Limited quantity Passenger:

0.5 L

Passenger LQ:

Y840

Excepted quantity:

E2

IATA-packing instructions - Passenger:

851

IATA-max. quantity - Passenger:

1 L

IATA-packing instructions - Cargo:

855

IATA-max. quantity - Cargo:

30 L

**14.6. Special precautions for user**

No information available.

**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****EU regulatory information**

2010/75/EU (VOC):

40 %

2004/42/EC (VOC):

40 %

Information according to 2012/18/EU  
(SEVESO III):

E1 Hazardous to the Aquatic Environment

**Additional information**

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

**National regulatory information**

Employment restrictions:

Observe restrictions to employment for juvenils according to the 'juvenile work protection guideline' (94/33/EC).

Water contaminating class (D):

3 - highly water contaminating

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**15.2. Chemical safety assessment**

Chemical safety assessments for substances in this mixture were not carried out.

**SECTION 16: Other information****Abbreviations and acronyms**

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 Harmonized 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  
LC50: Lethal concentration, 50%  
LD50: Lethal dose, 50%

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

Classification	Classification procedure
Skin Corr. 1; H314	On basis of test data
Eye Dam. 1; H318	Calculation method
STOT SE 3; H335	Calculation method
Aquatic Acute 1; H400	Calculation method
Aquatic Chronic 1; H410	Calculation method

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

H314 Causes severe skin burns and eye damage.  
H335 May cause respiratory irritation.  
H400 Very toxic to aquatic life.  
H410 Very toxic to aquatic life with long lasting effects.

**Further Information**

The information is based on present level of our knowledge. It does not, however, give assurances of product properties and establishes no contract legal rights. The receiver of our product is singularly responsible for adhering to existing laws and regulations.

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