

Safety data sheet
according to 1907/2006/EC, Article 31 Commission
regulation (EU) 2020/878

Printing date 15.05.2023

Version number 10.0 (replaces version 9.0)

Revision: 15.05.2023

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

1.1 Product identifier

• **Trade name:** Trichloroacetic acid, for analysis, ExpertQ®, ACS

• **Article number:** AC3132

• **CAS Number:**

76-03-9

• **EC number:**

200-927-2

• **Index number:**

607-004-00-7

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:** Laboratory reagent

1.3 Details of the supplier of the safety data sheet

• **Manufacturer/Supplier:**

Scharlab, S.L.

C/Gato Pérez, 33. Pol.Ind. Mas d'en Cisa

08181 Sentmenat (Barcelona) SPAIN

Tel: (+34) 93 745 64 00 - FAX: (+34) 93 715 27 65

email: scharlab@scharlab.com

Internet Web Site: www.scharlab.com

• **Regional representation:**

Scharlab, S.L.

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• **Further information obtainable from:** Technical Department

1.4 Emergency telephone number:

Please contact the regional Scharlab distributor/dealer in your country

During normal opening times: Scharlab, S.L. (+34) 93 715 18 11

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

• **Classification according to Regulation (EC) No 1272/2008**



corrosion

Skin Corr. 1A

H314 Causes severe skin burns and eye damage.



environment

Aquatic Acute 1 H400 Very toxic to aquatic life.

Aquatic Chronic 1 H410 Very toxic to aquatic life with long lasting effects.

2.2 Label elements

• **Labelling according to Regulation (EC) No 1272/2008**

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

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Hazard pictograms

GHS05 GHS09

Signal word Danger**Hazard statements**

H314 Causes severe skin burns and eye damage.

H410 Very toxic to aquatic life with long lasting effects.

Precautionary statements

P260 Do not breathe dusts or mists.

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.

P405 Store locked up.

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**

76-03-9 trichloroacetic acid

Identification number(s)**EC number:** 200-927-2**Index number:** 607-004-00-7**SECTION 4: First aid measures****4.1 Description of first aid measures****General information:**

Immediately remove any clothing soiled by the product.

Personal protection for the First Aider.

Seek medical treatment.

After inhalation:

Take affected persons into fresh air and keep quiet.

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

After skin contact:

Immediately rinse with water.

Immediate medical treatment necessary. Failure to treat burns can prevent wounds from healing.

After eye contact:

Rinse opened eye for several minutes under running water. Then consult a doctor.

Seek medical treatment.

After swallowing:

Drink plenty of water and provide fresh air. Call for a doctor immediately.

Do not induce vomiting; call for medical help immediately.

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- **4.2 Most important symptoms and effects, both acute and delayed**
No further relevant information available.
- **4.3 Indication of any immediate medical attention and special treatment needed**
Treat symptomatically.

SECTION 5: Firefighting measures

- **5.1 Extinguishing media**
- **Suitable extinguishing agents:**
CO₂, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **5.2 Special hazards arising from the substance or mixture**
Fire can cause the evolution of:
Hydrogen chloride (HCl)
Phosgene gas
- **5.3 Advice for firefighters**
- **Protective equipment:**
Respiratory protection and full chemical protective clothing must be provided for extinguishing work.
Cool exposed containers by water spray or water mist.
- **Additional information**
Collect contaminated fire fighting water separately. It must not enter the sewage system.
Dispose of fire debris and contaminated fire fighting water in accordance with official regulations.

SECTION 6: Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures**
Wear protective equipment. Keep unprotected persons away.
- **6.2 Environmental precautions:**
Do not allow to penetrate the ground/soil.
Inform respective authorities in case of seepage into water course or sewage system.
Do not allow to enter sewers/ surface or ground water.
- **6.3 Methods and material for containment and cleaning up:**
Send for recovery or disposal in suitable receptacles.
Use neutralising agent.
Dispose contaminated material as waste according to section 13.
Ensure adequate ventilation.
- **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**
Store in cool, dry place in tightly closed receptacles.
Thorough dedusting.
Do not eat, drink or smoke during use.
Wash hands after handling.
- **Information about fire - and explosion protection:** No special measures required.
- **7.2 Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:**
Store in a cool, dry and well-ventilated place.

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- Store only in unopened original receptacles.
- **Information about storage in one common storage facility:** Store away from foodstuffs.
- **Further information about storage conditions:**
 - Keep container tightly sealed.
 - See product label for storage temperature.
- **7.3 Specific end use(s)** No further relevant information available.

SECTION 8: Exposure controls/personal protection

- **8.1 Control parameters**
- **Ingredients with limit values that require monitoring at the workplace:** Not required.
- **DNELs**
 - DNEL worker, cronic. Systematic effects: Dermic - 1.4 mg/kg body weight
 - DNEL worker, cronic. Local and systematic effects: Inhalative - 124 mg/m3
 - DNEL consumer, prolonged. Systematic effects: Oral - 0.7 mg/kg body weight
 - DNEL consumer, prolonged. Systematic effects: Dermic - 0.7 mg/kg body weight
 - DNEL consumer, prolonged. Systematic effects: Inhalative - 61 mg/m3
- **PNECs**
 - PNEC (Fresh water): 0.0002 mg/L
 - PNEC (Sea water): 0.00002 mg/L
 - PNEC (Freshwater sediments): 0.00014 mg/kg
 - PNEC (Seawater sediments): 0.000014 mg/kg
 - PNEC (Soil): 0.0046 mg/kg
 - PNEC (Residual water depuration system): 100 mg/l
- **Additional information:** The lists valid during the making were used as basis.
- **8.2 Exposure controls**
- **Appropriate engineering controls** No further data; see section 7.
- **Individual protection measures, such as personal protective equipment**
- **General protective and hygienic measures:**
 - Keep away from foodstuffs, beverages and feed.
 - Immediately remove all soiled and contaminated clothing
 - Wash hands before breaks and at the end of work.
 - Avoid contact with the eyes and skin.
- **Respiratory protection:** Not required.
- **Hand protection**



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

- **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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· Eye/face protection

Tightly sealed goggles

SECTION 9: Physical and chemical properties

· 9.1 Information on basic physical and chemical properties**· General Information****· Physical state**

Solid

· Colour:

White

· Odour:

Pungent

· Odour threshold:

Not determined.

· Melting point/freezing point:

56 °C

· Boiling point or initial boiling point and boiling range

197 °C

· Flammability

Product is not flammable.

· Lower and upper explosion limit**· Lower:**

Not determined.

· Upper:

Not determined.

· Flash point:

Not applicable.

· Auto-ignition temperature:

110 °C

· Decomposition temperature:

Not determined.

· pH

<1

· Viscosity:**· Kinematic viscosity**

Not applicable.

· Dynamic:

Not applicable.

· Solubility**· water at 20 °C:**

1300 g/l

· Partition coefficient n-octanol/water (log value)

Not determined.

· Vapour pressure at 25 °C:

0.08 hPa

· Vapour pressure at 50 °C:

1.2 hPa

· Density and/or relative density**· Density at 20 °C:**1.62 g/cm³**· Relative density**

Not determined.

· Vapour density

Not applicable.

· 9.2 Other information**· Appearance:****· Form:**

Flakes

· Important information on protection of health and environment, and on safety.**· Ignition temperature:**

Not determined.

· Explosive properties:

Product does not present an explosion hazard.

· Molecular weight

163.39 g/mol

· Change in condition**· Evaporation rate**

Not applicable.

· Information with regard to physical hazard classes**· Explosives**

Void

· Flammable gases

Void

· Aerosols

Void

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• Oxidising gases	Void
• Gases under pressure	Void
• Flammable liquids	Void
• Flammable solids	Void
• Self-reactive substances and mixtures	Void
• Pyrophoric liquids	Void
• Pyrophoric solids	Void
• Self-heating substances and mixtures	Void
• Substances and mixtures, which emit flammable gases in contact with water	Void
• Oxidising liquids	Void
• Oxidising solids	Void
• Organic peroxides	Void
• Corrosive to metals	Void
• Desensitised explosives	Void

SECTION 10: Stability and reactivity

- **10.1 Reactivity** Stable under normal conditions. No decomposition if used according to regulations.
- **10.2 Chemical stability**
- **Thermal decomposition / conditions to be avoided:** Stable until boiling point.
- **10.3 Possibility of hazardous reactions** Reacts with alkalis (bases).
- **10.4 Conditions to avoid**
Heat
Thermal decomposition: >200 °C
Gas generation during decomposition may cause pressure in closed systems.
- **10.5 Incompatible materials:** Miscellaneous metals
- **10.6 Hazardous decomposition products:**
Phosgen
Hydrogen chloride (HCl)

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.
- **LD/LC50 values relevant for classification:**
Oral LD50 3,320 mg/kg (rat)
- **Skin corrosion/irritation** Causes severe skin burns and eye damage.
- **11.2 Information on other hazards**
- **Endocrine disrupting properties** Substance is not listed.

SECTION 12: Ecological information

- **12.1 Toxicity**
- **Aquatic toxicity:**
Toxicity to fish
CL50 - Oncorhynchus kisutch (coho salmon) - >277 mg/L - (48h)
Toxicity to daphnia and other aquatic invertebrates
EC50 - Daphnia magna (large sea flea) - 110 mg/L - 24 h
Toxicity to algae
EC50 - Chlorella vulgaris (fresh water algae) - 0.3 mg/l - 14 dias
- **12.2 Persistence and degradability** Moderately /partly biodegradable

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- **12.3 Bioaccumulative potential**
Bioconcentration Factor (BCF): 0.4 - 1.7.
May be accumulated in organism
- **12.4 Mobility in soil** No further relevant information available.
- **12.5 Results of PBT and vPvB assessment**
 - **PBT:** Not applicable.
 - **vPvB:** Not applicable.
- **12.6 Endocrine disrupting properties**
The product does not contain substances with endocrine disrupting properties.
- **12.7 Other adverse effects**
- **Remark:** Very toxic for fish
- **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.
Must not reach sewage water or drainage ditch undiluted or unneutralised.
Danger to drinking water if even small quantities leak into the ground.
Also poisonous for fish and plankton in water bodies.
Very toxic for aquatic organisms
Rinse off of bigger amounts into drains or the aquatic environment may lead to decreased pH-values. A low pH-value harms aquatic organisms. In the dilution of the use-level the pH-value is considerably increased, so that after the use of the product the aqueous waste, emptied into drains, is only low water-dangerous.

SECTION 13: Disposal considerations

- **13.1 Waste treatment methods**
- **Recommendation**
Must be specially treated adhering to official regulations.
Must not be disposed together with household garbage. Do not allow product to reach sewage system.
- **Uncleaned packaging:**
- **Recommendation:**
Empty contaminated packagings thoroughly. They may be recycled after thorough and proper cleaning.
Packagings that may not be cleansed are to be disposed of in the same manner as the product.
- **Recommended cleansing agents:** Water, if necessary together with cleansing agents.

SECTION 14: Transport information

- | | |
|---------------------------------------|--|
| • 14.1 UN number or ID number | UN1839 |
| • ADR, IMDG, IATA | |
| • 14.2 UN proper shipping name | 1839 TRICHLOROACETIC ACID, ENVIRONMENTALLY HAZARDOUS |
| • ADR | TRICHLOROACETIC ACID, MARINE POLLUTANT |
| • IMDG | TRICHLOROACETIC ACID |
| • IATA | |

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14.3 Transport hazard class(es)

ADR, IMDG



Class

8 Corrosive substances.

Label

8

IATA



Class

8 Corrosive substances.

Label

8

14.4 Packing group

ADR, IMDG, IATA

14.5 Environmental hazards:

Marine pollutant:

Yes

Special marking (ADR):

Symbol (fish and tree)

14.6 Special precautions for user

Symbol (fish and tree)

Hazard identification number (Kemler code):

Warning: Corrosive substances.

EMS Number:

80

Segregation groups

F-A, S-B

Stowage Category

(SGG1) Acids

Segregation Code

A

SG36 Stow "separated from" SGG18-alkalis.

SG49 Stow "separated from" SGG6-cyanides

14.7 Maritime transport in bulk according to IMO instruments

Not applicable.

Transport/Additional information:

ADR

Limited quantities (LQ)

1 kg

Transport category

2

Tunnel restriction code

E

UN "Model Regulation":

UN 1839 TRICHLOROACETIC ACID, 8, II, ENVIRONMENTALLY HAZARDOUS

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 -

Seveso category E1 Hazardous to the Aquatic Environment

Qualifying quantity (tonnes) for the application of lower-tier requirements 100 t

Qualifying quantity (tonnes) for the application of upper-tier requirements 200 t

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- **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

- **Contact:** msds@scharlab.com

- **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 relatif au transport international 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)

DNEL: Derived No-Effect Level (UK REACH)

PNEC: Predicted No-Effect Concentration (UK REACH)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

Skin Corr. 1A: Skin corrosion/irritation – Category 1A

Aquatic Acute 1: Hazardous to the aquatic environment - acute aquatic hazard – Category 1

Aquatic Chronic 1: Hazardous to the aquatic environment - long-term aquatic hazard – Category 1