

according to UK REACH Regulation

Trichloroacetic Acid 20 %

Revision date: 01.08.2023 Product code: 16388.xxxxx Page 1 of 12

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

1.1. Product identifier

Trichloroacetic Acid 20 %

UFI: Y0DF-R15Y-E00F-9W0C

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

Use of the substance/mixture

Use as laboratory reagent

Uses advised against

Any non-intended use.

1.3. Details of the supplier of the safety data sheet

Company name: MORPHISTO GmbH
Street: Schumannstr. 142/144
Place: D-63069 Offenbach

Telephone: +49 (0) 69 / 400 3019-60 Telefax: +49 (0) 69 / 400 3019-64

E-mail: info@morphisto.de Contact person: Morphisto GmbH

E-mail: gefahrstoffmanagement@morphisto.de

Internet: http://www.morphisto.de

1.4. Emergency telephone Poison Information Center Mainz, Germany, Tel: +49(0)6131/19240

number:

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

GB CLP Regulation

Skin Corr. 1; 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

GB CLP Regulation

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.

H411 Toxic to aquatic life with long lasting effects.

Precautionary statements

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



according to UK REACH Regulation

Trichloroacetic Acid 20 %

Revision date: 01.08.2023 Product code: 16388.xxxxx Page 2 of 12

present and easy to do. Continue rinsing.

P310 Immediately call a POISON CENTER/doctor.

P260 Do not breathe mist/vapours/spray.

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

P391 Collect spillage.

Labelling of packages where the contents do not exceed 125 ml

Signal word: Danger

Pictograms:







Hazard statements

H314

Precautionary statements

P260-P280-P303+P361+P353-P305+P351+P338-P310

2.3. Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulating and toxic (PBT) or very persistent and very bioaccumulating (vPvB) at levels of 0.1% or higher. Ecological information: The substance/mixture does not contain any components that are considered to be hazardous according to REACH Article 57(f) or Commission Delegated Regulation (EU) 2017/2100 or Commission Delegated Regulation (EU) 2018/605 in amounts of 0.1 % or more have endocrine disrupting properties. Toxicological information: The substance/mixture does not contain any components that are to be classified according to REACH Article 57(f) or Commission Delegated Regulation (EU) 2017/2100 or Commission Delegated Regulation (EU) 2018/605 in quantities of 0.1 % or more have endocrine disrupting properties.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Hazardous components

CAS No	Chemical name			Quantity
	EC No Index No REACH No			
	Classification (GB CLP Regulation)			
76-03-9	trichloroacetic acid	trichloroacetic acid		
	200-927-2	607-004-00-7	01-2119485186-30	
	Skin Corr. 1A, Aquatic Acute 1, Aquatic Chronic 1; H314 H400 H410			

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

Specific Conc. Limits, M-factors and ATE

CAS No	EC No	Chemical name	Quantity
	Specific Conc. L	Specific Conc. Limits, M-factors and ATE	
76-03-9	200-927-2	trichloroacetic acid	20 - < 25 %
	oral: LD50 = 3320 mg/kg STOT SE 3; H335: >= 1 - 100		

Further Information

This product contains no substances of very high concern (SVHC) (>0,1%) which are included in the Candidate List according to Article 59 of REACH.

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

Remove affected person from the danger area and lay down. In case of accident or unwellness, seek medical



according to UK REACH Regulation

Trichloroacetic Acid 20 %

Revision date: 01.08.2023 Product code: 16388.xxxxx Page 3 of 12

advice immediately (show directions for use or safety data sheet if possible).

First aider: Pay attention to self-protection!

Remove contaminated, saturated clothing immediately.

After inhalation

Provide fresh air. Medical treatment necessary. If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. If breathing is irregular or stopped, administer artificial respiration. Where appropriate artificial ventilation. In case of respiratory tract irritation, consult a physician.

After contact with skin

After contact with skin, wash immediately with plenty of water and soap. 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. Remove contact lenses, if present and easy to do. Continue rinsing. Consult an ophthalmologist.

After ingestion

Observe risk of aspiration if vomiting occurs. Rinse mouth immediately and drink 1 glass of of water. Adverse human health effects and symptoms: Gastric perforation. Do not allow a neutralisation agent to be drunk. Call a physician immediately. Rinse mouth. Do NOT induce vomiting. Never give anything by mouth to an unconscious person or a person with cramps.

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

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

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

First Aid, decontamination, treatment of symptoms.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

Co-ordinate fire-fighting measures to the fire surroundings. Carbon dioxide (CO2). Dry extinguishing powder. alcohol resistant foam. Atomized water.

Unsuitable extinguishing media

High power water jet.

5.2. Special hazards arising from the substance or mixture

Non-flammable. In case of fire may be liberated: Carbon monoxide Carbon dioxide (CO2). Hydrogen chloride (HCI). Chlorine (CI2). Gases/vapours, irritant

5.3. Advice for firefighters

Wear a self-contained breathing apparatus and chemical protective clothing. Full protection suit. In case of fire and/or explosion do not breathe fumes.

Additional information

Suppress gases/vapours/mists with water spray jet. Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water. Co-ordinate fire-fighting measures to the fire surroundings.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General advice

Provide adequate ventilation. Do not breathe gas/fumes/vapour/spray. Avoid contact with skin, eyes and clothes. Use personal protection equipment. Ventilate affected area.

6.2. Environmental precautions

Do not allow to enter into surface water or drains. Collect contaminated fire extinguishing water separately. This must not be discharged into drains. Cover drains. Prevent spread over a wide area (e.g. by containment or oil barriers). In case of gas escape or of entry into waterways, soil or drains, inform the responsible authorities.

Print date: 01.08.2023



Safety Data Sheet

according to UK REACH Regulation

Trichloroacetic Acid 20 %

Revision date: 01.08.2023 Product code: 16388.xxxxx Page 4 of 12

6.3. Methods and material for containment and cleaning up

For cleaning up

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

Other information

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

Treat the recovered material as prescribed in the section on waste disposal.

Clean contaminated objects and areas thoroughly observing environmental regulations.

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. Use extractor hood (laboratory). Provide adequate ventilation.

Use personal protection equipment. (See section 8.)

Do not mix with: alkali

Advice on protection against fire and explosion

Usual measures for fire prevention.

Advice on general occupational hygiene

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, drink, smoke, sniff. Always close containers tightly after the removal of product.

Further information on handling

Avoid contact with skin, eyes and clothes.

General protection and hygiene measures: See section 8.

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.

Make sure spills can be contained, e.g. in sump pallets or kerbed areas.

Suitable material for Container: polyethylene.

Hints on joint storage

Do not store together with: Explosives. Oxidizing solids. Oxidizing liquids. Organic peroxides. Self-reactive substances and mixtures. Radioactive substances. Infectious substances. Food and fodder.

Further information on storage conditions

Keep the packing dry and well sealed to prevent contamination and absorbtion of humidity.

Recommended storage temperature: 15-25 °C

Protect against: frost. UV-radiation/sunlight. heat. Humidity

7.3. Specific end use(s)

laboratory reagent

SECTION 8: Exposure controls/personal protection

8.1. Control parameters



according to UK REACH Regulation

Trichloroacetic Acid 20 %

Revision date: 01.08.2023 Product code: 16388.xxxxx Page 5 of 12

DNEL/DMEL values

CAS No	Substance			
DNEL type		Exposure route	Effect	Value
76-03-9	trichloroacetic acid			
Worker DNE	L, acute	dermal	local	1,41 mg/person/day
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

PNEC values

CAS No	Substance	
Environmen	Environmental compartment \	
76-03-9	03-9 trichloroacetic acid	
Freshwater		0,00017 mg/l
Freshwater	Freshwater (intermittent releases)	
Marine water		0,000017 mg/l
Marine water (intermittent releases)		0,017 mg/l
Freshwater sediment		0,000143 mg/kg
Marine sediment		0,000014 mg/kg
Micro-organisms in sewage treatment plants (STP)		100 mg/l
Soil		0,02 mg/kg

Additional advice on limit values

To date, no national critical limit values exist.

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. Use extractor hood (laboratory).

Provide adequate ventilation.

Individual protection measures, such as personal protective equipment

Eye/face protection

Suitable eye protection: goggles. Eye glasses with side protection EN 166

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. Pull-over gloves of rubber. EN ISO 374

Suitable material:

(penetration time (maximum wearing period): >= 8 h):

Butyl rubber. (0,5 mm)



according to UK REACH Regulation

Trichloroacetic Acid 20 %

Revision date: 01.08.2023 Product code: 16388.xxxxx Page 6 of 12

FKM (fluororubber). (0,4 mm)

CR (polychloroprenes, Chloroprene rubber). (0,5 mm)

Protective clothing should be selected, depending on concentration and quantity of the hazardous substance.

The chemical resistance of the products should be discussed with suppliers.

The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

Before using check leak tightness / impermeability. In the case of wanting to use the gloves again, clean them before taking off and air them well.

Skin protection

Use of protective clothing. Suitable protective clothing: Lab apron.

Minimum standard for preventive measures while handling with working materials are specified in the TRGS 500 (D).

Respiratory protection

In case of inadequate ventilation wear respiratory protection. With correct and proper use, and under normal conditions, breathing protection is not required.

Respiratory protection necessary at: generation/formation of aerosols

Suitable respiratory protective equipment:: Combination filtering device (EN 14387) Type: A-P2/3

The filter class must be suitable for the maximum contaminant concentration (gas/vapour/aerosol/particulates) that may arise when handling the product. If the concentration is exceeded, self-contained breathing apparatus must be used.

Environmental exposure controls

Do not allow uncontrolled discharge of product into the environment.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state: liquid
Colour: colourless
Odour: stinging

Melting point/freezing point:

Boiling point or initial boiling point and

not determined
not determined

boiling range:

Flammability: not determined Lower explosion limits: not determined Upper explosion limits: not determined Flash point: not determined Auto-ignition temperature: not determined Decomposition temperature: not determined pH-Value (at 20 °C): 1-2 Viscosity / kinematic: not determined Water solubility: miscible.

Solubility in other solvents

not determined

Partition coefficient n-octanol/water:

Vapour pressure:

Density (at 20 °C):

Relative vapour density:

Particle characteristics:

not determined

1,08 g/cm³

not determined

not determined

not determined

9.2. Other information

Information with regard to physical hazard classes

Explosive properties

The product is not: Explosive.

Sustaining combustion: Not sustaining combustion

Print date: 01.08.2023



Safety Data Sheet

according to UK REACH Regulation

Trichloroacetic Acid 20 %

Revision date: 01.08.2023 Product code: 16388.xxxxx Page 7 of 12

Oxidizing properties

The product is not: oxidising.

Other safety characteristics

Evaporation rate: not determined
Solid content: not determined
Viscosity / dynamic: not determined
Flow time: not determined

SECTION 10: Stability and reactivity

10.1. Reactivity

Possibility of hazardous reactions. No information available.

10.2. Chemical stability

The product is chemically stable under recommended conditions of storage, use and temperature.

10.3. Possibility of hazardous reactions

Base, Peroxides, Oxidizing agent. Exothermic reaction with: Strong alkali

10.4. Conditions to avoid

Protect against: UV-radiation/sunlight. heat.

10.5. Incompatible materials

Keep away from: Base, Oxidizing agent, Peroxides. Oxidizing agents, strong. strong alkalis

10.6. Hazardous decomposition products

Resulting from the use of the product: Chlorine. In case of fire may be liberated: Carbon monoxide Carbon dioxide (CO2). Hydrogen chloride (HCl). Chlorine (Cl2). Gases/vapours, irritant

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in GB CLP Regulation

Acute toxicity

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

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 mg/kg	3320	Rat	IUCLID	

Irritation and corrosivity

Causes severe skin burns and eye damage. (On basis of test data)

Causes serious eye damage. (On basis of test data)

Sensitising effects

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

Carcinogenic/mutagenic/toxic effects for reproduction

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.



according to UK REACH Regulation

Trichloroacetic Acid 20 %

Revision date: 01.08.2023 Product code: 16388.xxxxx Page 8 of 12

Aspiration hazard

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

11.2. Information on other hazards

Endocrine disrupting properties

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

Other information

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

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 fish toxicity	LC50 mg/l	2000	96 h	Pimephales promelas	suppliers SDS.	
	Acute crustacea toxicity	EC50 mg/l	2000	48 h	Daphnia magna	suppliers SDS.	

12.2. Persistence and degradability

No information available.

12.3. Bioaccumulative potential

The product has not been tested.

Partition coefficient n-octanol/water

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

12.4. Mobility in soil

The product has not been tested.

12.5. Results of PBT and vPvB assessment

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

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

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

Disposal recommendations

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. Observe in addition any national regulations! Consult the local waste disposal expert about waste disposal. Non-contaminated packages may be recycled.

According to (EWC) European Waste Catalogue, allocation of waste identity numbers/waste descriptions must be carried out in a specific way for every industry and process.

Control report for waste code/ waste marking according to (EWC) European Waste Catalogue:



according to UK REACH Regulation

Trichloroacetic Acid 20 %

Revision date: 01.08.2023 Product code: 16388.xxxxx Page 9 of 12

List of Wastes Code - residues/unused products

160506 WASTES NOT OTHERWISE SPECIFIED IN THE LIST; gases in pressure containers and

discarded chemicals; laboratory chemicals, consisting of or containing hazardous substances,

including mixtures of laboratory chemicals; hazardous waste

List of Wastes Code - used product

160506 WASTES NOT OTHERWISE SPECIFIED IN THE LIST; gases in pressure containers and

discarded chemicals; laboratory chemicals, consisting of or containing hazardous substances,

including mixtures of laboratory chemicals; hazardous waste

List of Wastes Code - contaminated packaging

150110 WASTE PACKAGING; ABSORBENTS, WIPING CLOTHS, FILTER MATERIALS AND

PROTECTIVE CLOTHING NOT OTHERWISE SPECIFIED; packaging (including separately collected municipal packaging waste); packaging containing residues of or contaminated by

hazardous substances; hazardous waste

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)

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



Classification code:

Limited quantity:

Excepted quantity:

Transport category:

Hazard No:

Tunnel restriction code:

C3

Limited quantity:

E2

Transport category:

80

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



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):

14.4. Packing group:

Hazard label:

8



according to UK REACH Regulation

Trichloroacetic Acid 20 %

Revision date: 01.08.2023 Product code: 16388.xxxxx Page 10 of 12



Marine pollutant:

Special Provisions:

Limited quantity:

Excepted quantity:

EmS:

YES

1 L

Excepted quantity:

E2

EmS:

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:8



Special Provisions:

Limited quantity Passenger:

Passenger LQ:

Excepted quantity:

A3 A803

0.5 L

Y840

Excepted 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

14.6. Special precautions for user

Warning: strongly corrosive. See section 8.

14.7. Maritime transport in bulk according to IMO instruments

not relevant

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

2010/75/EU (VOC): 20 % (216 g/l) 2004/42/EC (VOC): 20 % (216 g/l)

Information according to 2012/18/EU E2 Hazardous to the Aquatic Environment

(SEVESO III):

Additional information

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

National regulatory information



according to UK REACH Regulation

Trichloroacetic Acid 20 %

Revision date: 01.08.2023 Product code: 16388.xxxxx Page 11 of 12

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

work protection guideline' (94/33/EC).

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

15.2. Chemical safety assessment

For the following substances of this mixture a chemical safety assessment has been carried out:

trichloroacetic acid

SECTION 16: Other information

Changes

This data sheet contains changes from the previous version in section(s): 1,2,3,4,5,6,7,9,11,12,13,14,15,16.

Rev. 2,0; 14.01.2022; Individual safety data sheet based on 13383 collect

Rev. 2,1; 01.08.2023; general adjustment(s)

Abbreviations and acronyms

ADR: Accord européen sur le transport des marchandises dangereuses par Route

CAS Chemical Abstracts Service DNEL: Derived No Effect Level

IARC: INTERNATIONAL AGENCY FOR RESEARCH ON CANCER

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)

ICAO: International Civil Aviation Organization

ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO)

GHS: Globally Harmonized System of Classification and Labelling of Chemicals GefStoffV: Gefahrstoffverordnung (Ordinance on Hazardous Substances, Germany)

LOAEL: Lowest observed adverse effect level

LOAEC: Lowest observed adverse effect concentration

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

NOAEL: No observed adverse effect level NOAEC: No observed adverse effect level

NTP: National Toxicology Program N/A: not applicable

OSHA: Occupational Safety and Health Administration

PNEC: predicted no effect concentration PBT: Persistent bioaccumulative toxic

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de

fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

SARA: Superfund Amendments and Reauthorization Act

SVHC: substance of very high concern TRGS Technische Regeln fuerGefahrstoffe

TSCA: Toxic Substances Control Act VOC: Volatile Organic Compounds

VwVwS: Verwaltungsvorschrift wassergefaehrdender Stoffe

WGK: Wassergefaehrdungsklasse

CLP: Classification, labelling and Packaging

REACH: Registration, Evaluation and Authorization of Chemicals

GHS: Globally Harmonised System of Classification, Labelling and Packaging of Chemicals

UN: United Nations

CAS: Chemical Abstracts Service
DNEL: Derived No Effect Level
DMEL: Derived Minimal Effect Level
PNEC: Predicted No Effect Concentration

ATE: Acute toxicity estimate LL50: Lethal loading, 50%



according to UK REACH Regulation

Trichloroacetic Acid 20 %

Revision date: 01.08.2023 Product code: 16388.xxxxx Page 12 of 12

EL50: Effect loading, 50%

EC50: Effective Concentration 50%

ErC50: Effective Concentration 50%, growth rate NOEC: No Observed Effect Concentration

BCF: Bio-concentration factor

PBT: persistent, bioaccumulative, toxic vPvB: very persistent, very bioaccumulative

ADR: Accord européen sur le transport des marchandises dangereuses par Route

(European Agreement concerning the International Carriage of Dangerous Goods by Road)

RID: Regulations concerning the international carriage of dangerous goods by rail

ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways (Accord européen relatif au transport international des marchandises dangereuses par voies de navigation intérieures)

EmS: Emergency Schedules MFAG: Medical First Aid Guide

MARPOL: International Convention for the Prevention of Marine Pollution from Ships

IBC: Intermediate Bulk Container

For abbreviations and acronyms, see: ECHA Guidance on information requirements and chemical safety assessment, chapter R.20 (Table of terms and abbreviations).

Classification for mixtures and used evaluation method according to GB CLP Regulation

Classification	Classification procedure
Skin Corr. 1; H314	On basis of test data
Eye Dam. 1; H318	On basis of test data
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 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. 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 data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)