
MATERIAL SAFETY DATA SHEET

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

Product name:	TRICHLOROACETIC ACID
Index No:	607-004-00-7
CAS No:	76-03-9
REACH No:	01-2119485186-30-XXXX
Brand:	Solmedia Ltd
Item Code:	REA204

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

Laboratory chemicals, Manufacture of substances

1.3 Details of the supplier of the safety data sheet

- Name of Supplier:	Solmedia Ltd.
- Address of Supplier:	Unit 2, Vernon Drive Battlefield Enterprise Park Shrewsbury SY1 3TF UK
- Telephone:	0844 80 80 900
- Email:	labsupplies@solmedialtd.com

1.4 Emergency telephone number

Emergency Phone # +44 (0)844 80 80 900

SECTION 2: Hazards identification**2.1. Classification of the substance or mixture****Classification according to Regulation (EC) No 1272/2008**

Skin corrosion (Category 1A), H314

Specific target organ toxicity – single exposure (Category 3),
Respiratory system, H335

Acute aquatic toxicity (Category 1), H400

Chronic aquatic toxicity (Category 1), H410

For the full text of the H-Statements mentioned in this Section, see
Section 16

2.2 Label elements

Labelling according Regulation (EC) No 1272/2008**Hazard pictograms****Signal words:**

Danger

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.

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

P303+P361+P353: IF ON SKIN (or hair): Remove immediately all contaminated clothing. Rinse skin with water/shower.

P304+P340+P310: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a POISON CENTER or doctor.

P305+351+338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Supplemental Hazard Statements

None

2.3 Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

Vesicant.

SECTION 3: Composition/information on ingredients**3.1. Substances****Synonyms**

TCA

Formula $C_2HCl_3O_2$

Molecular weight	163.39 g/mol
CAS number:	76-03-9
EC-No	200-927-2
Index No:	607-004-00-7
REACH No:	01-2119485186-30-XXXX

Hazardous ingredient according to Regulation (EC) No 1272/2008

Component	Number	Classification	Concentration
Trichloroacetic Acid			
CAS-No	76-03-9	Skin Corr.1A; STOT SE3; Aquatic Acute 1; Aquatic Chronic 1; H314, H335, H400 H410 Concentration limits >=1%: STOT SE 3, H335 M-Factor – Aquatic Acute: 10	<=100%
EC-No 200-297-	200-297-2		
Index-No	607-004-00-7		
Registration number	01-2119485186-30-XXXX		

For the full text of the H-Statements mentioned in this Section, see Section 16.

SECTION 4: First aid measures
4.1 Description of first aid measures

General Advice:	Consult a physician. Show this safety data sheet to the doctor in attendance.
Inhalation:	If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.
Skin contact:	Remove all contaminated clothes and footwear immediately. Wash off with soap and plenty of water. Consult a physician.
Eye contact:	Rinse thoroughly with plenty of water for at least 15 minutes. Consult a physician.
Ingestion:	Do not induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

4.2 Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11.

4.3 Indication of any immediate medical attention and special treatment needed

No data available.

SECTION 5: Firefighting measures**5.1 Extinguishing media**

Water spray. Alcohol resistant foam. Dry chemical powder.
Carbon dioxide.

5.2 Special hazards arising from the substance or mixture

No data available.

5.3 Advice for firefighters

Wear self-contained breathing apparatus for fire-fighting if necessary.

5.4 Further information

No data available

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

Use personal protective equipment. Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust. For personal protection see section 8.

6.2 Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

6.3 Methods and materials for containment and cleaning up

Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

6.4 Reference to other sections

For disposal see section 13 of SDS

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Handling requirements: Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Provide appropriate exhaust ventilation at places where dust is formed.
For precautions see section 2.2.

7.2 Conditions for safe storage, including any incompatibilities

Storage conditions: Store under nitrogen. Keep container tightly closed in a dry and well-ventilated place. Store in cool place.
Recommended storage temperature 2 - 8°C

7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Components with workplace control parameters

Contains no substances with occupational exposure limit values.

8.2 Exposure controls

Appropriate engineering controls

Handle in accordance with good industrial hygiene and Safety practice. Wash hands before breaks and at the end of workday.

Personal protective equipment

Eye/face protection: Face shield and safety glasses. Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166 (EU)

Skin protection: Handle with gloved. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practises. Wash and dry hands.

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

Full contact

Material: Nature latex/chloroprene

Minimum layer thickness: 0.6 mm

Break through time: 480 min

Splash contact

Material: Nature latex/chloroprene

Minimum layer thickness: 0.6 mm

Break through time: 480 min

If uses in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the CE approved gloves. This recommendation is advisory only and must be evaluated by an industrial hygienist and safety officer familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.

Body Protection:

Complete suit protecting against chemicals. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace

Eye protection:

Tightly fitting safety goggles. Face-shield. Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Respiratory protection:

Where risk assessment shows are-purifying respirators are appropriate use a full-face particle respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Environmental Exposure Controls:

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

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

Appearance	Form: Crystalline powder, chunks
Colour	off-white
Odour	No data available
Odour Threshold	No data available
pH:	1 at 81.7 g/l at 25°C
Melting point/ range°C:	54 – 58°C – lit.
Boiling point/range°C:	196°C - lit
Flash point	> 113°C – closed cup
Evaporation rate	No data available
Flammability (solid, gas)	No data available
Upper/lower flammability Or explosive limits	No data available
Vapour pressure	1 hPa at 51°C
Vapour density	5.64 – (Air = 1.0)
Relative density	1.62 g/cm ³ at 25°C
Water Solubility	81.7 g/l at 20°C - completely soluble
Partition coefficient: n-octanol/water	log POW: 1.645
Auto-ignition temperature	No data available
Decomposition temperature	No data available
Viscosity	No data available
Explosive properties	No data available
Oxidizing properties	No data available

9.2 Other safety information

Bulk density	900 kg/m ³
Surface tension	27.8 mN/m at 80.2°C

Relative vapour density 5.64 – (Air = 1.0)

SECTION 10: Stability and reactivity

10.1 Reactivity

No data available.

10.2 Chemical stability

Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions

No data available

10.4 Conditions to avoid

Exposure to moisture Heat

10.5 Incompatible materials

Strong oxidizing agents, Strong bases, Amines

10.6 Hazardous decomposition products

Other decomposition products

No data available

Hazardous decomposition products formed under fire conditions

Carbon oxides, Hydrogen chloride gas

In the event of fire:

See section 5

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

LD50 Oral – Rat- male and female – 3,320 mg/kg

Skin corrosion/irritation

No data available

Serious eye damage/eye irritation

Eyes: Rabbit

Result Severe eye irritation – 5s

Respiratory or skin sensitisation

No data available

Germ cell mutagenicity

In vitro assay

Lymphocyte

OECD Test Guideline 474

Mouse – male and female

Result – negative

Carcinogenicity

No data available

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

Reproductive toxicity

No data available

Specific target organ toxicity – single exposure

May cause respiratory irritation

Specific target organ toxicity – repeated exposure

No data available

Aspiration hazard

No data available

Additional Information

Repeated dose toxicity

Rat – male – Oral – OECD Test Guideline 408

RTECS: AJ7875000

Burning sensation, Cough, wheezing, laryngitis, Shortness of breath, spasm, inflammation and edema of the larynx,

spasm, inflammation and edema of the bronchi, pneumonitis, pulmonary edema, Material is extremely destructive to tissue of the mucous membranes and upper respiratory tract, eyes, and skin. To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

SECTION 12: Ecological information

12.1 Toxicity

No data available

12.2 Persistence and degradability

No data available

12.3 Bioaccumulative potential

No data available

12.4 Mobility in soil

No data available

12.5 Results of PBT and vPvB assessment

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 1% or higher.

12.6 Other adverse effects

Very toxic to aquatic life with long lasting effects.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product:

Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an after-burner and scrubber. Offer surplus and non-recyclable solutions to a licensed disposal company. Waste material must be disposed of in accordance with the Directive on waste 2008/98/EC as well as other national and local regulations. Leave chemicals in original containers. No mixing with other waste. Handle uncleaned containers like the product itself.

Contaminated packaging:

Dispose of as unused product.

SECTION 14: Transport information**14.1. UN number**

ARD/RID:	UN1839
IMDG	UN1839
IATA	UN1839

14.2. UN proper shipping name

ARD/RID:	TRICHLOROACETIC ACID
IMDG	TRICHLOROACETIC ACID, SOLID
IATA	TRICHLOROACETIC ACID

14.3. Transport hazard class(es)

ARD/RID:	8
IMDG	8
IATA	8

14.4. Packing group

ARD/RID:	II
IMDG	II
IATA	II

14.5. Environmental hazards

ARD/RID:	YES
IMDG	Marine pollutant: Yes
IATA	No

14.6. Special precautions for user

No data available

SECTION 15: Regulatory information**15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006

15.2 Chemical safety assessment

For this product a chemical safety assessment was not carried out

SECTION 16: Other information

Full text of H-Statements referred to under sections 2 and 3

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 above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Solmedia Ltd shall not be held liable for any damage resulting from handling or from contact with the above product.