
MATERIAL SAFETY DATA SHEET

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

Product name: Testing Solution No. 27

Hydrochloric Acid 35%

Product Number:

– TS27

Brand: Solmedia Ltd

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

Identified uses: Test reagent

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

SECTION 2: Hazards identification**2.1 Classification of the substance or mixture****2.1.1 Classification according to Regulation (EC) No. 1272/2008 (CLP)**

Hazard classes and hazard categories	Hazard statements
Skin corrosion, category 1B	H314
Specific target organ toxicity (single exposure), category 3, vascular	H335

2.2 Label elements

Signal Word: Danger

Hazard Statements

H314	Causes severe skin burns and eye damage
H335	May cause respiratory irritation

Precautionary Statements

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

P301+P330+P331 IF SWALLOWED: rinse mouth. Do NOT induce vomiting.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P309+P310 IF exposed or if you feel unwell: Immediately call a POISON CENTER or doctor/physician.

2.3 Other hazards

SVHC No

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Substance Name	Concentration	Product Identifier	Hazard classes and hazard categories
Hydrochloric Acid	25-40%	CAS No.: 7647-01-0	Skin corrosion, category 1B – H314
		EC No.: 231-595-7	Specific target organ toxicity (single
		REACH No.:	exposure) category 3, vascular –H335
		Not yet communicated down the supply chain	

SECTION 4: First aid measures

4.1 General Information

IF exposed: Immediately call a POISON CENTRE/doctor/....

When in doubt or if symptoms are observed, get medical advice. If unconscious place in recovery position and seek medical advice. Never give anything by mouth to an unconscious person or a person with cramps. Change contaminated, saturated clothing. Do not leave affected person unattended

After inhalation

Immediately call a POISON CENTRE/doctor/....

Remove casualty to fresh air and keep warm and at rest. If breathing is irregular or stopped, administer artificial respiration. In case of respiratory tract irritation, consult a physician.

In case of skin contact

After contact with skin, wash immediately with plenty of water and soap. Remove contaminated, saturated clothing immediately. In case of skin reactions, consult a physician.

Immediate medical treatment required because corrosive injuries that are not treated are hard to cure.

After eye contact

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

In case of ingestion

Immediately call a POISON CENTRE/doctor/....

If accidentally swallowed rinse the mouth with plenty of water (only if the person is conscious) and obtain immediate medical attention. Do NOT induce vomiting. Give nothing to eat or drink.

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

4.4 Self-protection of the first aider

First aider: Pay attention to self-protection!

4.5 Information to physician

No data available

SECTION 5: Firefighting measures

5.1 Extinguishing media

The product itself does not burn. 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: Hydrogen Chloride

5.3 Advice for firefighters

DO NOT fight fire when fire reaches explosives

Wear self-contained breathing apparatus for firefighting if necessary.

5.4 Further information

Do not allow run-off from fire-fighting to enter drains or water courses. Do not inhale explosion and combustion gases. Use caution when applying carbon dioxide in confined

spaces. Carbon dioxide can displace oxygen. 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

In case of major fire and large quantities: Remove persons to safety

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

6.2 Environmental precautions

Discharge into the environment must be avoided.

6.3 Methods and materials for containment and cleaning up

Spilled product must never be returned to the clean contaminated objects and areas thoroughly observing environmental regulations. Soak up inert absorbent and dispose as waste requiring special attention.

6.4 Reference to other sections

For disposal see section 13. Clear spills immediately

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Avoid: Inhalation Avoid contact with skin and eyes. Use extractor hood (laboratory). If handled uncovered, arrangements with local exhaust ventilation have to be used. If local exhaust ventilation is not possible or not sufficient, the entire working area must be ventilated by technical means. Protect from moisture.

7.2 Conditions for safe storage, including any incompatibilities

Storage temperature: 15-25 °C Storage class: 8B

Store in cool place. Keep container tightly closed in a dry and well-ventilated place.

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

Ingredient (Designation)	Regulatory Information	Country	Limit value type (country of origin)	Limit Value
Hydrochloric Acid	2000/39/EC	EU	STV	15 mg/m ³ - 10 ppm
Hydrochloric Acid	2000/39/EC	EU	LTV	8 mg/m ³ - 5 ppm

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.

Personal protective equipment

Wear suitable protective clothing. When handling with chemical substances, protective clothing with CE-labels including the four control digits must be worn. For the protection against direct skin contact, body protective clothing is essential (in addition to the usual working clothes).

Eye/face protection

Eye glasses with side protection DIN-/EN-Norms: DIN EN 166

Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin protection

Handle with gloves. 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 practices.

Wash and dry hands.

Body Protection

Impervious clothing, the type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection

Respiratory protection necessary at: aerosol or mist formation Suitable respiratory protection apparatus: Full-/half-/quarter-face masks (DIN EN 136/140)

Additional information

Wash hands before breaks and after work. Avoid contact with skin and eyes. When using do not eat, drink or smoke. Provide eye shower and label its location conspicuously.

Control of environmental exposure

No special environmental precautions required.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

- a) Appearance Form: liquid, clear
- Colour: colourless
- b) Odour No data available
- c) Odour Threshold No data available
- d) pH <1 (20 °C)
- e) Melting point/freezing point -30 °C
- f) Initial boiling point and boiling range
110 °C (1013 hPa)
- g) Flash point not applicable
- h) Evaporation rate No data available
- i) Flammability (solid, gas) No data available
- j) Upper/lower flammability or explosive limits No data available
- k) Vapour pressure No data available
- l) Vapour density No data available
- m) Relative density
1.18 g/cm³ (20 °C)
- n) Water solubility easy soluble
- o) Partition coefficient: n-octanol/water No data available
- p) Auto-ignition temperature No data available
- q) Decomposition temperature No data available
- r) Viscosity Dynamic viscosity: 2.3 mPa*s (15 °C)
- s) Explosive properties No data available
- t) Oxidizing properties No data available

9.2 Other safety information

No data available

SECTION 10: Stability and reactivity

10.1 Reactivity

Corrosive to metals

10.2 Chemical stability

Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions

Explosive reaction with: Alkali metals Alkaline earth metal Alkali (lye) Violent reaction with:
light metals Powdered metals Exothermic reaction with: Water Substance, organic

10.4 Conditions to avoid

Humidity

10.5 Incompatible materials

Metal

10.6 Hazardous decomposition products

No data available

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

No data available

Skin corrosion/irritation

Causes severe skin burns and eye damage.

Serious eye damage/eye irritation

Causes serious eye damage

Irritation to respiratory tract: May cause respiratory irritation.

Respiratory or skin sensitisation

In case of skin contact: not sensitising After inhalation: not sensitising

Germ cell mutagenicity

No data available

Carcinogenicity

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

No data available

Specific target organ toxicity - repeated exposure

No data available

CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)

Carcinogenicity

No indication of human carcinogenicity.

Germ cell mutagenicity

No indications of human germ cell mutagenicity exist.

Reproductive toxicity No indications of human reproductive toxicity exist.

Aspiration hazard not applicable

Other adverse effects no data available

Additional Information

No data available

SECTION 12: Ecological information

12.1 Toxicity

No data available

12.2 Persistence and degradability

No data available

12.3 Bioaccumulative potential

Partition coefficient: n-octanol/water: no data available

12.4 Mobility in soil

No data available

12.5 Results of PBT and vPvB assessment

No data available

12.6 Other adverse effects

No data available

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product

Offer surplus and non-recyclable solutions to a licensed disposal company.

Dispose according to local legislation. Consult the appropriate local waste disposal expert about waste disposal

Contaminated packaging

Dispose of as unused product. Handle contaminated packages in the same way as the substance itself

SECTION 14: Transport information

Land transport (ADR/RID)

- 14.1 UN-No. 1789
- 14.2 Proper Shipping Name HYDROCHLORIC ACID
- 14.3 Class(es): 8 Classification code: C1 Hazard label(s): 8
- 14.4 Packing group: II
- 14.5 Environmental hazards: No
- 14.6 Special precautions for user: Hazard identification number (Kemler No.): 80 tunnel restriction code: E (Passage forbidden through tunnels of category E.)

Sea transport (IMDG)

- 14.1 UN-No.: 1789
- 14.2 Proper Shipping Name: HYDROCHLORIC ACID
- 4.3 Class(es): 8 Classification code: Hazard label(s): 8
- 14.4 Packing group: II
- 14.5 Environmental hazards: No MARINE POLLUTANT: No
- 14.6 Special precautions for user: Segregation group: 1 EmS-No. F-A S-B
- 14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code not relevant

Air transport (ICAO-TI / IATA-DGR)

- 14.1 UN-No.: 1789
- 14.2 Proper Shipping Name: HYDROCHLORIC ACID
- 14.3 Class(es): 8 Classification code: C1 Hazard label(s): 8
- 14.4 Packing group: II
- 14.5 Special precautions for user not relevant

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 as amended by Regulation (EU) 2015/830.

15.2 Chemical safety assessment

For this product a chemical safety assessment was not carried out

SECTION 16: Other information

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.