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## MATERIAL SAFETY DATA SHEET

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

#### 1.1 Product identifiers

Product name: Testing Solution No. 28

1N HYDROCHLORIC ACID

Hydrochloric Acid 1 mol/l (1N)

Product Number:

- TS28
- 129151150
- 129151144

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 number

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

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### 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
Substance or mixture corrosive to metals, category 1	H290

## 2.2 Label elements



Signal Word: Warning

### Hazard Statements

H290

May be corrosive to metals

### Precautionary Statements

P234 Keep in original container

P390 Absorb spillage to prevent material damage

P406 Store in corrosive resistant container with a resistant inner liner

## 2.3 Other hazards

SVHC No

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## SECTION 3: Composition/information on ingredients

### 3.2 Mixtures

Substance Name	Concentration	Product Identifier	Hazard classes and hazard categories
Hydrochloric Acid	1-10-%	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	

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## SECTION 4: First aid measures

### 4.1 General Information

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

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.

**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**

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

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

Suitable extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

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

In case of fire may be liberated: Pyrolysis products, toxic

**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.

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**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

**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 original container for recycling. Collect in closed and suitable containers for disposal

**6.4 Reference to other sections**

For disposal see section 13. Clear spills immediately

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**SECTION 7: Handling and storage****7.1 Precautions for safe handling**

All work processes must always be designed so that the following is as low as possible:  
Inhalation skin contact Eye contact

**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.

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

Components with workplace 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 <sup>3</sup> - 10 ppm
Hydrochloric Acid	2000/39/EC	EU	LTV	8 mg/m <sup>3</sup> - 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**

Eye/face protection

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 not required. For nuisance exposures use type OV/AG (US) or type ABEK

(EU EN 14387) respirator cartridges. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

#### **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.

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## **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 No data available
- f) Initial boiling point and boiling range No data available
- 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 1.02 g/cm<sup>3</sup>
- 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 No data available
- s) Explosive properties No data available
- t) Oxidizing properties No data available

## 9.2 Other safety information

No data available

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## 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

No data available

### 10.5 Incompatible materials

No data available

## **10.6 Hazardous decomposition products**

No data available

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## **SECTION 11: Toxicological information**

### **11.1 Information on toxicological effects**

#### **Acute toxicity**

No data available

#### **Skin corrosion/irritation**

No data available

#### **Serious eye damage/eye irritation**

No data available

#### **Respiratory or skin sensitisation**

#### **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

#### **Aspiration hazard**

No data available

#### **Additional Information**

RTECS: Not available

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## **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****12.6 Other adverse effects**

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**SECTION 13: Disposal considerations****13.1 Waste treatment methods****Product**

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

**Contaminated packaging**Dispose of as unused product.

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**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: III

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

14.3 Class(es): 8 Classification code: Hazard label(s): 8

14.4 Packing group: III

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: III

14.5 Special precautions for user not relevant

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**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.

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**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.