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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. 184

Iron (III) nitrate solution

Product Number:

– TS184

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

Classification according to Regulation (EC) No. 1272/2008

Skin corrosion (Category 1B), H314

#### 2.2 Label elements



Signal word     Danger

Hazard statements

H314     Causes severe skin burns and eye damage

Precautionary statements

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

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

P304 + P340 + P310     IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER or doctor/physician.

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

## 2.3 Other hazards

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

## SECTION 3: Composition/information on ingredients

### 3.2 Mixtures

Synonyms     Ferric nitrate < 1%  
                      Hydrochloric Acid < 5%

Formula:      $\text{FeN}_3\text{O}_9 \cdot 9\text{H}_2\text{O}$

Molecular weight: 404.00g/mol

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

Component

Ferric nitrate nonahydrate

CAS-No.	7782-61-8	Skin Corr. 1B;H314	< 1%
EC-No.	233-899-5		

Hydrochloric Acid

CAS-No	7647-01-0	Skin Corr. 1B;H314	< 5%
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EC-No. 231-595-7

For the full text of the H-statements mentioned in this section see Section 2.

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## **SECTION 4: First aid measures**

### **4.1 Description of first aid measures**

#### **If inhaled**

If breathed in, move person into fresh air. If not breathing, give artificial respiration.

#### **In case of skin contact**

Wash off with soap and plenty of water.

#### **In case of eye contact**

Flush eyes with water as a precaution.

#### **If swallowed**

Never give anything by mouth to an unconscious person. Rinse mouth with water.

### **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

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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**

No data available

### **5.3 Advice for firefighters**

Wear self-contained breathing apparatus for firefighting if necessary.

### **5.4 Further information**

No data available

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## **SECTION 6: Accidental release measures**

**6.1 Personal precautions, protective equipment and emergency procedures**

Avoid breathing vapours, mist or gas.

For personal protection see section 8.

**6.2 Environmental precautions**

No special environmental precautions required.

**6.3 Methods and materials for containment and cleaning up**

Keep in suitable, closed containers for disposal.

**6.4 Reference to other sections**

For disposal see section 13.

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

For precautions see section 2.2.

**7.2 Conditions for safe storage, including any incompatibilities**

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

Component	CAS-No	Value Form of exposure	Control Parameters	Basis
Ferric nitrate nonahydrate	7782-61-8	TWA	1 mg/m <sup>3</sup>	UK. EH40 WEL – Workplace Exposure Limits
Hydrochloric Acid	7647-01-0	STEL	2 mg/m <sup>3</sup>	UK. EH40 WEL – Workplace Exposure Limits

**8.2 Exposure controls****Appropriate engineering controls**

General industrial hygiene practice.

**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).

#### 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: Amber

b) Odour No data available

c) Odour Threshold No data available

d) pH No data available

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 1.000 g/cm<sup>3</sup>
- n) Water solubility No data available
- o) Partition coefficient: noctanol/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**

Hazardous decomposition products formed under fire conditions. - Nature of decomposition products not known.

Other decomposition products - No data available

In the event of fire: see section 5

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## **SECTION 11: Toxicological information**

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

#### **Acute toxicity**

LD50 Oral – Rat – 3,250 mg/kg

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

No data available

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

Risk of serious damage to eyes

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

No data available

#### **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: NO7175000

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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**

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.

### **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**

### **14.1 UN number**

ADR/RID: - IMDG: - IATA: 3260

### **14.2 UN proper shipping name**

ADR/RID: IMDG: IATA:

Corrosive acidic in organic NOS (Ferric nitrate)

### **14.3 Transport hazard class(es)**



ADR/RID: - IMDG: - IATA: - Class 8

#### **14.4 Packaging group**

ADR/RID: - IMDG: - IATA: - Class II

#### **14.5 Environmental hazards**

ADR/RID: no IMDG Marine pollutant: no IATA: no

#### **14.6 Special precautions for user**

No data available

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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.