

## Section 1. Identification

**1.1 Product Identifier** CS7380-18

Product Name SULPHURIC ACID 1.0M (2N) 1L.

CAS Number 7664-93-9

REACH Registration No Not applicable

Molecular Formula  $H_2SO_4 = 98.07$

### 1.2 Relevant identified uses of the substance or mixture & uses advised against

Uses of Material Chemical for industrial and laboratory use. Not suitable for domestic use.

**1.3 Supplier** Prime Chemicals



Beecroft & Partners  
Northfield Road  
Rotherham  
South Yorkshire  
S60 1RR  
UNITED KINGDOM

Phone 01709 377881

Fax 01709 369264

Email sales@beecroft-science.co.uk

**1.4 Emergency Telephone** (08:30-17:00) 01709 3778881  
(24hr) 112  
(Have this document to hand)

## Section 2. Hazards Identification

### 2.1 Classification of the substance or mixture

#### Classification according to regulation 1272/2008/EC

Skin corrosion/irritation, category 2 (Skin Irrit. 2). Serious eye damage/irritation, category 2 (Eye Irrit. 2).

### 2.2 Label elements

#### Labelling according to regulation 1272/2008/EC

Signal word Warning

Hazard Pictograms



Hazard Statements Causes skin irritation. Causes serious eye irritation.

Precautionary Statements Wear protective gloves/protective clothing/eye protection/face protection. Wash thoroughly after handling. IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. IF IN EYES: Rinse continuously with water for several minutes. Remove contact lenses if present and easy to do and continue rinsing.

## Section 3. Composition

### 3.1 Substances

| Component      | CAS No.   | EEC No.   | Conc w/w | CLP Classification (1272/2008/CE) |
|----------------|-----------|-----------|----------|-----------------------------------|
| Sulphuric acid | 7664-93-9 | 231-639-5 | 9.3 %    | Skin Corr. 1A                     |

## Section 4. First Aid

### 4.1 Description of first aid measures

|            |                                                                                                                                                        |
|------------|--------------------------------------------------------------------------------------------------------------------------------------------------------|
| Eyes       | Irrigate thoroughly with plenty of water for at least 10 minutes, holding the eye open. OBTAIN MEDICAL ATTENTION.                                      |
| Skin       | Wash off skin thoroughly with water. Remove contaminated clothing immediately and wash before re-use. If discomfort persists OBTAIN MEDICAL ATTENTION. |
| Inhalation | Remove from exposure.                                                                                                                                  |
| Ingestion  | If conscious give plenty of water to drink. Do not induce vomiting. If unconscious place in the recovery position. OBTAIN MEDICAL ATTENTION URGENTLY.  |

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

Causes skin irritation and may cause burns if contact is prolonged Causes serious eye irritation.

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

No further relevant information available.

## Section 5. Fire Fighting

### 5.1 Extinguishing media

|                     |                                                                          |
|---------------------|--------------------------------------------------------------------------|
| Extinguishing Media | Consider what other flammable materials are present and act accordingly. |
| Unsuitable Media    | Do not allow water to come into direct contact with material.            |

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

|         |                                   |
|---------|-----------------------------------|
| Hazards | Presents no specific fire danger. |
|---------|-----------------------------------|

### 5.3 Advice for firefighters

|                         |                                               |
|-------------------------|-----------------------------------------------|
| Advice for firefighters | Consider all other materials in the vicinity. |
|-------------------------|-----------------------------------------------|

## Section 6. Accidental Release Measures

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

|                     |                                                                                                                                                            |
|---------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Personal Protection | Avoid breathing vapour. Use approved personal protective equipment. Evacuate area immediately. Do not allow general use of area until it is safe to do so. |
|---------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------|

### 6.2 Environmental precautions

|               |                                                                                                                                                                                                                                                          |
|---------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Environmental | Keep material out of sewers, storm drains, surface waters and soil. Keep non-neutralised material out of sewers, storm drains, surface waters and soil. Notify the Environmental Agency and local Environmental Health Officer if major spillage occurs. |
|---------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

### 6.3 Methods and material for containment and cleaning up

|                |                                                                                                                                          |
|----------------|------------------------------------------------------------------------------------------------------------------------------------------|
| Major Spillage | Contain and absorb on inert material. Transfer absorbent to salvage container for removal. Wash area down with copious amounts of water. |
| Minor Spillage | Neutralise spill with soda ash, lime, calcium carbonate or sodium bicarbonate. Wash area down with copious amounts of water.             |

### 6.4 Reference to other sections

See section 8.2 for information on protective equipment and section 13 for information on disposal.

## Section 7. Storage & Handling

### 7.1 Precautions for safe handling

Avoid contact with skin and eyes. Do not breath vapours. Do not allow to contaminate clothing.  
Ensure Local Exhaust Ventilation maintains vapour concentrations below the recommended limits.

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

Well ventilated, cool, dry storage .

### 7.3 Specific end use(s)

See section 1.2.

## Section 8. Workplace Exposure & Personal Protection

### 8.1 Control parameters

| Component      | CAS No    | Concentration | Workplace Exposure Limits |   |                          |
|----------------|-----------|---------------|---------------------------|---|--------------------------|
|                |           |               | Long Term (8hr TWA)       |   | Short Term 15min period) |
| Sulphuric acid | 7664-93-9 | 9.3%          | -                         | - | 1.0 ppm                  |

### 8.2 Exposure controls

|                        |                                                                                                                                                                                                    |
|------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Respiratory Protection | Use L.E.V. or natural ventilation to maintain vapour concentrations below exposure limits. If not, use a well maintained chemical cartridge respirator, or use self contained breathing apparatus. |
| Hand Protection        | Use nitrile gloves or PVC gauntlets.                                                                                                                                                               |
| Eye Protection         | Use chemical splash proof glasses or goggles.                                                                                                                                                      |
| Skin Protection        | If skin contact or contamination of clothing is likely, protective clothing must be worn.                                                                                                          |
| Special Hazards        | No special precautions required.                                                                                                                                                                   |

## Section 9. Physical & Chemical Properties

### 9.1 Information on basic physical and chemical properties

|                       |                                                                    |
|-----------------------|--------------------------------------------------------------------|
| Appearance            | Clear colourless liquid.                                           |
| Odour                 | Odourless.                                                         |
| pH                    | 1 @ 20°C                                                           |
| Boiling Point         | Aqueous solution                                                   |
| Melting Point         | Not applicable                                                     |
| Flash Point           | Not applicable                                                     |
| Upper Flammable Limit | Not applicable                                                     |
| Lower Flammable Limit | Not applicable                                                     |
| Auto Ignition         | Not applicable                                                     |
| Explosive Properties  | No.                                                                |
| Oxidising Properties  | No.                                                                |
| Vapour Pressure       | 1mmHg @ 146°C                                                      |
| Relative Density      | 1.0608                                                             |
| Water Solubility      | Completely soluble in water with moderate increase in temperature. |

### 9.2 Other information

No data available.

## Section 10. Stability & Reactivity

|      |                                    |                                                                                                                                                                                                                                                                                                                                                   |
|------|------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 10.1 | Reactivity                         | No data available.                                                                                                                                                                                                                                                                                                                                |
| 10.2 | Chemical Stability                 | Stable under normal conditions                                                                                                                                                                                                                                                                                                                    |
| 10.3 | Possibility of hazardous reactions | No data available.                                                                                                                                                                                                                                                                                                                                |
| 10.4 | Conditions to Avoid                | No specific conditions.                                                                                                                                                                                                                                                                                                                           |
| 10.5 | Incompatible Materials             | Oxidising and reducing agents. Alkalis. Reacts with most metals to produce extremely flammable hydrogen gas. Peroxides, potassium permanganate, sodium, potassium, platinum, potassium tertiary butoxide. Combustible materials. Reacts with sulphide,phosphide,cyanide,carbide and silicides producing very toxic gases. Many organic compounds. |

**10.6** Hazardous Decomposition Products Toxic and acidic dense white fumes.

## Section 11. Toxicological Information

### 11.1 Information on toxicological effects

|                      |                                                                                            |
|----------------------|--------------------------------------------------------------------------------------------|
| Eyes                 | The liquid will irritate the eyes and can cause conjunctivitis.                            |
| Skin                 | The liquid will be irritating to the skin.                                                 |
| LD50 Skin            | Not available                                                                              |
| Ingestion            | Ingestion of large amounts may cause nausea, abdominal discomfort, vomiting and diarrhoea. |
| LD50 Oral            | Not available                                                                              |
| Inhalation           | Presents no significant health hazard by inhalation.                                       |
| LD50 Inhalation      | Not available                                                                              |
| TCLo                 | Not available                                                                              |
| Carcinogenicity      | Not considered to be a carcinogen.                                                         |
| Mutagenicity         | Not considered to be a mutagen.                                                            |
| Reproductive Effects | None identified.                                                                           |

## Section 12. Ecological

|                                              |                                                                                                                                                                                                                          |
|----------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>12.1</b> Toxicity                         | Dangerous to aquatic organism: causes damage to crops and vegetables. Natural alkalinity reduces damaged caused by low pH. Aquatic toxicity LC50 Bluegill sunfish. 24 hr fresh water-24.5 mg/l, 48 hr tap-water-49 mg/l. |
| LC50 Algal                                   | Not available                                                                                                                                                                                                            |
| LC50 Crustacea                               | Not available                                                                                                                                                                                                            |
| LC50 Fish                                    | Not available                                                                                                                                                                                                            |
| <b>12.2</b> Persistence and degradability    | No data available.                                                                                                                                                                                                       |
| <b>12.3</b> Bioaccumulative potential        | No data available.                                                                                                                                                                                                       |
| <b>12.4</b> Mobility in soil                 | No data available.                                                                                                                                                                                                       |
| <b>12.5</b> Results of PBT & vPvB assessment | Assessment not required.                                                                                                                                                                                                 |
| <b>12.6</b> Other adverse effects            | None known at present.                                                                                                                                                                                                   |

## Section 13. Disposal Considerations

### 13.1 Waste treatment methods

|                        |                                                                                                                             |
|------------------------|-----------------------------------------------------------------------------------------------------------------------------|
| Disposal Methods       | Dilute in a large excess of water and carefully neutralise with soda ash, then wash to drain with copious amounts of water. |
| Contaminated Packaging | Wash out containers with water. Use a licensed waste disposer.                                                              |

## Section 14. Transport Information

|                                          |                                  |
|------------------------------------------|----------------------------------|
| <b>14.1 UN Number</b>                    | 2796                             |
| <b>14.2 Proper Shipping Name</b>         | Sulphuric Acid                   |
| <b>14.3 Transport classes</b>            |                                  |
| UN classification                        | 8                                |
| Subsidiary Risk                          | None                             |
| Transport category                       | 2                                |
| ADR Hazard ID                            | 80                               |
| Tunnel Restriction Code                  | E                                |
| <b>14.4 Packing Group</b>                | II                               |
| <b>14.5 Environment hazards</b>          | See section 12.                  |
| <b>14.6 Special precautions for user</b> | No special precautions required. |
| <b>14.7 Transport in bulk</b>            | Not transported in bulk.         |



## Section 15. Regulatory Information

### 15.1 Safety, health and environment regulations specific for substance/mixture.

#### Classification, Labeling & Packaging of Substances & Mixtures Regulations (1272/2008/CE)

Classification Skin corrosion/irritation, category 2; Serious eye damage/irritation, category 2

Signal word Warning

Hazard Pictograms

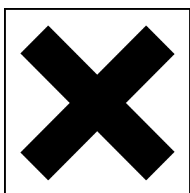


Hazard Statements H315, H319  
Causes skin irritation. Causes serious eye irritation.

Precautionary Statements P280, P264, P301+P330+P331, P303+P361+P353, P305+P351+P338  
Wear protective gloves/protective clothing/eye protection/face protection. Wash thoroughly after handling. IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. IF IN EYES: Rinse continuously with water for several minutes. Remove contact lenses if present and easy to do and continue rinsing.

#### Chemicals (Hazard Information & Packaging) Regulations 2009 (67/548/EEC, 99/45/EC)

Classification Irritant(Xi)



Risk & Safety Phrases R36/38, S26, S37/39  
Irritating to eyes and skin. In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Wear suitable gloves and eye/face protection.

### 15.2 Chemical safety assessment

Assessment not required.

## Section 16. Other Information

The information contained in this document only covers the hazards presented by this material, it DOES NOT constitute a workplace risk assessment. See sections 11 for toxicological information and section 12 for ecological information.

Revision date: 06 October 2014

Reviewed by chemist: 06 October 2014

Printed date: 29 March 2017

Copyright: 2017 Prime Chemicals