

## Section 1. Identification

### 1.1 Product Identifier

1353

Product Name POTASSIUM PERSULPHATE pure

CAS Number 7727-21-1

REACH Registration No 01-2119495676-19-XXXX

Molecular Formula  $K_2S_2O_8$  =270.31

### 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

Vickers Laboratories Ltd



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### 1.4 Emergency Telephone

(08:00-16:30) +44(0) 113 2362811

(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

Oxidising solid, category 3

Acute toxicity, category 4 (oral)

Skin corrosion/irritation, category 2

Serious eye damage/irritation, category 2

Respiratory sensitization, category 1

Skin sensitization, category 1

Spec target organ tox - single, category 3

H272: May intensify fire; oxidizer.

H302: Harmful if swallowed.

H315: Causes skin irritation.

H319: Causes serious eye irritation.

H334: May cause allergy or asthma symptoms or breathing difficulties if inhaled.

H317: May cause an allergic skin reaction.

H335: May cause respiratory irritation.

### 2.2 Label elements

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

Signal word Danger

Hazard Pictograms



**Hazard Statements** May intensify fire; oxidizer. Harmful if swallowed. Causes serious eye irritation. May cause respiratory irritation. Causes skin irritation. May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause an allergic skin reaction.

**Precautionary Statements** Keep away from heat / sparks/open flames/hot surfaces - No smoking. Keep / Store away from clothing / combustible materials. Take any precaution to avoid mixing with combustibles... Wear protective gloves / protective clothing / eye protection.

## Section 3. Composition

### 3.1 Substances

| Component             | CAS No.   | EEC No.   | REACH No.             | Conc w/w | CLP Classification (1272/2008/CE)   |
|-----------------------|-----------|-----------|-----------------------|----------|---|
| Potassium persulphate | 7727-21-1 | 231-781-8 | 01-2119495676-19-XXXX | >99%     | Ox. Sol. 3, Acute Tox. 4 (O), Skin Irrit. 2, Eye Irrit. 2, Resp. Sens. 1, Skin Sens. 1, STOT SE 3 (I) |

## 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. If discomfort persists OBTAIN MEDICAL ATTENTION.   |
| Inhalation                           | Remove from exposure. Keep warm and at rest. In severe cases or if exposure has been great, OBTAIN MEDICAL ATTENTION.   |
| Ingestion                            | If conscious give plenty of water to drink. Keep warm and at rest. If there is difficulty in breathing give oxygen if available. If breathing stops or shows signs of failing, apply artificial resuscitation. OBTAIN MEDICAL ATTENTION URGENTLY. |
| Personal protection for first aiders | Wear protective gloves / eye protection.  |

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

No further relevant information available.

### 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 | Water spray.       |
| Unsuitable Media    | Nothing specified. |

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

|         |  |
|---------|--|
| Hazards | May evolve toxic fumes if involved in a fire. Mixtures with combustible materials are flammable. Mixtures with finely divided combustible materials can react explosively. |
|---------|--|

### 5.3 Advice for firefighters

|                         |  |
|-------------------------|--|
| Advice for firefighters | Evacuate area immediately. Keep up wind. Avoid exposure to toxic vapours and fumes. Fire-fighters should wear protective clothing and breathing apparatus. |
|-------------------------|--|

## Section 6. Accidental Release Measures

## 6.1 Personal precautions, protective equipment and emergency procedures

Personal Protection Evacuate area immediately. If contact with acid is possible, use full protective clothing and breathing apparatus.

## 6.2 Environmental precautions

Environmental Keep 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 Shovel/sweep up into container for removal Wash area down with copious amounts of water.  
Minor Spillage 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 dust. Do not allow to contaminate clothing.  
Ensure Local Exhaust Ventilation maintains dust concentrations to a minimum.

## 7.2 Conditions for safe storage, including any incompatibilities

Well ventilated, cool, dry storage . Store in a suitable area for oxidising agents. Keep well separated from combustible materials.

## 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) |
| Potassium persulphate | 7727-21-1 | >99%          | -                         | -                        |

Exposure data source(s) No occupational exposure data currently available.

## 8.2 Exposure controls

Respiratory Protection If process creates significant amounts of dust use L.E.V. or wear suitable dust mask.  
Hand Protection Wear gloves.  
Eye Protection Use tightly fitting chemical splash proof glasses or goggles.  
Skin Protection Avoid contact with skin. 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 White crystalline solid.  
Odour No specific odour.  
pH 3 @ 20°C solution.  
Boiling Point Not available  
Melting Point 100 °C (Decomposition)  
Flash Point Not applicable  
Upper Flammable Limit Not applicable  
Lower Flammable Limit Not applicable  
Auto Ignition Not applicable  
Explosive Properties No.

|                      |                           |
|----------------------|---------------------------|
| Oxidising Properties | A strong oxidising agent. |
| Vapour Pressure      | Not applicable            |
| Relative Density     | 1.3900                    |
| Water Solubility     | 50%                       |

## 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 but decomposes rapidly above 100C.                                    |
| 10.3 Possibility of hazardous reactions | No data available.   |
| 10.4 Conditions to Avoid                | Will undergo self accelerating decomposition above 170C. Avoid contact with rust and traces of metal |
| 10.5 Incompatible Materials             | Alkalis. Combustible materials.  |
| 10.6 Hazardous Decomposition Products   | Decomposes to form toxic fumes of oxides of sulphur, flammable oxygen and toxic ozone.               |

## Section 11. Toxicological Information

### 11.1 Information on toxicological effects

|                      |   |
|----------------------|---|
| Eyes                 | Causes serious eye irritation.  |
| Skin                 | The solid and solutions may be irritating to the skin. May cause skin sensitisation.  |
| LD50 Skin            | Not available   |
| Ingestion            | Harmful if swallowed. Causes immediate irritation of the mouth, throat and gastro-intestinal tract.                                     |
| LD50 Oral            | 1000mg/kg Rat   |
| Inhalation           | Inhalation of dust will produce irritation of the eyes, nose, throat and respiratory tract. May cause sensitisation by dust inhalation. |
| LD50 Inhalation      | Not available   |
| TCLo                 | Not available   |
| Carcinogenicity      | Not considered to be a carcinogen.  |
| Mutagenicity         | No information is available.  |
| Reproductive Effects | None identified.  |

## Section 12. Ecological

|                                       |   |
|---------------------------------------|---|
| 12.1 Toxicity                         | Low levels are readily bio-degraded in the environment. |
| LC50 Algal                            | Not available   |
| LC50 Crustacea                        | Not available   |
| LC50 Fish                             | Not 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 & vPvB assessment | Assessment not required.                                |
| 12.6 Other adverse effects            | None known at present.                                  |

## Section 13. Disposal Considerations

### 13.1 Waste treatment methods

|                        |  |
|------------------------|--|
| Disposal Methods       | Dispose of via an authorised waste disposal contractor to an approved waste disposal site, observing all local and national regulations. |
| Contaminated Packaging | Wash out containers with water.  |

## Section 14. Transport Information

|  |                                  |
|--|----------------------------------|
| <b>14.1 UN Number</b>                    | 1492                             |
| <b>14.2 Proper Shipping Name</b>         | Potassium persulphate            |
| <b>14.3 Transport classes</b>            |                                  |
| UN classification                        | 5.1                              |
| Subsidiary hazard(s)                     | None                             |
| Transport category                       | 3                                |
| ADR Hazard ID                            | 50                               |
| Tunnel Restriction Code                  | E                                |
| <b>14.4 Packing Group</b>                | III                              |
| <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 Oxidising solid, category 3; Acute toxicity, category 4 (oral); Skin corrosion/irritation, category 2; Serious eye damage/irritation, category 2; Respiratory sensitization, category 1; Skin sensitization, category 1; Spec target organ tox - single, category 3

Signal word Danger

Hazard Pictograms



Hazard Statements H272, H302, H319, H335, H315, H334, H317  
May intensify fire; oxidizer. Harmful if swallowed. Causes serious eye irritation. May cause respiratory irritation. Causes skin irritation. May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause an allergic skin reaction.

Precautionary Statements P210, P220, P221, P280  
Keep away from heat / sparks/open flames/hot surfaces - No smoking. Keep / Store away from clothing / combustible materials. Take any precaution to avoid mixing with combustibles... Wear protective gloves / protective clothing / eye 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.

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