SAFETY DATA SHEET
SYSTEM DESCALER / DE RUST THIN

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product identifier
Product name SYSTEM DESCALER / DE RUST THIN
Internal Id C902

1.2. Relevant identified uses of the substance or mixture and uses advised against
Identified uses Cleaning agent.

1.3. Details of the supplier of the safety data sheet
Supplier ARROW SOLUTIONS
RAWDON ROAD
MOIRA
SWADLINCOTE
DERBYSHIRE
DE12 6DA
TEL: +44 (0)1283 221044
EMERGENCY: +44 (0) 777 8505 330
FAX: +44 (0)1283 225731
sales@arrowchem.com

1.4. Emergency telephone number
+44 (0) 777 8505 330

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture
Classification (EC 1272/2008)
Physical and Chemical Hazards Not classified.
Human health Skin Corr. 1A - H314
Environment Not classified.

Classification (1999/45/EEC) C;R35.
The Full Text for all R-Phrases and Hazard Statements are Displayed in Section 16.

2.2. Label elements
Contains PHOSPHORIC ACID 41.9625%
Detagent Labelling:
>= 30% phosphates
< 5% non-ionic surfactants
Label In Accordance With (EC) No. 1272/2008
2.3. Other hazards

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.2. Mixtures

<table>
<thead>
<tr>
<th>PHOSPHORIC ACID ...%</th>
<th>30-60%</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAS-No.: 7664-38-2</td>
<td>EC No.: 231-633-2</td>
</tr>
</tbody>
</table>

Classification (EC 1272/2008)  
Skin Corr. 1B - H314

Classification (67/548/EEC)  
C;R34

The Full Text for all R-Phrases and Hazard Statements are Displayed in Section 16.

SECTION 4: FIRST AID MEASURES

4.1. Description of first aid measures

**Inhalation**
Provide fresh air, warmth and rest, preferably in a comfortable upright sitting position. Get medical attention if any discomfort continues.

**Ingestion**
Rinse mouth thoroughly. DO NOT INDUCE VOMITING! Get medical attention.

**Skin contact**
Rinse the skin immediately with lots of water. Get medical attention if irritation persists after washing.

**Eye contact**
Immediately flush with plenty of water for up to 15 minutes. Remove any contact lenses and open eyelids widely. If irritation persists: Seek medical attention and bring along these instructions.

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

**Inhalation**
Upper respiratory irritation.

**Ingestion**
May cause chemical burns in mouth and throat.

**Skin contact**
May cause serious chemical burns to the skin.

**Eye contact**
Extreme irritation of eyes and mucous membranes, including burning and tearing.

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

SECTION 5: FIREFIGHTING MEASURES

5.1. Extinguishing media

**Extinguishing media**
This product is not flammable. Use fire-extinguishing media appropriate for surrounding materials.

5.2. Special hazards arising from the substance or mixture
Hazardous combustion products
Fire or high temperatures create: Corrosive gases/vapours/fumes of: Phosphoric acid mist.

5.3. Advice for firefighters
Special Fire Fighting Procedures
No specific fire fighting procedure given.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures
Wear protective clothing as described in Section 8 of this safety data sheet.

6.2. Environmental precautions
Do not discharge onto the ground or into water courses.

6.3. Methods and material for containment and cleaning up
Dam and absorb spillage with sand, sawdust or other absorbent. Neutralise with alkaline material (Lime, crushed limestone, sodium bicarbonate or soda ash). Flush area with water.

6.4. Reference to other sections
Wear protective clothing as described in Section 8 of this safety data sheet.

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for safe handling
Avoid spilling, skin and eye contact.

7.2. Conditions for safe storage, including any incompatibilities
Store in closed original container at temperatures between 0°C and 40°C.

Storage Class
Corrosive storage.

7.3. Specific end use(s)
The identified uses for this product are detailed in Section 1.2.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

<table>
<thead>
<tr>
<th>Name</th>
<th>STD</th>
<th>TWA - 8 Hrs</th>
<th>STEL - 15 Min</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHOSPHORIC ACID ...%</td>
<td>WEL</td>
<td>1 mg/m3</td>
<td>2 mg/m3</td>
<td></td>
</tr>
</tbody>
</table>

WEL = Workplace Exposure Limit.

PHOSPHORIC ACID ...% (CAS: 7664-38-2)

<table>
<thead>
<tr>
<th>DNEL</th>
<th>Long Term</th>
<th>2.92</th>
</tr>
</thead>
</table>

8.2. Exposure controls
Protective equipment

Hand protection
Protective gloves must be used if there is a risk of direct contact or splash. Use protective gloves made of: Neoprene, nitrile, polyethylene or PVC.

Eye protection
Wear approved safety goggles.
Other Protection
Wear suitable protective clothing as protection against splashing or contamination.

Hygiene measures
Wash promptly if skin becomes contaminated. Remove contaminated clothing and wash the skin thoroughly with soap and water after work.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>Liquid</td>
</tr>
<tr>
<td>Colour</td>
<td>Colourless to Pale straw</td>
</tr>
<tr>
<td>Odour</td>
<td>Acidic</td>
</tr>
<tr>
<td>Solubility</td>
<td>Completely soluble in water</td>
</tr>
<tr>
<td>Relative density</td>
<td>1.28</td>
</tr>
<tr>
<td>pH-Value, Conc. Solution</td>
<td>&lt;2.0</td>
</tr>
</tbody>
</table>

9.2. Other information

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity
Exothermic reaction with: Strong alkalis.

10.2. Chemical stability
Stable under normal temperature conditions and recommended use.

10.3. Possibility of hazardous reactions
Not determined.

10.4. Conditions to avoid
Reacts with alkalis and amines generating excessive heat. Avoid contact with: Strong alkalis. Oxidising materials.

10.5. Incompatible materials
Materials To Avoid
Strong alkalis.

10.6. Hazardous decomposition products
Fire or high temperatures create: Corrosive gases/vapours/fumes of: Phosphoric acid mist.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

Inhalation
May cause irritation to the respiratory system.

Ingestion
May cause chemical burns in mouth and throat. Gastrointestinal symptoms, including upset stomach.

Skin contact
Causes severe burns.

Eye contact
Extreme irritation of eyes and mucous membranes, including burning and tearing.

SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicity
Not regarded as dangerous for the environment.
12.1. Toxicity
Acute Toxicity - Fish
Not determined.

12.2. Persistence and degradability
Degradability
The product is expected to be biodegradable.

12.3. Bioaccumulative potential
Bioaccumulative potential
Will not bio-accumulate.

12.4. Mobility in soil
Mobility:
The product is soluble in water.

12.5. Results of PBT and vPvB assessment
Not Classified as PBT/vPvB by current EU criteria.

12.6. Other adverse effects
Not determined.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods
Dispose of waste and residues in accordance with local authority requirements.

SECTION 14: TRANSPORT INFORMATION

14.1. UN number
UN No. (ADR/RID/ADN) 1760
UN No. (IMDG) 1760
UN No. (ICAO) 1760

14.2. UN proper shipping name
Proper Shipping Name CORROSIVE LIQUID N.O.S. (Phosphoric acid)

14.3. Transport hazard class(es)
ADR/RID/ADN Class 8
ADR/RID/ADN Class Class 8: Corrosive substances.
IMDG Class 8
ICAO Class/DIVISION 8
Transport Labels

14.4. Packing group
ADR/RID/ADN Packing group II
IMDG Packing group II
ICAO Packing group II
14.5. Environmental hazards
Environmentally Hazardous Substance/Marine Pollutant
No.

14.6. Special precautions for user
Tunnel Restriction Code (E)

14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code
Not applicable.

SECTION 15: REGULATORY INFORMATION

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture
Uk Regulatory References
The Control of Substances Hazardous to Health Regulations 2002 (S.I 2002 No. 2677) with amendments.
Guidance Notes
Workplace Exposure Limits EH40.
EU Legislation

15.2. Chemical Safety Assessment

SECTION 16: OTHER INFORMATION

General information
Only trained personnel should use this material.
Revision Date 29/05/13
Revision 1.1
Supersedes date 01/11/2011
Risk Phrases in Full
R34 Causes burns.
R35 Causes severe burns.
Hazard Statements in Full
H314 Causes severe skin burns and eye damage.

Disclaimer
This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.