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

1.1. Product identifier
Product form: Wet Mixture
Product name: 22 CAULK MIX
CAS No: 02.250
Product group: Finished Goods
Other means of identification: Phosphate Bonded Repair filler

1.2. Relevant identified uses of the substance or mixture and uses advised against
1.2.1. Relevant identified uses
Industrial/Professional use spec: Industrial
For professional use only
Use of the substance/mixture: Refractory

1.3. Details of the supplier of the safety data sheet
Resco Products (UK) Limited
Newbold Works, Melbourne Road, Lount
LE65 1PL Ashby-de-la-Zouch - England
Adrian.Hudson@Rescoproducts.com

1.4. Emergency telephone number
Emergency number: + 44 (0) 1530 222694

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture
Classification according to Regulation (EC) No. 1272/2008 [CLP]
H318 H315

2.2. Label elements
Labelling according to Regulation (EC) No. 1272/2008 [CLP]
Hazard pictograms (CLP):

Signal word (CLP): Danger
Hazard statements (CLP): H314 – Causes severe skin burns & eye damage
Precautionary statements (CLP): P280 - Wear eye protection, Dust mask, protective gloves
P301+P330+P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower
P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
P337+P313 - If eye irritation persists: Get medical advice/attention
P363 Wash contaminated clothing before reuse.
P405 Store locked up.
P260 - Do not breathe dust / vapours
P501 Dispose of contents/containers in accordance with local regulations.

2.3. Other hazards
No additional information available

SECTION 3: Composition/information on ingredients

3.1. Substance
Not applicable

3.2. Mixture

<table>
<thead>
<tr>
<th>Name</th>
<th>Product identifier</th>
<th>%</th>
<th>Classification according to Directive 67/548/EEC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Orthophosphoric Acid</td>
<td>(CAS No) 7664-38-2 (EC no) 231-633-2</td>
<td>15-20</td>
<td>C; R34 Corrosive</td>
</tr>
</tbody>
</table>

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Full text of R- and H-phrases: see section 16
SECTION 4: First aid measures

4.1. Description of first aid measures
First-aid measures general: Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).
First-aid measures after inhalation: Remove person from source of contamination and keep comfortable for breathing. Allow victim to breathe fresh air. Allow the victim to rest.
First-aid measures after skin contact: Wash with plenty of soap and water.
First-aid measures after eye contact: IF IN EYES: Rinse immediately with plenty of water. Remove contact lenses, if present and easy to do. Continue rinsing for 15 minutes & seek medical attention.
First-aid measures after ingestion: Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention. Call a poison center or a doctor if you feel unwell.

4.2. Most important symptoms and effects, both acute and delayed
Symptoms/injuries after inhalation: Coughing, chest tightness, feeling of chest pressure.,
Symptoms/injuries after skin contact: Causes skin irritation.
Symptoms/injuries after eye contact: Causes eye irritation.

4.3. Indication of any immediate medical attention and special treatment needed
Medical Supervision for at least 48 hrs.

SECTION 5: Firefighting measures

5.1. Extinguishing media
Suitable extinguishing media: Use extinguishing media appropriate for surrounding fire.
Unsuitable extinguishing media: No unsuitable extinguishing media known.

5.2. Special hazards arising from the substance or mixture
Fire hazard: Not flammable.
Explosion hazard: In a fire or heated a pressure increase may occur and the container may burst.
Hazardous decomposition products in case of fire: None.

5.3. Advice for firefighters
Firefighting instructions: Exercise caution when fighting any chemical fire. Prevent fire-fighting water from entering environment.
Protection during firefighting: Do not enter fire area without proper protective equipment, including respiratory protection. Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures
6.1.1. For non-emergency personnel
Emergency procedures: Do not touch or walk through spilt material. Wear appropriate personnel protective equipment.

6.1.2. For emergency responders
Protective equipment: Do not attempt to take action without suitable protective equipment. Equip cleanup crew with proper protection. For further information refer to section 8: "Exposure controls/personal protection".
Emergency procedures: Ventilate area.

6.2. Environmental precautions
Avoid release to the environment. Prevent entry to sewers and public waters.

6.3. Methods and material for containment and cleaning up
Methods for cleaning up: Absorb liquid components with liquid-binding material. Use neutralizing agent. Dispose contaminated material as waste according to item 13. Ensure adequate ventilation.
Other information: Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections
See Heading 8. Exposure controls and personal protection. For further information refer to section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling
Precautions for safe handling: Ensure good ventilation of the work station. Wear personal protective equipment (See Section 8). Do not handle until all safety precautions have been read and understood. Do not get into eyes or on skin or clothing. Keep in original container or approved alternative made from compatible material. Empty containers contain residue & can be hazardous.
Hygiene measures: Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities
Storage conditions: Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well ventilated area, away from incompatible materials (see section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination.
Incompatible products: Strong acids.
Incompatible materials: Strong acids.

7.3. Specific end use(s)
No additional information available
SECTION 8: Exposure controls/personal protection

8.1. Control parameters

<table>
<thead>
<tr>
<th>Orthophosphoric Acid (7664-38-2)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>IOELV (EU)</td>
<td>Short Term Value (mg/m³)</td>
</tr>
<tr>
<td></td>
<td>Long Term Value (mg/m³)</td>
</tr>
<tr>
<td></td>
<td>2</td>
</tr>
</tbody>
</table>

Exposure limit values for the other components

<table>
<thead>
<tr>
<th>Aluminium oxide, non-fibrous (1344-28-1)</th>
</tr>
</thead>
<tbody>
<tr>
<td>United Kingdom</td>
</tr>
</tbody>
</table>

8.2. Exposure controls

- **Appropriate engineering controls**: Ensure good ventilation of the work station.
- **Personal protective equipment**: Avoid all unnecessary exposure.
- **Hand protection**: Wear protective gloves
- **Eye protection**: Chemical goggles or safety glasses.
- **Skin and body protection**: Wear suitable protective acid resistant clothing.
- **Respiratory protection**: Wear appropriate mask.
- **Environmental exposure controls**: Avoid release to the environment.
- **Other information**: Do not eat, drink or smoke during use.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

- **Physical state**: Liquid Paste
- **Appearance**: Liquid Paste.
- **Colour**: White
- **Odour**: Acetic Odor.
- **Odour threshold**: Not applicable
- **pH**: 10% Solution <3
- **Relative evaporation rate (butylacetate=1)**: Not applicable
- **Relative evaporation rate (ether=1)**: Not applicable
- **Melting point**: > 1649 °C
- **Freezing point**: ~0 °C
- **Boiling point**: Not applicable
- **Flash point**: Not applicable
- **Critical temperature**: Not applicable
- **Auto-ignition temperature**: Not applicable
- **Decomposition temperature**: No data available
- **Flammability (solid, gas)**: None
- **Vapour pressure**: Not Applicable
- **Vapour pressure at 50 °C**: Not Applicable
- **Critical pressure**: Not applicable
- **Relative vapour density at 20 °C**: No data available
- **Relative density**: No data available
- **Solubility**: Water: Slight
- **Log Pow**: No data available
- **Viscosity, kinematic**: Not applicable
- **Viscosity, dynamic**: Not Applicable
- **Explosive properties**: No data available
- **Oxidising properties**: No data available
- **Explosive limits**: Not applicable

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

Air setting. Corrosive action on metals. Reacts with Alkalis (lyes)

10.2. Chemical stability

No decomposition if used and stored according to specifications.

10.3. Possibility of hazardous reactions

React with metals forming hydrogen. Reacts with alkali (lyes).

10.4. Conditions to avoid

Avoid dust when Grinding dried product.

10.5. Incompatible materials

Alkalis, metals.
10.6. Hazardous decomposition products
Phosphorus oxides (e.g. P2O5)

SECTION 11: Toxicological information

11.1. Information on toxicological effects

| Acute toxicity | Acute toxicity: · LD/LC50 values relevant for classification: Oral LD50 2600 mg/kg (rat) (equivalent to OECD 423) Specific symptoms in biological assay: Phosphoric acid is classified as corrosive to the skin, therefore, no need to perform an acute dermal and an acute inhalative toxicity tests. Swallowing will lead to a strong caustic effect on mouth and throat and to the danger of perforation of esophagus and stomach. This substance is not considered to have bioaccumulative potential as it is highly soluble in water and phosphate levels in the body are regulated via homeostasis.
| Skin corrosion/irritation | H314 – Causes severe skin burns & eye damage
| Serious eye damage/irritation | H314 – Causes severe skin burns & eye damage
| Germ cell mutagenicity | Not classified (Based on available data, the classification criteria are not met)
| Carcinogenicity | Not classified (Based on available data, the classification criteria are not met)
| Reproductive toxicity | NOAEL ≥ 500 mg/kg bw/day; rat; oral (OECD 422) Developmental toxicity: NOAEL ≥ 410 mg/kg bw/day; rat; oral Maternal toxicity: NOAEL ≥ 410 mg/kg bw/day; rat; oral (equivalent to OECD 414)
| Specific target organ toxicity (single exposure) | Not classified (Based on available data, the classification criteria are not met)
| Specific target organ toxicity (repeated exposure) | Not classified (Based on available data, the classification criteria are not met)
| Aspiration hazard | Not classified (Based on available data, the classification criteria are not met)
| Potential adverse human health effects and symptoms | Based on available data, the classification criteria are not met.

SECTION 12: Ecological information

12.1. Toxicity

Orthophosphoric Acid (7664-38-2)
Fish (Bluegill) LC50 (96 hour) >100mg/l Fish Mortality is caused by Low pH values
Aquatic invertibrates (Daphnia magna) EC 50 (48 hour) >100 mg/l

12.2. Persistence and degradability

22 Caulk Mix (Mixture)
Persistence and degradability Not established.

Orthophosphoric Acid (7664-38-2)
Persistence and degradability The substance is inorganic; therefore no biodegradation tests are applicable. Phosphoric acid dissociates in water into H3O+, H2PO4–, HPO4- - ions, which cannot be further degraded.

12.3. Bioaccumulative potential

22 Caulk Mix (Mixture)
Bioaccumulative potential Not established.

Orthophosphoric Acid (7664-38-2)
Bioaccumulative potential Does not accumulate in organisms This substance is highly water soluble and dissociating. Phosphoric acid dissociates in water into H3O+, H2PO4–, HPO4- - ions, which are ubiquitous in the environment. Phosphoric acid is absorbed in form of phosphate anions. This anion is an essential component of the body.

12.4. Mobility in soil
This substance is highly water soluble and dissociating. When spilled onto soil, phosphoric acid will infiltrate downward and will be partially neutralized by dissolving some of the soil material. On reaching the ground table phosphoric acid will be dispersed and diluted. Therefore, the environmental assessment should be limited to the aquatic compartment.

12.5. Results of PBT and vPvB assessment
No additional information available

12.6. Other adverse effects

Additional information | Avoid release to the environment

SECTION 13: Disposal considerations

13.1. Waste treatment methods
Waste disposal recommendations | Must not be disposed together with household garbage. Do not allow product to reach sewage system Dispose in a safe manner in accordance with local/national regulations. Empty containers may contain some residue. This material & container must be disposed of in a safe way.

SECTION 14: Transport information

In accordance with ADR / RID / IMDG / IATA / ADN

15/04/2015 EN (English)
22 Caulk Mix
Safety Data Sheet
according to Regulation (EC) No. 453/2010

14.1. UN number
Not regulated for transport

14.2. UN proper shipping name
Proper Shipping Name (ADR) : Not applicable
Proper Shipping Name (IMDG) : Not applicable
Proper Shipping Name (IATA) : Not applicable
Proper Shipping Name (ADN) : Not applicable
Proper Shipping Name (RID) : Not applicable

14.3. Transport hazard class(es)
ADR
Transport hazard class(es) (ADR) : Not applicable
IMDG
Transport hazard class(es) (IMDG) : Not applicable
IATA
Transport hazard class(es) (IATA) : Not applicable
ADN
Transport hazard class(es) (ADN) : Not applicable
RID
Transport hazard class(es) (RID) : Not applicable

14.4. Packing group
Packing group (ADR) : Not applicable
Packing group (IMDG) : Not applicable
Packing group (IATA) : Not applicable
Packing group (ADN) : Not applicable
Packing group (RID) : Not applicable

14.5. Environmental hazards
Dangerous for the environment : No
Marine pollutant : No
Other information : No supplementary information available

14.6. Special precautions for user
14.6.1. Overland transport
Not subject to ADN : No
14.6.2. Transport by sea
14.6.3. Air transport
14.6.4. Inland waterway transport
Not subject to ADN : No
14.6.5. Rail transport
Carriage prohibited (RID) : No

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code
Not applicable

SECTION 15: Regulatory information
15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture
15.1.1. EU-Regulations
Contains no substances with Annex XVII restrictions
22 Caulk Mix is not on the REACH Candidate List
Contains no substance on the REACH candidate list
Contains no REACH Annex XIV substances
15.1.2. National regulations
No additional information available

15.2. Chemical safety assessment
No chemical safety assessment has been carried out

SECTION 16: Other information
Other information : Since this product is a proprietary mixture of unique ingredients & is supplied in a premixed (Wet) condition, Airborne dust is not readily generated. This MSDS is prepared to alert Customers and other users to the various components of the product and their relative quantity and toxicity in the product as provided. The user must review his/her own circumstances and then determine what is required to establish a safe working environment.

SDS EU (REACH Annex II)
Although reasonable care has been taken in the preparation of the information contained herein, Resco extends no warranties, makes no representation and assumes no responsibility as to the accuracy or suitability of such information for application to purchaser's intended purposes or for consequences of its use.