SAFETY DATA SHEET
UREA PHOSPHATE POWDER

1. IDENTIFICATION OF THE SUBSTANCE / PREPARATION AND OF THE COMPANY / UNDERTAKING

Product identifier:
Product name: UREA PHOSPHATE POWDER
REACH registered name: UREA PHOSPHATE
REACH registered number(s): 01-2119489460-34-####
CAS number: 4861-19-2
EINECS number: 225-464-3

Relevant identified uses of the substance or mixture and uses advised against:
Use of substance / mixture: PC4: Anti-Freeze and de-icing products. PC7: Base metals and alloys. PC8: Biocidal products (e.g. Disinfectants, pest control). PC12: Fertilizers. PC14: Metal surface treatment products, including galvanic and electroplating products. PC20: Products such as ph-regulators, flocculants, precipitants, neutralization agents. PC21: Laboratory chemicals.

Company name: Nexchem Ltd
Unit 1 Underwood Court
Elm Tree Avenue
Glenfield
Leicester
Leicestershire
LE3 8SG
Tel: 0116 2311130
Fax: 0116 2311124
Emergency Tel: +44 (0) 116 2877916 or +44 (0) 7714 303742 (24 Hours)
Email: sales@nexchem.co.uk

2. HAZARDS IDENTIFICATION

Classification of the substance or mixture
Classification under CHIP: C: R34
Classification under CLP: Skin Corr. 1B: H314
Most important adverse effects: Causes burns.

Label elements:
Label elements under CLP:
Hazard statements: H314: Causes severe skin burns and eye damage.
Signal words: Danger
Hazard pictograms: GHS05: Corrosion

[cont...]
Precautionary statements:
P264: Wash hands thoroughly after handling.
P280: Wear protective gloves/protective clothing/eye protection/face protection.
P285: In case of inadequate ventilation wear respiratory protection.
P305+351+338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P303+361+353: IF ON SKIN (or hair): Remove immediately all contaminated clothing. Rinse skin with water.
P502: Refer to manufacturer/supplier for information on recovery/recycling.

Label elements under CHIP:

Hazard symbols: Corrosive.

Risk phrases: R34: Causes burns.

Safety phrases: S24/25: Avoid contact with skin and eyes.
S26: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S28: After contact with skin, wash immediately with plenty of water.
S36/37/39: Wear suitable protective clothing, gloves and eye / face protection.
S38: In case of insufficient ventilation, wear suitable respiratory equipment.
S59: Refer to manufacturer / supplier for information on recovery / recycling.

Other hazards:
PBT: This product is not identified as a PBT/vPvB substance.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Substances:

Chemical identity: UREA PHOSPHATE
CAS number: 4861-19-2
EINECS number: 225-464-3
REACH registered number(s): 01-2119489460-34-####

4. FIRST AID MEASURES

Description of first aid measures:

Skin contact: Remove all contaminated clothes and footwear immediately unless stuck to skin. Drench the affected skin with running water for 10 minutes or longer if substance is still on skin. Transfer to hospital if there are burns or symptoms of poisoning.

Eye contact: Bathe the eye with running water for 15 minutes. Transfer to hospital for specialist examination.

Ingestion: Wash out mouth with water. Do not induce vomiting. Give 1 cup of water to drink every 10 minutes. If unconscious, check for breathing and apply artificial respiration if necessary. If unconscious and breathing is OK, place in the recovery position. Transfer to hospital as soon as possible.

[cont...]
Inhalation: Remove casualty from exposure ensuring one's own safety whilst doing so. If unconscious and breathing is OK, place in the recovery position. If conscious, ensure the casualty sits or lies down. If breathing becomes bubbly, have the casualty sit and provide oxygen if available. Transfer to hospital as soon as possible.

Most important symptoms and effects, both acute and delayed:

Skin contact: Blistering may occur. Progressive ulceration will occur if treatment is not immediate. Severe burns may occur.

Eye contact: Corneal burns may occur. May cause permanent damage. There may be severe pain. May cause permanent blindness.

Ingestion: Corrosive burns may appear around the lips. Blood may be vomited. There may be bleeding from the mouth or nose.

Inhalation: There may be shortness of breath with a burning sensation in the throat. Exposure may cause coughing or wheezing.

Delayed / immediate effects: Immediate effects can be expected after short-term exposure.

Indication of any immediate medical attention and special treatment needed:

Immediate / special treatment: Eye bathing equipment should be available on the premises. Immediate medical attention is required.

5. FIRE-FIGHTING MEASURES

Extinguishing media: Suitable extinguishing media for the surrounding fire should be used. Use water spray to cool containers.

Special hazards arising from the substance or mixture:

Exposure hazards: Corrosive. In combustion emits toxic fumes.

Advice for fire-fighters: Wear self-contained breathing apparatus. Wear protective clothing to prevent contact with skin and eyes.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures:

Personal precautions: Notify the police and fire brigade immediately. If outside keep bystanders upwind and away from danger point. Mark out the contaminated area with signs and prevent access to unauthorised personnel. Do not attempt to take action without suitable protective clothing – see section 8 of SDS. Do not create dust.

Environmental precautions: Do not discharge into drains or rivers.
Methods and material for containment and cleaning up:

Clean-up procedures: Clean-up should be dealt with only by qualified personnel familiar with the specific substance. Transfer to a closable, labelled salvage container for disposal by an appropriate method.

Reference to other sections: Refer to section 8 of SDS. Refer to section 13 of SDS.

7. HANDLING AND STORAGE

Precautions for safe handling:

Handling requirements: Avoid direct contact with the substance. Ensure there is sufficient ventilation of the area. Do not handle in a confined space. Avoid the formation or spread of dust in the air.

Conditions for safe storage, including any incompatibilities:

Storage conditions: Store in cool, well ventilated area. Keep container tightly closed.

Suitable packaging: Must only be kept in original packaging.

Specific end use(s): No data available.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Control parameters:

Hazardous ingredients: UREA PHOSPHATE

Workplace exposure limits: Respirable dust

<table>
<thead>
<tr>
<th>State</th>
<th>8 hour TWA</th>
<th>15 min. STEL</th>
<th>8 hour TWA</th>
<th>15 min. STEL</th>
</tr>
</thead>
<tbody>
<tr>
<td>UK</td>
<td>1 mg/m³</td>
<td>2 mg/m³</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

DNEL/PNEC Values

<table>
<thead>
<tr>
<th>Hazardous ingredients</th>
<th>Type</th>
<th>Exposure</th>
<th>Value</th>
<th>Population</th>
<th>Effect</th>
</tr>
</thead>
<tbody>
<tr>
<td>UREA PHOSPHATE</td>
<td>DNEL</td>
<td>Inhalation (repeated dose)</td>
<td>2.92 mg/m³</td>
<td>Workers</td>
<td>Local</td>
</tr>
<tr>
<td></td>
<td>DNEL</td>
<td>Inhalation (repeated dose)</td>
<td>0.73 mg/m³</td>
<td>General Population</td>
<td>Local</td>
</tr>
</tbody>
</table>

Exposure controls:

Engineering measures: Ensure there is sufficient ventilation of the area. Ensure there is exhaust ventilation of the area. Ensure all engineering measures mentioned in section 7 of SDS are in place.

Respiratory protection: Particle filter class P3SL (EN143). Respiratory protective device with particle filter.

Hand protection: Protective gloves. Breakthrough time of the glove material > 2 hours. Gloves (acid resistant). BS EN 374:2003

Eye protection: Tightly fitting safety goggles. Ensure eye bath is to hand.

Skin protection: Protective clothing.

Environmental: Refer to specific Member State legislation for requirements under Community environmental legislation.

[cont…]
9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties:

- **State:** Solid
- **Colour:** White
- **Odour:** Odourless
- **Evaporation rate:** Not applicable.
- **Oxidising:** Non-oxidising (by EC criteria)
- **Solubility in water:** Highly soluble
- **Viscosity:** No data available.
- **Boiling point/range °C:** No data available.
- **Flammability limits %: lower:** No data available.
- **Flammable point °C:** No data available.
- **Auto flammability °C:** No data available.
- **Relative density:** 1.77 kg/L
- **VOC g/l:** No data available.

**Other information:** No data available.

10. STABILITY AND REACTIVITY

- **Reactivity:** Stable under recommended transport or storage conditions.
- **Chemical stability:** Stable under normal conditions.
- **Hazardous reactions:** Hazardous reactions will not occur under normal transport or storage conditions. Decomposition may occur on exposure to conditions or materials listed below.
- **Conditions to avoid:** Heat.
- **Hazardous decomposition products:** In combustion emits toxic fumes.

11. TOXICOLOGICAL INFORMATION

**Hazardous ingredients:**

**UREA PHOSPHATE**

**ORAL RAT LD50**

<table>
<thead>
<tr>
<th>Hazard</th>
<th>Route</th>
<th>Basis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Skin corrosion/irritation</td>
<td>DRM</td>
<td>Based on test data</td>
</tr>
<tr>
<td>Serious eye damage/irritation</td>
<td>OPT</td>
<td>Based on test data</td>
</tr>
</tbody>
</table>

**Symptoms / routes of exposure:**

- **Skin contact:** Blistering may occur. Progressive ulceration will occur if treatment is not immediate. Severe burns may occur.

[cont…]
Eye contact: Corneal burns may occur. May cause permanent damage. There may be severe pain. May cause permanent blindness.

Ingestion: Corrosive burns may appear around the lips. Blood may be vomited. There may be bleeding from the mouth or nose.

Inhalation: There may be shortness of breath with a burning sensation in the throat. Exposure may cause coughing or wheezing.

Delayed / immediate effects: Immediate effects can be expected after short-term exposure.
Other information: Not applicable.

12. ECOLOGICAL INFORMATION

Toxicity:
Ecotoxicity values: No data available.

Persistence and degradability: Biodegradable.

Bioaccumulative potential: No bioaccumulation potential.

Mobility in soil: Soluble in water.

Results of PBT and vPvB assessment:
PBT identification: This product is not identified as a PBT/vPvB substance.

Other adverse effects: Negligible ecotoxicity.

13. DISPOSAL CONSIDERATIONS

Waste treatment methods:
Disposal operations: Transfer to a suitable container and arrange for collection by specialised disposal company. Biological treatment not specified elsewhere which results in final compounds or mixtures which are discarded by means of any of the other possible disposal operations. Physico-chemical treatment not specified elsewhere in this Annex which results in final compounds or mixtures which are discarded by means of any of the other possible disposal operations (e.g. evaporation, drying, calcination, etc.).

Recovery operations: Recycling/reclamation of organic substances which are not used as solvents (including composting and other biological transformation processes). Land treatment resulting in benefit to agriculture or ecological improvement.

Disposal of packaging: Dispose of in a regulated landfill site or other method for hazardous or toxic wastes.
NB: The user's attention is drawn to the possible existence of regional or national regulations regarding disposal.
14. TRANSPORT INFORMATION

UN number: UN1759
UN proper shipping name: CORROSIVE SOLID, N.O.S. (UREA PHOSPHATE)
Transport hazard class(es): 8
Packing group: III
Environmentally hazardous: No                Marine pollutant: No
Special precautions: No special precautions.
Tunnel code: E
Transport category: 3

15. REGULATORY INFORMATION

Safety, health and environmental regulations/legislation specific for the substance or mixture:
Specific regulations: Not applicable.
Chemical safety assessment: A chemical safety assessment has not been carried out for the substance or the mixture by the supplier.

Note: The regulatory information given above only indicates the principal regulations specifically Applicable to the product described in the safety data sheet. The user's attention is drawn to the possible existence of additional provisions which complete these regulations. Refer to all applicable national, international and local regulations or provisions.

16. OTHER INFORMATION

Other information: This safety data sheet is prepared in accordance with Commission Regulation (EU) No 453/2010.
* indicates text in the SDS which has changed since the last revision.

Phrases used in s.2 and s.3: H314: Causes severe skin burns and eye damage.
R34: Causes burns.

Legend to abbreviations: PNEC = predicted no effect level
                         DNEL = derived no effect level
                         LD50 = median lethal dose
                         LC50 = median lethal concentration
                         EC50 = median effective concentration
                         IC50 = median inhibitory concentration
                         dw = dry weight
                         bw = body weight
                         cc = closed cup
                         oc = open cup
                         MUS = mouse
                         GPG = guinea pig
                         RBT = rabbit

[cont…]
HAM = hamster
HMN = human
MAM = mammal
PGN = pigeon
IVN = intravenous
SCU = subcutaneous
SKN = skin
DRM = dermal
OCC = ocular/corneal
PCP = phycico-chemical properties

Legal disclaimer:
The information contained in this SDS does not constitute a risk assessment, and should not replace the user's own assessment of risks as required by other health and safety legislation. This advice is given by Nexchem Ltd who accept no legal liability for it except otherwise provided by law. The information contained herein is based on the present state of our knowledge and is intended to describe our products from the point of view of safety requirements. It should not therefore be construed as guaranteeing specific properties.