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

1.1 Product identifier

Product Name: Urea
CAS No.: 57-13-6
EC No.: 200-315-5
REACH Registration No.: 01-2119463277-33-0065

1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified Use(s): Fertiliser - industrial use.
Uses Advised Against: No information available.

1.3 Details of the supplier of the safety data sheet

Manufacturer
Company Identification: Abu Qir Fertilizers & Chemical Industries
Address of Manufacturer: El Tabia, Rasheed Road Alexandria, Egypt
Postal code: 21911
Telephone: +203 560 3053
Fax: +203 560 3047
E-mail: marketing@abuqir.com
Office hours

Supplier
Company Identification: Abu Qir Fertilizers & Chemical Industries
Address of Supplier: El Tabia, Rasheed Road Alexandria, Egypt
Postal code: 21911
Telephone: +203 560 3053
Fax: +203 560 3047
E-mail: marketing@abuqir.com
Office hours

1.4 Emergency telephone number

Emergency Phone No.: +203 560 3053 (7040-2400)
Contact: Health, Safety and Environment (HSE) Department

2. SECTION 2: HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture


2.2 Label elements

Product Name: Urea
Hazard Pictogram(s): None.
Signal Word(s): None.
Hazard Statement(s): None.
Precautionary Statement(s): None.
2.3 Other hazards
None known.

2.4 Additional Information
Handling and/or processing of this material may generate a dust which can cause irritation of the eyes, skin, nose and throat. Ingestion of large amount of urea may cause gastrointestinal and abdominal pain.

3. SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances

<table>
<thead>
<tr>
<th>HAZARDOUS INGREDIENT(S)</th>
<th>CAS No.</th>
<th>EC No. / REACH Registration No.</th>
<th>%W/W</th>
<th>Hazard Statement(s)</th>
<th>Hazard Pictogram(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Urea</td>
<td>57-13-6</td>
<td>200-315-5</td>
<td>01-2119463277-33-0000</td>
<td>≥98-≤99.4</td>
<td>Not classified</td>
</tr>
</tbody>
</table>

3.2 Mixtures
Not applicable.

4. SECTION 4: FIRST AID MEASURES

4.1 Description of first aid measures

Inhalation
If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing.

Skin Contact
Wash skin with water.

Eye Contact
Flush eyes with water for at least 15 minutes.

Ingestion
Wash out mouth with water.

4.2 Most important symptoms and effects, both acute and delayed
None anticipated. Treat symptomatically.

4.3 Indication of any immediate medical attention and special treatment needed
Unlikely to be required but if necessary treat symptomatically.

5. SECTION 5: FIREFIGHTING MEASURES

5.1 Extinguishing media
Suitable Extinguishing media
As appropriate for surrounding fire.

Unsuitable extinguishing media
None.

5.2 Special hazards arising from the substance or mixture
None anticipated. Heating may cause decomposition.

5.3 Advice for firefighters
Fire fighters should wear complete protective clothing including self-contained breathing apparatus.

6. SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures
Provide adequate ventilation. Wear suitable gloves if prolonged skin contact is likely.

6.2 Environmental precautions
SAFETY DATA SHEET

Do not release large quantities into the surface water or into drains.

6.3 Methods and material for containment and cleaning up
Sweep spilled substances into containers if appropriate moisten first to prevent dusting.

6.4 Reference to other sections
See Also Section 8, 13.

7. SECTION 7: HANDLING AND STORAGE

7.1 Precautions for safe handling
Ensure adequate ventilation. Do not eat, drink or smoke at the work place.
Wash hands thoroughly after handling.

7.2 Conditions for safe storage, including any incompatibilities
In case the material stored in closed container it must be cool, dry, isolated, well ventilated and away from heat and incompatibles. Do not use container made of brass or copper alloy or galvanised metals.

Storage temperature Ambient.
Storage life Stable under normal conditions.
Incompatible materials Avoid contact with strong oxidisers, acids, bases and nitrate. React with sodium or calcium hypochlorite to form explosive nitrogen trichloride.

7.3 Specific end use(s)
Fertiliser - industrial use.

8. SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters
8.1.1 Occupational Exposure Limits
No Occupational Exposure Limit assigned.

<table>
<thead>
<tr>
<th>Urea</th>
<th>DNEL / DMEL</th>
<th>Oral</th>
<th>Inhalation</th>
<th>Dermal</th>
</tr>
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<tbody>
<tr>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Industry - Long Term - Local effects</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Industry - Long Term - Systemic effects</td>
<td>292 mg/m³</td>
<td>580 mg/m³</td>
<td></td>
<td></td>
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<tr>
<td>Industry - Short term - Local effects</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Industry - Short term - Systemic effects</td>
<td>292 mg/m³</td>
<td>580 mg/m³</td>
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<tr>
<td>Consumer - Long Term - Local effects</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Consumer - Long Term - Systemic effects</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Urea</th>
<th>Environment</th>
<th>PNEC</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Aquatic Compartment (including sediment)</td>
<td>Fresh water 0.47 mg/l</td>
</tr>
<tr>
<td></td>
<td>Terrestrial Compartment</td>
<td></td>
</tr>
</tbody>
</table>
8.2 Exposure controls

8.2.1. Appropriate engineering controls
Ensure adequate ventilation.

8.2.2. Personal protection equipment

Eye Protection
Wear eye protection with side protection (EN166).

Skin protection
Not normally required. Wear suitable gloves if prolonged skin contact is likely.

Respiratory protection
Wear suitable respiratory protective equipment if processing involves working in areas where dusts or vapours are likely to be evolved.

Thermal hazards
Not applicable.

8.2.3. Environmental Exposure Controls
Do not release large quantities into the surface water or into drains.

9. SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance
Solid.
Colour : White.

Odour
Odourless, Pungent.

Odour threshold
Not established.

pH
7.2 @ 100 g/l

Melting point/freezing point
133.3 °C

Initial boiling point and boiling range
133°C (decomposes)

Flash Point
Not applicable.

Evaporation rate
Not applicable.

Flammability (solid, gas)
Non-flammable.

Upper/lower flammability or explosive limits
Not available.

Vapour pressure
0.0016 Pa @ 25°C

Vapour density
Not available.

Density (g/ml)
1.33 g/cm³

Relative density
1.33 g/cm³ @ 20 °C

Solubility(ies)
Solubility (Water) : 624 g/l @ 20 °C (Soluble )
Solubility (Other) : Not known.

Partition coefficient: n-octanol/water
-1.73 Log Pow

Auto-ignition temperature
Not applicable.

Decomposition Temperature (°C)
133 °C

Viscosity
Not applicable.
SAFETY DATA SHEET

Explosive properties  Not explosive.
Oxidising properties Not oxidising.

9.2 Other information
Granulometry  0.1-5 mm
Dissociation constant  <0.6 pKb

10. SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity
Stable under normal conditions.

10.2 Chemical Stability
Stable under normal conditions.

10.3 Possibility of hazardous reactions
No hazardous reactions known if used for its intended purpose.

10.4 Conditions to avoid
Avoid the creation of dust when handling and avoid all possible sources of ignition (spark or flame). Prevent dust accumulation. Avoid high temperature and moisture.

10.5 Incompatible materials
Avoid contact with strong oxidisers, acids, bases and nitrate. React with sodium or calcium hypochlorite to form explosive nitrogen trichloride.

10.6 Hazardous decomposition products
Under normal conditions of storage and use, hazardous decomposition products should not be produced.

11. SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects
Acute toxicity - Ingestion  Not classified.
Acute toxicity - Skin Contact  Not classified.
Acute toxicity - Inhalation  Not classified.
Skin corrosion/irritation  Not classified.
Serious eye damage/irritation  Not classified.
Skin sensitization data  Not classified.
Respiratory sensitization data  Not classified.
Germ cell mutagenicity  Not classified.
Carcinogenicity  Not classified.
Reproductive toxicity  Not classified.
Lactation  Not classified.
STOT - single exposure  Not classified.
STOT - repeated exposure  Not classified.
Aspiration hazard  Not classified.

11.2 Other information
Not known.
12. SECTION 12: ECOLOGICAL INFORMATION

12.1 Toxicity
Toxicity - Aquatic invertebrates  Low toxicity to invertebrates.
Toxicity - Fish  Low toxicity to fish.
Toxicity - Algae  Low toxicity to algae.
Toxicity - Sediment Compartment  Not classified.
Toxicity - Terrestrial Compartment  Not classified.

12.2 Persistence and Degradation
   Readily biodegradable, non-persistent.

12.3 Bioaccumulative potential
   The substance has no potential for bioaccumulation.

12.4 Mobility in soil
   Soluble in water. The substance is predicted to have high mobility in soil.

12.5 Results of PBT and vPvB assessment
   Not classified as PBT or vPvB.

12.6 Other adverse effects
   Not known.

13. SECTION 13: DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods
   Dispose at suitable refuse site.

13.2 Additional Information
   Disposal should be in accordance with local, state or national legislation.

14. SECTION 14: TRANSPORT INFORMATION

Not classified as hazardous for transport.

15. SECTION 15: REGULATORY INFORMATION

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

   European Regulations - Authorisations and/or Restrictions On Use
   Candidate List of Substances of Very High Concern for Authorisation  Not listed
   REACH: ANNEX XIV list of substances subject to authorisation  Not listed
   REACH: Annex XVII Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles  Not listed
SAFETY DATA SHEET

Community Rolling Action Plan (CoRAP) Not listed
Regulation (EC) N° 2037/2000 on substances that deplete the ozone layer Not listed

National regulations
Other Not known.

15.2 Chemical Safety Assessment
A REACH chemical safety assessment has not been carried out.

16. SECTION 16: OTHER INFORMATION
The following sections contain revisions or new statements:

LEGEND
Hazard Pictogram(s) None.
Hazard Pictogram(s) None.
Hazard Statement(s) None.
Precautionary Statement(s) None.

Acronyms
CAS : Chemical Abstracts Service
CLP : Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures
DNEL : Derived No Effect Level
EC : European Community
EINECS : European Inventory of Existing Commercial Chemical Substances
LTEL : Long term exposure limit
PBT : Persistent, Bioaccumulative and Toxic
PNEC : Predicted No Effect Concentration
REACH : Registration, Evaluation, Authorisation and Restriction of Chemicals
STEL : Short term exposure limit
STOT : Specific Target Organ Toxicity
vPvB : very Persistent and very Bioaccumulative

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