



济南久安酯类化工有限公司

JINAN JIUAN ESTER CHEMICAL CO., LTD

CHEMICAL INDUSTRIAL PARK, ZHANGQIU CITY, SHANDONG PROVINCE, CHINA

SDS-0312E-2016

SAFETY DATA SHEET

Urea

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

| | |
|---------------------------|---|
| Product identifier | Urea |
| Chemical name | Carbamide, Carbonyldiamide |
| Company name | Jinan Jiuan Ester Chemical Co., Ltd. |
| Address | Chemical Industrial Park, Zhangqiu City, Shandong Province, China |
| Telephone | 0086-531-82687186 |
| Website | www.pengbobio.com |
| E-mail | sales@pengbobio.com |

SECTION 2. HAZARDS IDENTIFICATION

| | |
|-------------------------|-----------------|
| Physical hazards | Not classified. |
| Health hazards | Not classified. |
| OSHA hazard(s) | Not classified. |

GHS Label elements

| | |
|-------------------------|----------------|
| Hazard symbol | No symbol. |
| Signal word | Not available. |
| Hazard statement | Not available. |

Precautionary statement

| | |
|--------------------------------|-----------------|
| Prevention | Not available |
| Response | Not available |
| Storage | Not available |
| Disposal | Not available. |
| Hazard(s) not otherwise | Not classified. |

RS

| | |
|-------------------------|-----|
| Hazard symbol(s) | Xi |
| R-phrases(s) | R38 |
| S-phrases(s) | S37 |

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Non-hazardous components

| Chemical name | Molecular formula | M.W. | EINECS No. | CAS No. | Weight percent |
|---------------|----------------------------------|-------|------------|---------|----------------|
| Urea | CH ₄ N ₂ O | 60.04 | 200-315-5 | 57-13-6 | 98-100 |

SECTION 4. FIRST AID MEASURES**Inhalation**

If breathing is difficult, remove to fresh air and keep at rest in a position comfortable for breathing.
Call a physician if symptoms develop or persist.

Skin contact

Rinse skin with water/shower. Get medical attention if irritation develops and persists

Eye contact

Rinse with water. Get medical attention if irritation develops and persists.

Ingestion

Rinse mouth. If ingestion of a large amount does occur, call a poison control center immediately.

Most important symptoms /effects, acute and delayed

None known.

Indication of immediate medical attention and special treatment needed

None known.

General information

Remove from exposure. Remove contaminated clothing. For treatment advice, seek guidance from an occupational health physician or other licensed health-care provider familiar with workplace chemical exposures. In the United States, the national poison control center phone number is 1-800-222-1222. If person is not breathing, give artificial respiration. If breathing is difficult, give oxygen if available. Persons developing serious hypersensitivity (anaphylactic) reactions must receive immediate medical attention.

SECTION 5. FIREFIGHTING MEASURES

Suitable extinguishing media Use fire-extinguishing media appropriate for surrounding materials. Water. Foam. Dry chemical or CO₂.

Unsuitable extinguishing media None known.

Specific hazards arising from the chemical No unusual fire or explosion hazards noted

Special protective equipment and precautions for firefighters Wear suitable protective equipment.

Fire-fighting equipment/instructions Use water spray to cool unopened containers. As with all fires, evacuate personnel to a safe area. Firefighters should use self-contained breathing equipment and protective clothing.

Specific methods Use standard firefighting procedures and consider the hazards of other involved materials.

SECTION 6. ACCIDENTAL RELEASE MEASURES

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| Personal precautions, protective equipment and emergency procedures | Keep unnecessary personnel away. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. Avoid inhalation of dust from the spilled material. Wear appropriate personal protective equipment. |
| Methods and materials for containment and cleaning up | Sweep up or vacuum up spillage and collect in suitable container for disposal. Avoid the generation of dusts during clean-up. For waste disposal, see section 13 of the MSDS. Clean surface thoroughly to remove residual contamination. |

SECTION 7. HANDLING AND STORAGE

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| Technical measures: | Handle preventing formation of airborne dust. Wearing protective equipment such as dust mask and protective glasses is recommended because this substance may cause some irritation by inhalation. Cautions of the deteriorations to depend on light, |
| Precautions for safe handling | Handle it under local exhaust ventilation or in the place with a whole exhaust ventilation system. |
| Conditions for safe storage, including any incompatibilities | Store in a cool and dark place avoiding high temperature, humidity and direct sun-light because of its hygroscopic property. |
| Packing: | Storing in a plastic or paper container or bag, etc and sealing it is preferable to avoid moistening. |

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

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| Engineering controls: | Handle with caution not to cause dust especially in a room. Use local exhaust ventilation depending on the situation. It is preferable to install a hand and eye washer near the handling place and show its place clearly. |
| Appropriate engineering controls | Airborne exposure should be controlled primarily by engineering controls such as general dilution ventilation, local exhaust ventilation, or process enclosure. |
| Respiratory protection | In case of insufficient ventilation: Effective dust mask. |
| Eye/face protection | Safety glasses with side-shields. |
| Hand protection | Protective gloves. |
| Skin and body protection | Wear suitable protective clothing, gloves and eye/face protection |
| General hygiene considerations | Handle in accordance with good industrial hygiene and safety practice. |

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

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|-------------------------------------|-----------------------------------|
| Appearance | White crystalline. |
| Physical state | Solid. |
| Odour | Odorless or weak particular odor. |
| pH | 6.0-9.0 (10% solution in water) |
| Melting point/freezing point | 132 - 135°C (270 - 275 ° F) |
| Boiling Point/Range | Not available. |
| Evaporation rate | Not available. |
| Flash point | Not available. |
| Flammability (solid, gas) | Not applicable. |

| | |
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| Vapor pressure | 0.009 hPa (0.007 mmHg) at 20 °C (68 °F). |
| Viscosity | Not applicable. |
| Solubility in water | Freely soluble. |
| Solubility (other) | Soluble in Ethyl alcohol |
| Decomposition temperature | Not applicable. |

SECTION 10. STABILITY AND REACTIVITY

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| Reactivity | No reactivity hazards known. |
| Chemical stability | Stable under recommended storage conditions. |
| Conditions to avoid | Protect from moisture. |
| Materials to avoid | Strong bases, strong oxidizing agents. |
| Hazardous decomposition products | Carbon monoxide and carbon dioxide |

SECTION 11. TOXICOLOGICAL INFORMATION

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| Acute toxicity: | LD50 Oral - rat - 8,471 mg/kg |
| Inhalation | Due to lack of data the classification is not possible. |
| Skin contact | Skin - rabbit - No skin irritation. |
| Eye contact | Eyes - rabbit - No eye irritation |
| Mutagenicity Data: | Due to lack of data the classification is not possible. |

SECTION 12. ECOLOGICAL INFORMATION

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| Ecotoxicity | Fish LC50 - Poecilia reticulata (guppy) - 17,500 mg/l - 96 h EC50 - Daphnia magna (Water flea) - 3,910 mg/l - 48 h |
| Persistence and degradability | 76 %, The product is readily biodegradable according to OECD criteria. |
| Bioaccumulative potential | Bioaccumulation is unlikely. |
| Mobility in soil | The product is water soluble, and may spread in water systems.. |

SECTION 13. DISPOSAL CONSIDERATIONS

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| Disposal instructions | Dispose in accordance with all applicable regulations. Under RCRA, it is the responsibility of the user of the product to determine, at the time of disposal, whether the product meets RCRA criteria for hazardous waste. |
| Local disposal regulations | Not available. |
| Hazardous waste code | Not available. |
| Waste from residues / unused products | Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions). |
| Contaminated packaging | Empty containers should be taken to an approved waste handling site for recycling or disposal. Since emptied containers may retain product residue, follow label warnings even after container is emptied. |

SECTION 14. TRANSPORTATION INFORMATION

Not dangerous goods in the meaning of ADR/RID, ADNR, IMDG-Code, ICAO/IATA-DGR.

Transport in bulk according
to Annex II of MARPOL 73/78 No information available.
and the IBC Code

SECTION 15. REGULATORY INFORMATION

US federal regulations CERCLA/SARA Hazardous Substances - Not applicable.
All components are on the U.S. EPA TSCA Inventory List.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories Immediate Hazard - No
Delayed Hazard - No
Fire Hazard - No
Pressure Hazard - No
Reactivity Hazard - No

SARA 302 Extremely
hazardous substance No

SARA 311/312
Hazardous chemical No

Other federal regulations

Safe Drinking Water Act
(SDWA) Not regulated.

Food and Drug
Administration (FDA) Not regulated.

US state regulations California Safe Drinking Water and Toxic Enforcement Act of 1986
(Proposition 65): This material is not known to contain any chemicals
currently listed as carcinogens or reproductive toxins.

SECTION 16. OTHER INFORMATION

References: Not available

Other Special Considerations: Not available

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall Jinan Juan Ester Chemical Co., Ltd. be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if Jinan Juan Ester Chemical Co., Ltd. has been advised of the possibility of such damages.

End of Safety Data Sheet

JINAN JUAN ESTER CHEMICAL CO., LTD
