

Guizhou Zerophos Technology Co., Ltd.



Material Safety Data Sheet

Trade Name: Urea feed grade

Registration No.: None

Version No.: 1

SECTION 1

CHEMICAL PRODUCT AND COMPANY INFORMATION

Chemical Type: Amides

Preparation trade name : Urea
Manufacturer : Guizhou Zerophos Technology Co., Ltd.
Usage : feed additives
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SECTION 2

COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name and Synonyms: Urea

C.A.S. No. : 57-13-6

Chemical Formula: $\text{CO}(\text{NH}_2)_2$

Hazardous: None

Non-Hazardous: Nuisance Dust Not available

SECTION 3

HAZARDS IDENTIFICATION

Classification of the substance or mixture: Not a hazardous substance or mixture.

Label elements: Not a hazardous substance or mixture.

Other hazards: This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

SECTION 4

FIRST AID MEASURES

Ingestion: Induce vomiting immediately as directed by medical personnel. Never give anything by mouth to an unconscious person. Seek medical attention.

Inhalation: Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Seek medical attention.

Eyes: Rinse skin with rinse out with plenty of water. Remove contact lenses. Seek medical attention.

Skin: Take off immediately all contaminated clothing. Rinse skin with water/ shower. Seek medical attention.

Swallow: Make victim drink water (two glasses at most). Consult doctor if feeling unwell.

SECTION 5

FIRE FIGHTING MEASURES

Extinguishing media:

Suitable extinguishing media
Water Foam Carbon dioxide (CO₂) Dry powder
Unsuitable extinguishing media
For this substance/mixture no limitations of extinguishing agents are given.

Special hazards arising from the substance or mixture:

Carbon oxides
Nitrogen oxides (NO_x)
Combustible.
Fire may cause evolution of:
Ammonia, nitrous gases
Development of hazardous combustion gases or vapours possible in the event of fire.

Advice for firefighters: In the event of fire, wear self-contained breathing apparatus.

Further information: Suppress (knock down) gases/vapors/mists with a water spray jet. Prevent fire extinguishing water from contaminating surface water or the ground water system.

SECTION 6	ACCIDENTAL RELEASE MEASURES
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Personal precautions, protective equipment and emergency procedures:

Advice for non-emergency personnel: Avoid inhalation of dusts. Evacuate the danger area, observe emergency procedures, consult an expert.
For personal protection see section 8.

Environmental precautions: Do not let product enter drains.

Methods and materials for containment and cleaning up: Cover drains. Collect, bind, and pump off spills. Observe possible material restrictions (see sections 7 and 10). Take up dry. Dispose of properly. Clean up affected area. Avoid generation of dusts.

Reference to other sections: For disposal see section 13.

SECTION 7	HANDLING AND STORAGE
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Precautions for safe handling: Not a hazardous substance or mixture

Conditions for safe storage, including any incompatibilities Storage conditions:

Tightly closed. Dry.
Storage class
Storage class (TRGS 510): 11: Combustible Solids

Specific end use(s): Apart from the uses mentioned in section 1, no other specific uses are stipulated

SECTION 8	EXPOSURE CONTROLS/PERSONAL PROTECTION
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Airborne Exposure Limits: None established.

Ventilation System:

A system of local and/or general exhaust is recommended to keep employee exposures as low as possible. Local exhaust ventilation is generally preferred because it can control the emissions of the contaminant at its source, preventing dispersion of it into the general work area. Please refer to the ACGIH document, Industrial Ventilation, A Manual of Recommended Practices, most recent edition, for details.

Personal Respirators (NIOSH Approved):

For conditions of use where exposure to dust or mist is apparent and engineering controls are not feasible, a particulate respirator (NIOSH type N95 or better filters) may be worn. If oil particles (e.g. lubricants, cutting fluids, glycerin, etc.) are present, use a NIOSH type R or P filter. For emergencies or instances where the exposure levels are not known, use a full-face positive-pressure, air-supplied respirator. **WARNING:** Air-purifying respirators do not protect workers in oxygen-deficient atmospheres.

Skin Protection:

Wear impervious protective clothing, including boots, gloves, lab coat, apron or coveralls, as appropriate, to prevent skin contact.

Eye Protection:

Use chemical safety goggles and/or full face shield where dusting or splashing of solutions is possible.
Maintain eye wash fountain and quick-drench facilities in work area.

Respiratory protection:

required when dusts are generated.

Recommended Filter type: Filter type P1

The entrepreneur has to ensure that maintenance, cleaning and testing of respiratory protective devices are carried out according to the instructions of the producer.

These measures have to be properly documented.

Control of environmental exposure: Do not let product enter drains.

SECTION 9	PHYSICAL AND CHEMICAL PROPERTIES
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Appearance:	White, Prill.
Odor:	Odorless
Solubility:	Appreciable in water. 624 g/l at 20 °C completely soluble
Density:	1,32 g/cm3 at 20 °C
pH:	7,5 - 9,5 at 480 g/l at 25 °C
Viscosity:	Viscosity, kinematic: No data available Viscosity, dynamic: No data available
Initiative Boiling Point and boiling range:	Decomposes below the boiling point.
Melting Point:	134 °C
Flammability (solid, gas):	No data available
Upper/lower flammability or explosive limits	No data available
Vapor Density (Air=1):	No information found.
Vapor Pressure (mm Hg):	< 0,1 hPa at 25 °C
Autoignition temperature	> 134 °C - Relative self-ignition temperature for solids does not ignite
Flash point:	Not applicable
Explosive properties:	No data available
Oxidizing properties:	none
Bulk density:	720 - 760 kg/m3

SECTION 10	STABILITY AND REACTIVITY
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Chemical stability:	The product is chemically stable under standard ambient conditions (room temperature).
Reactivity:	The following applies in general to flammable organic substances and mixtures: in correspondingly fine distribution, when whirled up a dust explosion potential may generally be assumed.
Possibility of hazardous reactions:	Exothermic reaction with: metallic chlorides Chlorites chromates/perchromates Fluorine nitrates

strong oxidising agents
hydrogen peroxide
Generates dangerous gases or fumes in contact with:
bases
chlorinated solvents
Risk of explosion/exothermic reaction with:
ammonium nitrate
calcium hypochlorite
Chlorine
chromyl chloride
Nitroso compound
sodium hypochlorite
nitrosyl compounds
phosphorus pentachloride
perchlorates
nitrites
Nitro compounds

Hazardous decomposition products: In the event of fire: please see section 5

Incompatibilities: Various Plastics

Conditions to Avoid: No information available

SECTION 11	TOXICOLOGY INFORMATION
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Acute toxicity:

LD50 Oral - Rat - 8.471 mg/kg

Remarks: (RTECS)

Symptoms: Nausea, Vomiting

Inhalation: No data available

Dermal: No data available

Skin corrosion/irritation:

Skin - Rabbit Result:

No skin irritation - 4 h

Serious eye damage/eye irritation:

Eyes - Rabbit

Result: slight irritation

Respiratory or skin sensitization:

No data available

Carcinogenicity:

No data available

Reproductive toxicity:

No data available

Specific target organ toxicity - single exposure:

No data available

Specific target organ toxicity - repeated exposure:

No data available

Aspiration hazard:

No data available

SECTION 12	ECOLOGICAL INFORMATION
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None listed.

SECTION 13	DISPOSAL CONSIDERATIONS
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Waste Disposal Procedures: No data available

SECTION 14	TRANSPORT INFORMATION
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UN proper shipping name:

ADR/RID: Not dangerous goods
IMDG: Not dangerous goods
IATA: Not dangerous goods

Environmental hazards:

ADR/RID: No
IMDG Marine pollutant: No
IATA: No

Further Information: Not classified as dangerous in the meaning of transport regulations.

SECTION 15	REGULATORY INFORMATION
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Chemical Safety Assessment: For this product a chemical safety assessment was not carried out

SECTION 16	OTHER INFORMATION
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Other:

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