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上虞洁华化工有限公司
Shangyu Jiehua Chemical Co., Ltd

Urea Hydrogen Peroxide

1. Chemical Product and Supplier Identification

Product Name

- Urea Hydrogen Peroxide

Synonyms

- Carbamide Peroxide, Perhydrit, Perhydrol Urea

Manufacturer

- Shangyu Jiehua Chemical Co., Ltd.
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MSDS Number

- JHUHP-01-01

Effective Date

- January 1, 2006

2. Composition/Information on Ingredients

Ingredients	Chemical Formula	CAS No.	Percentage
Urea Hydrogen Peroxide	$CO(NH_2)_2.H_2O_2$	124-43-6	Min.35.0

3. Hazards Identification

Emergency Overview

- Strong oxidizer! contact with other material may cause fire. Under fire conditions this material may decompose and release oxygen that intensifies fire.

Potential Health Effects

- Inhalation…… Irritating to the respiratory tract. Causes chemical burns.
- Eye contact…….. May cause irritation to the eyes. May cause eye burns.
- Skin contact…… May cause skin irritation and burns
- Ingestion…….. May cause severe and permanent damage to the digestive tract. Causes gastrointestinal tract burns.

4. First-aid Measures

- Inhalation…….. Remove affected person to fresh air. Do not use mouth-to mouth resuscitation. Seek medical attention if effects persist.
- Eye contact…….. Flush eyes with running water for at least 15 minutes with eyelids held open. Seek specialist advice immediately.
- Skin contact…….. Wash affected skin with soap and mild detergent and large amounts of water.
- Ingestion…….. Remove from exposure to fresh air immediately. If breathing is difficult, give oxygen. Do not use mouth-to-mouth resuscitation. Seek medical service immediately.

5. Fire Fighting Measure

- Flash Point
- Not applicable

Flammability

- Not applicable

Ignition Temperature

- Not applicable

Danger of Explosion

- Non-explosive

Extinguishing Media

- Water

Fire Hazards

- Oxidizer. Storage vessels involved in a fire may vent gas or rupture due to internal pressure. Damp material may decompose exothermically and ignite combustibles. Oxygen release due to exothermic decomposition may support combustion. May ignite other combustible materials. Avoid contact with incompatible materials such as heavy metals, reducing agents, acids, bases, combustibles (wood, papers, cloths etc.). Thermal decomposition releases oxygen and heat. Pressure bursts may occur due to gas evolution. Pressurization if confined when heated or decomposing. Containers may burst violently.

Fire-Fighting Measures

- Evacuate all non-essential personnel
- Wear protective clothing and self-contained breathing apparatus
- Remain upwind of fire to avoid hazardous vapors and decomposition products
- Use water spray to cool fire-exposed containers

6. Accidental Release Measures

Spill Clean-up Procedures

- Oxidizer. Eliminate all sources of ignition. Evacuate unprotected personnel from equipment recommendations found in Section 8. Never exceed any occupational exposure limit.
- Shovel or sweep material into plastic bags or vented containers for disposal. Do not return spilled or contaminated material to inventory.
- Flush remaining area with water to remove trace residue and dispose of properly. Avoid direct discharge to sewers and surface waters. Notify authorities if entry occurs.
- Do not touch or walk through spilled material. Keep away from combustibles (wood, paper, oils, etc.). Do not return any product to container because of the risk of contamination.

7. Handling and Storage

Storage

- Oxidizer. Store in a dry, well ventilated area away from all source of ignition and out of direct sunlight. Store in a dry location away from heat. Store at room temperature (15°C~25°C is recommended).

- Keep away from incompatible materials. Keep containers tightly closed. Do not store in unlabeled or mislabeled containers. Never return unused product to storage container.
- Protect from moisture. Do not store near combustible materials. Keep containers well sealed, seal only with original vent cap. Ensure pressure relief and adequate ventilation.
- Store separately from organics and reducing materials. Avoid contamination which may lead to decomposition.

Handling

- Avoid contact with eyes, skin, and clothing. Use with adequate ventilation.
- Do not swallow. Avoid breathing vapors, mists, or dust. Do not eat, drink, or smoke in work area.
- Prevent contact with combustible or organic materials.
- Label containers and keep them tightly closed when not in use.
- Wash thoroughly after handling.

8. Exposure Controls/Personal Protection

Engineering Controls

- General room ventilation is required. Local exhaust ventilation, process enclosures or other engineers controls may be needed to maintain airborne levels below recommended exposure limits. Avoid creating dust or mist. Maintain adequate ventilation. Do not use in closed or confined spaces. Keep levels below exposure limits. To determine exposure levels, monitoring should be performed regularly.

Respiratory Protection

- For many conditions, no respiratory protection may be needed; however, in dusty or unknown atmospheres or when exposures exceed limit values, wear a NIOSH approved respirator.

Eye/Face Protection

- Wear chemical safety goggles and a full face shield while handling this product.

Skin Protection

- Prevent contact with this product. Wear gloves and protective clothing depending on condition of use.

Other Protective Equipment

- Eye-wash station
- Safety shower
- Impervious clothing
- Rubber boots

General Hygiene Considerations

- Wash with soap and water before meal times and at the end of each work shift. Good manufacturing practices require gross amounts of any chemical be removed from skin as soon as practical, especially before eating or smoking.

9. Physical and Chemical Properties

Appearance:	White crystals

Odor:	None
Bulk Density:	500~800 g/L
Solubility:	800g/L @20°C
PH, 3% Solution:	6.5
Decomposition Temperature:	Self-accelerating decomposition with oxygen release starting from 50 °C

10. Stability and Reactivity

Stability

- Stable at room temperature in closed containers under normal storage and handling conditions.

Conditions to Avoid

- High temperature
- Water
- Acids
- Salts of heavy metals
- Reducing agents
- Organic materials
- Flammable substances

Hazardous Decomposition Products

- Oxygen, carbon dioxide, carbon monoxide, irritating and toxic fumes and gases

11. Toxicological Information

- No specific data
- After inhalation of dust: Irritation symptoms in the respiratory tract
- After skin contact: Severe irritations
- After eye contact: Burns
- After ingestion: Irritation of mucous membranes in the mouth, pharynx, oesophagus, and gastrointestinal tract. Risk of perforation in the oesophagus and stomach
- Sensitization with allergic manifestations in predisposed persons

12. Ecological Information

Ecotoxicological Information

- A harmful effect on aquatic organisms can not be excluded in the event of improper handling or disposal.
- Fish toxicity: LC50 (L.idus): 30 mg/l
- Daphnia toxicity: EC50 (Daphnia magna): 7.7 mg/l
- Algeal toxicity: IC50 (Sc. quadricauda): 7.3 mg/l

Chemical Fate Information

- As indicated by chemical properties oxygen is released into the environment.

13. Disposal Considerations

Waste Treatment

- Dispose of in an approved waste facility operated by an authorized contractor in compliance with local regulations.

Package Treatment

- The empty and clean containers are to be recycled or disposed of in conformity with local regulations.

14. Transport Information

- Proper Shipping Name: Urea Hydrogen Peroxide
- UN Number: UN1511
- Hazard Class: 5.1
- Labels: 5.1 (Oxidizer)
- Packing Group: III

15. Regulatory Information

SARA Section…….……....	Yes
SARA (313) Chemicals…….	No
EPA TSCA Inventory…….	Appears
Canadian WHMIS Classification…..	C, E
Canadian DSL……...	Appears
EINECS Inventory…….	Appears

16. Other Information

Disclaimer

- The data in this Material Safety Data Sheet is believed to be correct. However, since conditions of use are outside our control it should not taken as a warranty of representation for which Shangyu Jiehua Chemical Co., Ltd. assumes legal responsibility. This information is provided solely for your consideration, investigation, and verification.