



# MATERIAL SAFETY DATA SHEET

**WORLD-PROSPECT**

Versions: 2.0

**iChem<sup>®</sup> - TK111**

Revision Date: May 08, 2020

## 1. Product and Company certification

**Product name:**

**Antibacterial & Antiviral  
iChem<sup>®</sup> - TK111**

**Use:**

**Manufacturers:**

Shanghai World-Prospect Industrial  
Co., Ltd.  
No.137, Lane 366, Minghua Road,  
Songjiang District, Shanghai, China  
Tel: +86-21-5427 7770  
Fax: +86-21-5427 7770  
Mob: +13901658218

**Emergency contact:**

## 2. Composition and Related information

Composition	CAS No.	Content %
Si	7440-21-3	45 ± 20%
Al	7429-90-5	45 ± 20%
Ag	7440-22-4	10 ± 10%

## 3. Hazard identification

**Risk category:** No information

**Intrusive way:** Skin contact, eye contact, inhalation, ingestion

**Health hazards:** No irritating effect on eyes, respiratory system and skin, inhalation of econ dust, the main harm to the body is caused by silicosis. At present, there is no specific treatment for silicosis, the key is dust prevention.

## 4. First aid measures

**Skin contact:** Remove contaminated clothing and rinse with running water.

**Eye contact:** Lift eyelids, rinse with running water or normal saline.

**Inhalation:** Leave the scene to fresh air.

**Ingestion:** Drink enough warm water to induce vomiting; Go to a doctor

## 5. Fire control measures

**Fire extinguishing media:**

Use a medium that does not burn easily. The selected extinguishing agent shall not



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react with other components contained in the product.

**Inappropriate extinguishing media:**

No

**Combustion product:**

The material is non-combustible.

**Exposure hazards:**

There is no special danger that the product itself will not burn, but antibacterial water agents may break down during heating treatment to produce irritating, corrosive or toxic fumes.

**Special protection for firefighters:**

Self-contained breathing apparatus is required.

## 6. Accident mitigation measures

**Personal Precautions:**

Wear appropriate personal protective equipment. Keep unnecessary personnel away from the accident site.

**Environmental protection:**

Avoid access to sewage systems, surface water and groundwater.

**Cleaning method:**

Should be vacuumed or swept to a suitable container. To clean up the splash as soon as possible, use appropriate protective equipment to avoid the phenomenon of flying dust.

## 7. Operation and storage

**Operation requirements:**

Wash hands thoroughly after use, and wash hands before eating. Use proper ventilation to minimize dust generation and accumulation. Avoid direct contact with eyes, skin and clothing. Keep container tightly closed to avoid inhaling and inhaling powder.

**Storage requirements:**

It should be stored in a closed container away from incompatible substances and kept cool, dry, well ventilated and protected.

## 8. Exposure control and self-protection

**Engineering control:** Production process sealing. Ensure good natural ventilation.

**Respiratory protection:** When the concentration of dust in the air exceeds the



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standard, it is recommended to wear a self-suction filter respirator. Emergency rescue when evacuating, you should wear an air respirator.

**Eye protection:** Wear chemical safety goggles.

**Physical protection:** No special protection is generally required.

**Hand protection:** Wear latex gloves.

**Others:** After work, shower and change clothes. Keep good hygiene.

## 9. Physical and chemical properties

<b>Appearance:</b>	Powder
<b>Color:</b>	White
<b>Smell:</b>	Tasteless
<b>pH:</b>	6-8
<b>Melting point:</b>	> 1000°C
<b>Relative density:</b>	2.5-2.8g/cm <sup>3</sup> (15°C)
<b>Water solubility:</b>	Insoluble
<b>Solubility:</b>	Insoluble in water

## 10. Stability and reactivity

**Stability:**

Stable under normal temperature and pressure.

**Possible dangerous reactions:**

No dangerous reaction during normal use.

**Environment to Avoid:**

At high temperatures, strong or searing reactions with metals (sodium, zinc, lithium) occur.

**Ingredients to be avoided:**

Strong acid, strong base and strong oxidation reagent.

**Dangerous decomposition products:**

No decomposition under normal use.

## 11. Toxicological information

**Effects of short-term exposure**

**Inhalation:**

Excessive inhalation may produce pneumoconiosis.



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**Eye contact:**

Generally no irritant reaction.

**Skin contact:**

Generally no irritant reaction.

**Ingestion:**

Generally no abnormal reaction.

Effects of long-term exposure

**Target organ:**

No

**Chronic effects:**

Long-term inhalation may lead to pneumoconiosis. Low hazard to long term industrial operations. The toxicological properties of this product have not been fully monitored.

**CMR assessment:**

**Carcinogenicity:** no harm according to EU standards.

**Mutagenicity:** no harm according to EU standards.

**Regenerative effects:** no harm according to EU standards.

**Test impact:**

**Teratogenicity:** no hazard according to EU standards.

**Embryonic toxicity:** no harm according to EU standards.

**Respiratory sensitization:** no harm according to EU standards.

**Skin sensitization:** no harm according to EU standards.

**Toxicological synergies:** none.

## 12. Information ecology

**Ecotoxicity:**

When exposed to aquatic organisms and aquatic systems, this product does not cause significant ecotoxicity.

**Mobility:**

No

**Persistence and degradation:**

No.

**Bioaccumulation:**

No.

**Other negative effects:**

No.

## 13. Deal with matters

**Waste water from surplus or unused products:**

Residues should be disposed of in accordance with local and national regulations.



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## **Contaminated packaging:**

Contaminated packaging should be dumped as clean as possible and treated in accordance with applicable regulations.

Uncontaminated packaging should be reused.

Uncontaminated packaging should be recycled.

## **14. Transport information**

### **Land transport (ADR):**

According to the transportation regulations, it is not classified as dangerous goods.

### **Land transport (RID):**

According to the transportation regulations, it is not classified as dangerous goods.

### **Ocean transport (IMDG):**

According to the transportation regulations, it is not classified as dangerous goods.

### **Air transport (ICAO/IATA):**

According to the transportation regulations, it is not classified as dangerous goods.

## **15. Regulatory information**

### **National laws/regulations**

(chemical dangerous goods safety management regulations promulgated by the State Council on February 17, 1987), the chemical dangerous goods safety management regulations, implementing rules (change law is sent [1992] 677), using chemicals workplace safety regulation (no. 423 [1996] labor department is sent) such as laws and regulations, for the safe use of hazardous chemicals, production, storage, transportation, loading and unloading are classified according to eu standards made corresponding regulations.

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