

# QSHI INDUSTRY (SHANG HAI) CO., L TD.

Room 505, No.800, Shangcheng Road, Pudong New Area, Shanghai, 200120, China

## Material Safety Data Sheet

### Section 1 - Chemical Product and Company Identification

Product Name: Potassium fluoride

Formula: KF

Company Identification:

Company name: Qshi Industry (Shanghai) Co., Ltd.

Address: Room 505, No.800, Shangcheng Road, Pudong New Area, Shanghai ,  
200120, China

Office Telephone Number: 0086-21-68908772

Office Fax Number: 0086-21-68908992

### Section 2 - Composition, Information on Ingredients

CAS#	Chemical Name	Percent	EINECS/ELINCS
7789-23-3	Potassium fluoride	99.0%min	232-151-5

Hazard Symbols: T

Risk Phrases: 23/24/25

### Section 3 - Hazards Identification

#### EMERGENCY OVER VIEW

Toxic by inhalation, in contact with skin and if swallowed. Hygroscopic (absorbs moisture from the air).

Potential Health Effects

Eye:

May cause eye irritation.

Skin:

May cause skin irritation.

Ingestion:

Harmful if swallowed. Ingestion of large amounts of fluoride may cause salivation, nausea, vomiting, abdominal pain, fever, labored breathing. Inorganic fluorides can be harmful. Acute exposure to fluorine compounds can lead to digestive tract burns, and abdominal pain.

Exposure to fluoride compounds can result in systemic toxic effects on the heart, liver, and kidneys. It may also deplete calcium levels in the body leading to hypocalcemia and death.

Causes gastrointestinal tract irritation. Contains fluoride.

Fluoride can reduce calcium levels leading to fatal hypocalcemia.

Inhalation:

May cause respiratory tract irritation.

Chronic:

Chronic inhalation and ingestion may cause chronic fluoride poisoning (fluorosis) characterized by weight loss, weakness, anemia, brittle bones, and stiff joints. Chronic exposure to fluoride compounds may cause systemic toxicity.

#### Section 4 - First Aid Measures

**Eyes:** Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid.

**Skin:**

Get medical aid immediately. Flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes.

Wash clothing before reuse.

**Ingestion:**

Do not induce vomiting. If victim is conscious and alert, give 2-4 cupfuls of milk or water. Never give anything by mouth to an unconscious person. Get medical aid immediately.

**Inhalation:**

Get medical aid immediately. Remove from exposure and move to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Do NOT use mouth-to-mouth resuscitation.

Notes to Physician:

#### Section 5 - Fire Fighting Measures

**General Information:**

As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear.

**Extinguishing Media:**

Use water spray, dry chemical, carbon dioxide, or alcohol-resistant foam.

#### Section 6 - Accidental Release Measures

**General Information:** Use proper personal protective equipment as indicated in Section 8.

**Spills/Leaks:**

Vacuum or sweep up material and place into a suitable disposal container. Clean up spills immediately, observing precautions in the Protective Equipment section. Avoid generating dusty conditions.

Provide ventilation.

#### Section 7 - Handling and Storage

**Handling:**

Wash thoroughly after handling. Remove contaminated clothing and wash before reuse. Use with adequate ventilation. Minimize dust generation and accumulation. Avoid contact with eyes, skin, and clothing. Avoid breathing dust.

**Storage:**

Store in a cool, dry, well-ventilated area away from incompatible substances. Keep containers tightly closed.

## Section 8 - Exposure Controls, Personal Protection

### Engineering Controls:

Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate general or local exhaust ventilation to keep airborne concentrations below the permissible exposure limits.

### Exposure Limits CAS# 7789-23-3:

United Kingdom, WEL-TWA:(listed as fluorides, inorganic): 2.5 mg/m<sup>3</sup> TW A (as F)

United Kingdom, WEL - STEL: (listed as fluorides, inorganic): 6.2 mg/m<sup>3</sup> STEL (as F)

United States OSHA: 2.5 mg/m<sup>3</sup> TWA (as F) (listed under Fluorides).2.5 mg/m<sup>3</sup> TW A (as F) (listed under Fluorides).

Belgium - TWA: (listed as fluorides, inorganic): 2.5 mg/m<sup>3</sup> VLE (as F)

France - VME: (listed as fluorides): 2.5 mg/m<sup>3</sup> VME (as F)

Germany: (listed as fluorides): 2.5mg/m<sup>3</sup> VME(as F)

Malaysia: (listed as fluorides): 2.5 mg/m<sup>3</sup> TWA (as F)

Netherlands: (listed as fluorides): 3.5 mg/m<sup>3</sup> STEL (as F)

Russia: 1mg/m<sup>3</sup> TW A

Russia: 0.2 mg/m<sup>3</sup> STEL

Spain: (listed as fluorides, inorganic): 2.5 mg/m<sup>3</sup> VLA-ED (except uranium hexafluoride, as F)

### Personal Protective Equipment

#### Eyes:

Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

#### Skin:

Wear appropriate protective gloves to prevent skin exposure.

#### Clothing:

Wear appropriate protective clothing to prevent skin exposure.

#### Respirators:

Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

## Section 9 - Physical and Chemical Properties

Physical State: Powder

Color: white

Odor: None reported.

pH: Not available.

Vapor Pressure: Not available.

Viscosity: Not available.

Boiling Point: 1505 deg C @ 760 mm Hg

Freezing/Melting Point: 858 deg C

Auto ignition Temperature: Not applicable.

Flash Point: Not applicable.

Explosion Limit s, Lower: Not available.

Explosion Limit s, upper: Not available.

Decomposition Temperature:

Solubility in water: IN WATER: 92.3 G/100ML (18C)

Specific Gravity/Density: 2.4800 g/cm<sup>3</sup>

Molecular Formula: FK

Molecular Weight: 58.09

## Section 10 - Stability and Reactivity

Chemical Stability:

Stable under normal temperatures and pressures.

Conditions to Avoid:

Dust generation, excess heat.

Incompatibilities with Other Materials:

Strong acids.

Hazardous Decomposition Products:

Hydrogen fluoride gas, oxides of potassium.

Hazardous Polymerization: Has not been reported.

## Section 11 - Toxicological Information

RTECS#:

CAS# 7789-23-3: TT0700000 LD50/LC50:

CAS# 7789-23-3: Oral , rat: LD50 = 245 mg/kg.

Carcinogenicity:

Potassium fluoride - Not listed by ACGIH, IARC, or NTP .

Other:

See actual entry in RTECS for complete information.

## Section 12 - Ecological Information

No information available.

## Section 13 - Disposal Considerations

Dispose of in a manner consistent with federal, state, and local regulations.

## Section 14 - Transport Information

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Shipping Name: POTASSIUM FLUORIDE

Hazard Class: 6.1

UN Number: 1812

Packing Group: III

IMO

Shipping Name: POTASSIUM FLUORIDE, SOLID

Hazard Class: 6.1

UN Number: 1812

Packing Group: III

## Section 15 - Regulatory Information

### European/International Regulations

European Labeling in Accordance with EC Directives

Hazard Symbols: T

Risk Phrases:

R 23/24/25 Toxic by inhalation, in contact with skin and if swallowed.

Safety Phrases:

S 26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

S 45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

WGK (Water Danger/Protection)

CAS# 7789-23-3: 1

Canada

CAS# 7789-23-3 is listed on Canada's DSL List.

CAS# 7789-23-3 is not listed on Canada's Ingredient Disclosure List.

US FEDERAL

TSCA

CAS# 7789-23-3 is listed on the TSCA inventory.

## Section 16 - Additional Information

MSDS Creation Date: 3/02/2015

Revision #6 Date: 11/08/2015

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 Qshi 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 Qshi has been advised of the possibility of such damages.