



# SAFETY DATA SHEET

ProChemOnline.com



## SECTION 1 PRODUCT AND COMPANY INFORMATION

PRODUCT NAME: **Rubidium (I) Fluoride**

PRODUCT NUMBER: 3025

CAS NUMBER: 13446-74-7

SYNONYMS: Rubidium monofluoride

### MANUFACTURER:

Prochem, Inc.  
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## SECTION 2 HAZARDS IDENTIFICATION

### CLASSIFICATION OF SUBSTANCE OR MIXTURE

Pictogram



Signal Word

**Danger**

### Hazard Statements

H301+H311+H331	Toxic if swallowed, in contact with skin or if inhaled
H315	Causes skin irritation
H319	Causes serious eye irritation
H335	May cause respiratory irritation

### Precautionary Phrases

P261	Avoid breathing dust/fume/gas/mist/vapors/spray.
P301+P310	IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing.
P361	Remove/take off immediately all contaminated clothing

### HMIS CLASSIFICATION:

Health: 2      Fire: 0      Reactivity Hazard: 1

### NFPA RATING:

Health:2      Flammability: 0      Reactivity Hazard:1

**EYE CONTACT:** May cause irritation and serious eye damage. Effects may not occur immediately

**SKIN CONTACT:** Toxic by skin contact. May cause irritation with redness and pain. Soluble fluoride may be corrosive. Effects may not immediately appear

## SECTION 2 HAZARDS IDENTIFICATION (Cont.)

**INHALATION:** May be harmful if inhaled. Causes respiratory tract irritation.

**INGESTION:** Fatal if swallowed

## SECTION 3 COMPOSITION / INFORMATION ON INGREDIENTS

Formula: RbF

Molecular Weight: 104.47

CHEMICAL NAME	CAS#	%
Rubidium fluoride	13446-74-7	100

## SECTION 4 FIRST AID MEASURES

**EYE EXPOSURE:** Immediately flush the eyes with copious amounts of water for at least 15 minutes. Assure flushing under eyelids. A victim may need assistance in keeping their eyelids open. Get immediate competent medical attention.

**SKIN EXPOSURE:** Wash affected area with water. Remove contaminated clothes if necessary. Seek medical assistance if irritation persists.

**INHALATION:** Remove to fresh air and keep at rest. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. Get medical attention if necessary.

**INGESTION:** Do NOT induce vomiting. Never give anything by mouth to an unconscious person. If conscious, wash out mouth with water. Get medical attention if necessary.

## SECTION 5 FIREFIGHTING MEASURES

**FLASH POINT:** Product is not flammable

**AUTO IGNITION TEMPERATURE:** Not available

**EXPLOSION LIMITS:** Not available

**EXTINGUISHING MEDIUM:** Use fire fighting measures that suit the surrounding fire.

**SPECIAL FIRE FIGHTING PROCEDURES:** Wear self-contained, approved breathing apparatus and full protective clothing, including eye protection and boots.

**HAZARDOUS COMBUSTION AND DECOMPOSITION PRODUCTS:** Hydrogen fluoride and rubidium oxides.

## SECTION 6 ACCIDENTAL RELEASE MEASURES

**PERSONAL PRECAUTIONS:** Wear all appropriate equipment when using this material. Ensure adequate ventilation.

**ENVIRONMENTAL PRECAUTIONS:** Prevent spillage from entering drains or allowing it to be released into the environment.

**METHODS AND MATERIALS FOR CONTAINMENT AND CLEANING UP:** Avoid raising dust. Small spills can be mixed with diatomaceous earth, sand, vermiculite, or other suitable inert material and swept up.

## SECTION 7 HANDLING AND STORAGE

**PRECAUTIONS FOR SAFE HANDLING:** Wear appropriate personal protective equipment. Avoid contact with skin and eyes. Use with adequate ventilation. Wash thoroughly after using. Keep container closed when not in use. Avoid formation of dusts and aerosols.

**CONDITIONS FOR SAFE STORAGE:** Store in cool, dry, and well-ventilated area. Keep away from incompatible materials. Hygroscopic – protect from humidity and water. Store under dry inert gas.

## SECTION 8 EXPOSURE CONTROLS AND PERSONAL PROTECTION

**EXPOSURE CONTROLS:** Contains no substances with occupational exposure limit values.

Component	Exposure Limits	Basis	Entity
Rubidium fluoride	2.5 mg/m <sup>3</sup>	TLV	ACGIH
	2.5 mg/m <sup>3</sup>	PEL	OSHA
	2.5 mg/m <sup>3</sup>	REL	NIOSH
	2 mg/L*	BEI-U	ACGIH
	3 mg/L**	BEI-U	ACGIH

\*Prior to shift

\*\*After shift

## SECTION 8 EXPOSURE CONTROLS AND PERSONAL PROTECTION (Cont.)

TLV: Threshold Limit Value over 8 hours of work.  
PEL: Permissible Exposure Limit

REL: Recommended Exposure Limit  
BEI-U: Biological Exposure Indices in Urine

**EYE PROTECTION:** Wear chemical safety glasses or goggles and face shield

**SKIN PROTECTION:** Wear nitrile or rubber gloves, and a complete suit protecting against chemicals

**VENTILATION:** Provide local exhaust, preferably mechanical.

**RESPIRATOR:** Use an approved respirator

**ADDITIONAL PROTECTION:** Provide eyewash stations, quick-drench showers and washing facilities accessible to areas of use and handling.

## SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

**COLOR AND FORM:** White crystalline or powder

**ODOR:** None

**MOLECULAR WEIGHT:** 104.47

**BOILING POINT:** 1410° C

**MELTING POINT:** 795° C

**SPECIFIC GRAVITY:** 3.557 gm/ml

**VAPOR DENSITY:** No data available

**SOLUBILITY:** Soluble

## SECTION 10 STABILITY AND REACTIVITY

**STABILITY:** Stable

**HAZARDOUS POLYMERIZATION:** Reacts with strong mineral acids to form hydrogen fluoride

**CONDITIONS TO AVOID:** None

**INCOMPATIBILITY:** Mineral acids, water, and moisture.

**DECOMPOSITION PRODUCTS:** Hydrogen fluoride and rubidium oxide

## SECTION 11 TOXICOLOGICAL DATA

**ACUTE TOXICITY:** Not available

**CARCINOGENIC EFFECTS:** No components of this product present at levels greater than or equal to 0.1% is identified a carcinogen.

**MUTAGENIC EFFECTS:** Not available

**TETRATOGENIC EFFECTS:** Not available

**CHRONIC TOXICITY:** The toxicity of rubidium compounds is generally due to the anion. Rubidium has been reported to replace potassium in animals studies. Indications are that overexposure could lead to muscle and red blood cell accumulation with possible neuromuscular effects, hyperirritability and muscle spasms. No cases of industrial injury have been reported. Fluorides may cause salivation, nausea, vomiting, diarrhea, and abdominal pain, followed by weakness, tremors, shallow respiration, convulsions, and coma. May cause brain and kidney damage. Chronic fluoride poisoning can cause severe bone changes, loss of weight, anorexia, anemia, and dental defects.

**RTECS:** VL8740000

To the best of our knowledge the toxicological effects of this compound have not been fully investigated.

## SECTION 12 ECOLOGICAL DATA

No data available.

## SECTION 13 DISPOSAL CONSIDERATIONS

Dispose of in according to local, state, and federal regulations.

## **SECTION 14 TRANSPORTATION DATA**

UN3288

Marine Pollutant: No

Toxic solid, inorganic, n.o.s.

(Rubidium fluoride)

CLASS 6.1

PG III

## **SECTION 15 REGULATORY INFORMATION**

**TSCA:** Listed in the TSCA inventory

**DSCL (EEC):** Listed on the DSCL inventory

**SARA 302/304:** Not Listed

**SARA 311/312:** Not Listed

**SARA (TITLE 313):** Not Listed

**CALIFORNIA PROP. 65:** Not Listed

## **SECTION 16 OTHER INFORMATION**

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