



**SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING**

**1.1 Product identifier**

Product Identifier : Flumequine  
Product Number : F011  
CAS Number : [42835-25-6]

**1.2 Relevant identified uses of the substance or mixture and uses advised against**

Identified Uses : For research use only - restricted to professional users.  
Uses Advised Against : Not for human or animal use

**1.3 Details of the supplier of the safety data sheet**

Company : TOKU-E Company  
715 W Orchard Dr. Suite 3  
Bellingham, WA 98225  
Phone Number : (360) 734-1789  
E-mail Address : info@toku-e.com  
Safety Data Sheet Issued by : TOKU-E Company (USA)

**1.4 Emergency telephone number**

Emergency Phone Number (Internat.) : +1 (352) 353-3500 (INFOTRAC, 24-Hour Number)  
Emergency Phone Number (US Only) : 1 (800) 535-5053 (INFOTRAC, 24-Hour Number)

**SECTION 2: HAZARDS IDENTIFICATION**

**2.1 Classification of the substance or mixture**

**GHS classification in accordance with 29 CFR 1910 (OSHA HCS)**

Skin Irritation (Category 2), H315  
Skin Sensitization (Category 1), H317  
Respiratory Sensitization (Category 1), H334

For the full text of the H-Statements mentioned in this section, see Section 16.

**2.2 GHS label elements, including precautionary statements**

**Pictogram(s):**



**Signal Word:** Danger

**Hazard Statement(s)**

H315 Causes skin irritation  
H317 May cause an allergic skin reaction  
H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled

**Precautionary Statement(s)**

P264	Wash hands/skin thoroughly after handling.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P302+P352	IF ON SKIN: Wash with plenty of water/soap
P321	Specific treatment, see applicable response statements on this label
P332+P313	IF SKIN irritation occurs: Get medical advice/attention.
P362+P364	Take off contaminated clothing and wash it before reuse.
P261	Avoid breathing dust/fumes/gas/mist/vapors/spray.
P272	Contaminated work clothing should not be allowed out of the workplace.
P333+P313	IF SKIN irritation or rash occurs: Get medical advice/attention.
P501	Dispose of contents/container in accordance with governmental regulation
P284	In case of inadequate ventilation wear respiratory protection
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P342+P311	If experiencing respiratory symptoms: call a POISON CENTER or doctor/physician.

**2.3 Hazards otherwise not classified (HNOC) or not covered by GHS**

None

**SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS****3.1 Substances**

Synonym(s) : 9-Fluoro-6,7-dihydro-5-methyl-1-oxo-1H,5H-benzo[*ij*]quinolizine-2-carboxylic acid; R 802  
 Formula : C<sub>14</sub>H<sub>12</sub>FNO<sub>3</sub>  
 Molecular weight : 261.25 g/mol

**Hazardous components**

Component	Classification	Concentration
<b>Flumequine</b>		
CAS Number [42835-25-6]	Skin Irrit. 2, H315 Skin Sens. 1, H317	≤ 100%
EC Number [255-962-6]	Resp. Sens. 1, H334	

For the full text of the H-Statements mentioned in this section, see Section 16.

**SECTION 4: FIRST-AID MEASURES****4.1 Description of first-aid measures****General information**

Consult a doctor/physician if exposed - additional medical care may be required. Show this safety data sheet to the medical provider.

**If inhaled**

If inhaled, move to fresh air. If not breathing, give artificial respiration. Consult a physician.

**In case of skin contact**

Wash skin thoroughly with soap and water. Remove any contaminated clothing. Consult a physician.

**In case of eye contact**

Flush eye with water. After initial flush, remove any contact lenses and continue flushing for at least 15 minutes.

**If swallowed**

Rinse mouth with water. Immediately call a doctor, physician, or poison control center. Never give anything by mouth to an unconscious person.

**4.2 Most important symptoms/effects, acute and delayed**

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11.

**4.3 Indication of any immediate medical attention and special treatment needed**

No data available

## **SECTION 5: FIRE-FIGHTING MEASURES**

### **5.1 Extinguishing media**

#### **Suitable extinguishing media**

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

#### **Unsuitable extinguishing media**

No data available

### **5.2 Special hazards arising from the substance or mixture**

#### **Hazardous Combustion Products**

Carbon and nitrogen oxides, hydrogen fluoride

### **5.3 Advice for firefighters**

Wear self-contained breathing apparatus if necessary.

### **5.4 Further information**

No data available

## **SECTION 6: ACCIDENTAL RELEASE MEASURES**

### **6.1 Personal precautions, protective equipment and emergency procedures**

Consult the safety measures listed in Section 7 and 8. Use personal protective equipment. Avoid breathing dust, vapors, mist or gas. Avoid direct contact with spilled substances. Ensure adequate ventilation. Avoid dust formation.

In the event of a spill, evacuate personnel to safe areas.

For personal protection see Section 8.

### **6.2 Environmental precautions**

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

### **6.3 Methods and materials for containment and cleaning up**

Pick up and arrange disposal without creating dust. Sweep up and shovel.

Keep in suitable, closed containers for disposal.

### **6.4 Reference to other sections**

Refer to section 8 for exposure control and personal protection. Refer to section 13 for disposal information.

## **SECTION 7: HANDLING AND STORAGE**

### **7.1 Precautions for safe handling**

Avoid exposure: obtain special instructions before use. Avoid contact with skin and eyes.

Avoid formation of dust and aerosols. Provide appropriate exhaust ventilation at places where dust is formed.

For precautionary statements see section 2.2

### **7.2 Conditions for safe storage, including any incompatibilities**

Keep container tightly closed in a dry and well-ventilated place. Protect from humidity.

Recommended storage temperature:  $\leq 30$  °C

#### **Incompatibilities:**

Strong oxidizing agents

### **7.3 Specific end use(s)**

Refer to section 1.2

## **SECTION 8: EXPOSURE CONTROLS/ PERSONAL PROTECTION**

### **8.1 Control parameters**

#### **Components with workplace control parameters:**

Contains no substances with occupational exposure limit values.

## 8.2 Exposure controls

### Appropriate engineering controls:

Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling this product.

### Personal Protective Equipment (PPE):

#### Respiratory protection

Wear respiratory protection. Use type N95 (US) or type P1 (EN 143) dust masks as a backup to engineering controls. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

#### Skin protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal techniques to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

#### Eye/Face protection

Wear eye protection. Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166 (EU).

#### Body protection

Wear protective clothing. The type of protective equipment must be selected according to the concentration of the dangerous substance at the specific work place.

#### Environmental exposure controls

Do not let product enter drains. Discharge into the environment must be avoided.

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

### 9.1 Information on basic physical and chemical properties

Appearance	:	White crystalline powder
Odor	:	No data available
Odor Threshold	:	No data available
pH	:	No data available
Melting Point/Freezing Point	:	No data available
Initial Boiling Point and Range	:	No data available
Flash Point	:	No data available
Evaporation rate	:	No data available
Flammability (solid, gas)	:	No data available
Upper/Lower Flammability or Explosive Limits	:	No data available
Vapor Pressure	:	No data available
Vapor Density	:	No data available
Relative Density	:	No data available
Solubility(ies)	:	Slightly soluble in methanol or DMSO
Partition Coefficient: n-octanol/water	:	No data available
Auto-Ignition Temperature	:	No data available
Decomposition Temperature	:	No data available
Viscosity	:	No data available
Explosive Properties	:	No data available
Oxidizing Properties	:	No data available

### 9.2 Other safety information

No data available

## SECTION 10: STABILITY AND REACTIVITY

### 10.1 Reactivity

No data available

## 10.2 Chemical stability

Stable under recommended storage conditions

## 10.3 Possibility of hazardous reactions

No data available

## 10.4 Conditions to avoid

No data available

## 10.5 Incompatible materials

Strong oxidising agents

## 10.6 Hazardous decomposition products

No data available

See Section 5 for hazardous combustion products.

## **SECTION 11. TOXICOLOGICAL INFORMATION**

### 11.1 Information on toxicological effects

#### **Acute Toxicity**

No data available

#### **Skin Corrosion/Irritation**

No data available

#### **Serious Eye Damage/ Eye Irritation**

No data available

#### **Respiratory or Skin Sensitization**

Prolonged or repeated exposure may cause allergic reactions in certain sensitive individuals.

#### **Germ Cell Mutagenicity**

No data available

#### **Carcinogenicity**

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by the International Agency for Research on Cancer Monograph.

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by the National Toxicology Program.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by the Occupational Health and Safety Association.

#### **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

#### **Additional Information**

RTECS: DK1672000

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

## **SECTION 12: ECOLOGICAL INFORMATION**

### **12.1 Toxicity**

No data available

### **12.2 Persistence and degradability**

No data available

### **12.3 Bioaccumulative potential**

No data available

### **12.4 Mobility in soil**

No data available

### **12.5 Results of PBT and vPvB assessment**

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted.

### **12.6 Other adverse effects**

No data available

In the absence of complete ecological information, treat product as environmentally hazardous.  
Use proper storage, handling, and disposal to prevent unintentional release into the environment.

## **SECTION 13: DISPOSAL CONSIDERATIONS**

### **13.1 Waste treatment methods**

#### **Product**

Offer surplus and non-recyclable products to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber. Avoid disposal of material in drains or sewers.

#### **Contaminated Packaging**

Dispose of as unused product.

## **SECTION 14: TRANSPORT INFORMATION**

### **DOT (US)**

Not dangerous goods

### **IMDG**

Not dangerous goods

### **IATA**

Not dangerous goods

## **SECTION 15: REGULATORY INFORMATION**

### **SARA 302 Components**

No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

### **SARA 313 Components**

No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 313.

### **SARA 311/312 Hazards**

No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 311/312.

### **Massachusetts Right to Know**

No components are subject to the Massachusetts Right to Know Act.

**Pennsylvania Right to Know**

No components are subject to the Pennsylvania Right to Know Act.

**New Jersey Right to Know**

No components are subject to the New Jersey Right to Know Act.

**California Prop. 65 Components**

This product does not contain any chemicals known to the State of California to cause birth defects, cancer, or any other reproductive harm.

**SECTION 16: OTHER INFORMATION****Full text of H-Statements referred to under sections 2 and 3**

H315 Causes skin irritation

H317 May cause an allergic skin reaction

H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled

**Further information**

Revision Date: 2020-03-23

The above information is based upon the present state of our knowledge and is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information is believed to be correct but does not purport to be all inclusive. It does not represent any guarantees of the properties of the product. TOKU-E Company shall not be held liable for damage or injury resulting from contact, handling, or storage of the above product.