



## Xcess Biosciences Inc.

7144 N Harlem Ave #169  
Chicago, IL 60631 USA

<http://www.xcessbio.com>

Toll free: 1-866-706-2330

Fax: 1-619- 810-0718

Email: [info@xcessbio.com](mailto:info@xcessbio.com)

# Material Safety Data Sheet

## 1. Identification of substance:

**Trade name:** BIBW2992 (Afatinib)

**Product Number:** M60065-5s, M60065-5

**Manufacturer/Supplier:** Xcess Biosciences Inc.

7144 N Harlem Ave #169

Chicago, IL 60631 USA

Phone: 1-866-706-2330

Fax: 1-619- 810-0718

## 2. Composition/data on components:

**Chemical Name:** (S,E)-N-(4-(3-chloro-4-fluorophenylamino)-7-(tetrahydrofuran-3-yloxy)quinazolin-6-yl)-4-(dimethylamino)but-2-enamide

**Synonyms:** BIBW2992 (Afatinib)

**Hazardous Ingredient:** BIBW2992 (Afatinib)

**CAS Registry Number:** 439081-18-2

**Molecular Weight:** 485.94

**Molecular Formula:** C<sub>24</sub>H<sub>25</sub>ClFN<sub>5</sub>O<sub>3</sub>

## 3. Hazards identification:

**Hazard Description:** Contains a pharmaceutically active ingredient. Substance not fully tested. May be harmful if swallowed or inhaled. May cause irritation of the respiratory tract, eye, and skin. Handling should only be performed by personnel trained and familiar with handling of potent active pharmaceutical ingredients.

## 4. First aid measures:

**After Inhalation:** If inhaled, remove to fresh air; if breathing is difficult, give oxygen; if breathing stops, give artificial respiration.

**After skin contact:** flush with copious amounts of water; remove contaminated clothing and shoes; call a physician.

**After eye contact:** check for and remove contact lenses; flush with copious amounts of water; assure adequate flushing by separating the eyelids with fingers; call a physician

**After swallowing:** if swallowed, wash out mouth with copious amounts of water; call a physician

## 5. Firefighting measures:

**Suitable extinguishing agents:** water spray, carbon dioxide, dry chemical powder or foam.

**Protective equipment:** wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.

**Unusual fire hazard:** emits toxic fumes such as carbon monoxide, etc.

## 6. Accidental release measures:



## **Xcess Biosciences Inc.**

7144 N Harlem Ave #169  
Chicago, IL 60631 USA

<http://www.xcessbio.com>

Toll free: 1-866-706-2330

Fax: 1-619- 810-0718

Email: [info@xcessbio.com](mailto:info@xcessbio.com)

**Person-related safety precautions:** cordon off area of spill; wear self-contained breathing apparatus, protective clothing and heavy rubber gloves.

**Measures for cleaning/collecting:** absorb solutions with finely- powdered liquid-binding material (diatomite, universal binders); decontaminate surfaces and equipment by scrubbing with alcohol; dispose of contaminated material according to Section 13.

### **7. Handling and storage:**

**Information for safe handling:** Handle with care and avoid unnecessary exposure. Avoid inhalation. Avoid contact with eyes, skin, and clothing. Use protective equipment to minimize exposure. Avoid prolonged or repeated exposure. Handle compound in a laboratory fume hood.

**Storage:** store solid and solutions at 4°C or -20°C for longer time storage.

### **8. Exposure controls and personal protection:**

**Engineering controls:** safety shower and eye bath; mechanical exhaust required.

**Personal protective equipment as follows:**

**Breathing equipment:** NIOSH/MSHA-approved respirator.

**Protection of hands:** chemical-resistant rubber gloves.

**Eye protection:** chemical safety goggles.

### **9. Physical and chemical properties:**

**Form:** Crystalline solid; granular or powder

**Danger of explosion:** none

**Solvent content:** none

**Solubility:** DMSO

### **10. Stability and reactivity:**

**Stability:** stable if stored as directed; avoid strong oxidizing agents

**Conditions to avoid:** protect from light and heat

**Material to avoid:** acids and bases

**Dangerous products of decomposition:** thermal decomposition may produce toxic gases such as carbon monoxide, carbon dioxide, and nitrogen oxides

### **11. Toxicological information:**

**RTECS No:** not available

**Acute toxicity:** not known

**Primary irritant effect:** not known

**On the skin:** not known; may be an irritant

**On the eye:** not known; may be an irritant

**Effects of Short-Term Exposure:** not available

**Effects of Long-Term Exposure:** not available

**Sensitization to Product:** not available

**Carcinogenicity:** not available

**Reproductive Toxicity:** not available

**Teratogenicity and Embryotoxicity:** not available



**Xcess Biosciences Inc.**

7144 N Harlem Ave #169  
Chicago, IL 60631 USA

<http://www.xcessbio.com>

Toll free: 1-866-706-2330

Fax: 1-619- 810-0718

Email: [info@xcessbio.com](mailto:info@xcessbio.com)

**Mutagenicity:** not available

**12. Ecological information:**

Ecotoxicity: not known

**13. Disposal consideration:**

Dispose of in accordance with prevailing country, federal, state and local regulations

**14. Transport information:**

**DOT:**

**Proper shipping name:** none

**Non-Hazardous for transport:** this substance is considered to be non-hazardous for transport

**IATA class:**

**Proper shipping name:** none

**Non-Hazardous for transport:** this substance is considered to be non-hazardous for transport

**15. Regulations:**

Code letter and hazard designation of product:

Hazard-determining components of labeling:

EU Risk and safety phrases:

- S24/25: Avoid contact with skin and eyes
- S26: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice
- S28: After contact with skin, wash immediately with plenty of water
- S36/37/39: Wear protective clothing, gloves and eye/face protection
- R28: Very toxic if swallowed
- R38: Irritating to skin
- R41: Risk of serious damages to eyes
- R48: Toxic; danger of serious damage to health by prolonged exposure
- R62: Possible risk of impaired fertility
- R63: Possible risk of harm to unborn child

**16. Other information:**

The above information is believed to be correct based on our present knowledge but does not purport to be complete. For research use only by trained personnel. The burden of safe use of this material rests entirely with the user. Xcess Biosciences disclaims all liability for any damage resulting from use of this material. For research use only. Not for use in diagnostic or therapeutic applications.

End of safety data sheet