Section 1. Product and Company Identification

Product Name: Afatinib
Product ID: A2077
Chemical Name (Synonyms): BIBW 2992
Supplier: LKT Laboratories, Inc
545 Phalen Blvd.
St. Paul, MN 55130 USA
Ph: 651-644-8424 Fax: 651-644-8357
www.lktlabs.com - getinfo@lktlabs.com

Emergency Phone #: 1-800-424-9300

Section 2. Hazards Identification

GHS Classification:
- Acute toxicity, Oral (Category 2), H300
- Skin corrosion/Irritation (Category 2), H315
- Serious eye damage/Eye irritation (Category 1), H318
- Toxic to reproduction (Category 2), H361
- Target organ systemic toxicity, repeated exposure (Category 2), Respiratory, H373

GHS Label elements including precautionary statements

Pictogram

Signal word: Danger

Hazard and precautionary statements:

Hazard statements:
- H300 - Fatal if swallowed.
- H315 - Causes skin irritation.
- H318 - Causes serious eye damage.
- H361 - Suspected of damaging fertility or the unborn child.
- H373 - May cause damage through prolonged or repeated exposure.

Precautionary statements:
- P201 - Obtain special instructions before use.
- P202 - Do not handle until all safety precautions have been read and understood.
- P260 - Do not breath dust, fumes, gas, mist, vapors, spray.
- P362 + P364 - Take off contaminated clothing and wash before reuse.
- P254 - Wash skin thoroughly after handling.
- P270 - Do not eat, drink, or smoke, when using this product.
- P280 - Wear protective gloves, eye protection, or face protection.
- P281 - Use personal protective equipment as required.
- P301 + P310 - IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
- P302 + P352 - IF ON SKIN: Wash with plenty of soap and water.
- P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- P308 + P313 - IF exposed or concerned: Get medical advice/attention.
- P310 - Immediately call a POISON CENTER or doctor/physician.
- P314 - Get medical advice/attention if you feel unwell.
- P315 - Specific treatment (see supplemental 1st aid instructions on this label).
- P320 - Rinse mouth.
- P332 + P313 - If skin irritation occurs: Get medical advice/attention.
- P337 + P313 - If eye irritation persists: Get medical advice/attention.
- P362 - Take off contaminated clothing and wash before reuse.
- P405 - Store locked up.
- P401 - Dispose of contents/container to an approved waste disposal plant.

HMIS Classification: Not classified.

NFPA Rating: Not classified.

Potential Health Effects:
- Inhalation - May be harmful if inhaled. May cause respiratory tract irritation.
- Skin - May be harmful if absorbed through skin. Causes skin irritation.
- Eyes - Causes serious eye damage.
Ingestion - Fatal if swallowed.

### Section 3. Composition/Information on Ingredients

<table>
<thead>
<tr>
<th>Substances</th>
<th>Ingredient: Title Compound</th>
<th>Percent: 100</th>
</tr>
</thead>
<tbody>
<tr>
<td>Formula</td>
<td>( \text{C}<em>{24}\text{H}</em>{25}\text{ClF}_5\text{O}_3 )</td>
<td>485.94</td>
</tr>
<tr>
<td>CAS No.</td>
<td>850140-72-6</td>
<td>EC No.</td>
</tr>
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</table>

### Section 4. First Aid Measures

**General advice**
Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

**Eye Contact**
Flush eyes with water as a precaution.

**Skin Contact**
Wash off with soap and plenty of water.

**Inhalation**
If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

**Ingestion**
Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

### Section 5. Firefighting Measures

**Flash Point**
Not available.

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

**Firefighting Procedures**
Wear self-contained breathing apparatus for fire fighting if necessary.

**Unusual Fire Hazards**
Carbon oxides, nitrogen oxides (NOx).

### Section 6. Accidental Release Measures

**Personal Precautions**
Wear respiratory protection. Avoid dust formation. Avoid breathing vapors, mist, or gas. Ensure adequate ventilation. Evacuate personnel to safe areas.

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

**Methods and materials for containment and cleanup**
Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

### Section 7. Handling and Storage

**Handling**
Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Provide appropriate exhaust ventilation at places where dust is formed.

**Storage Conditions**
Keep container tightly closed in a dry and well-ventilated place.
Recommended storage temperature: +4°C

**Hazardous Decomposition Products**
Not available.

**Other Remarks**
Section 8. Exposure Controls/Personal Protection

Personal protective equipment

EXPOSURE CONTROLS
Contains no substances with occupational exposure limit values.

General industrial hygiene practice.

PERSONAL PROTECTION

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

Skin protection: Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) 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.

Body protection: Choose body protection in relation to its type, to the concentration and amount of dangerous substances and to the specific workplace. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection: Respiratory protection is not required. Where protection from nuisance levels of dusts are desired, use type N95 (US) or type P1 (EN 143) dust masks. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Section 9. Physical and Chemical Properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical State</td>
<td>Solid</td>
</tr>
<tr>
<td>Color</td>
<td>Pale yellow powder</td>
</tr>
<tr>
<td>Boiling Point</td>
<td>Not available</td>
</tr>
<tr>
<td>Volatility</td>
<td>Not available</td>
</tr>
<tr>
<td>Melting Point</td>
<td>Not available</td>
</tr>
<tr>
<td>Density</td>
<td>Not available</td>
</tr>
<tr>
<td>Solubility</td>
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<tr>
<td>pH</td>
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<tr>
<td>Flash Point</td>
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<td>Ignition temperature</td>
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<td>Lower explosion limit</td>
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<tr>
<td>Upper explosion limit</td>
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<tr>
<td>Vapor pressure</td>
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<td>Water solubility</td>
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<td>Odor</td>
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<tr>
<td>Partition coefficient:</td>
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<tr>
<td>n-octanol/water</td>
<td>Odor Threshold</td>
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<tr>
<td>Relative vapor density</td>
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</tr>
<tr>
<td>Evaporation rate</td>
<td>Not available</td>
</tr>
</tbody>
</table>

Section 10. Stability and Reactivity

Stability
Stable under recommended storage conditions.

Materials To Avoid
Strong oxidizing agents.

Hazardous Decomposition Products
Not available.
Section 11. Toxicological Information

### Oral LD50
Not available.

### Inhalation LC50
Not available.

### Dermal LD50
Not available.

### Other information on acute toxicity
Not available.

### Skin corrosion/irritation
Not available.

### Serious eye damage/irritation
Not available.

### Respiratory or skin sensitization
Not available.

### Germ cell mutagenicity
Not available.

### Reproductive Toxicity
Not available.

### Aspiration Hazard
Not available.

### Specific organ toxicity
- **Single exposure (GHS)**
  Not available.
- **Repeated exposure (GHS)**
  Not available.

### Synergistic effects
Not available.

### Additional Information
Not available.

### Signs and symptoms of exposure
Not available.

### Potential Health Effects
Inhalation - May be harmful if inhaled. May cause respiratory tract irritation. Skin - May be harmful if absorbed through skin. Causes skin irritation. Eyes - Causes serious eye damage. Ingestion - Fatal if swallowed.

### 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 IARC.
**ACGIH:** No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.
**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 NTP.
**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 OSHA.

Section 12. Ecological Information

### Toxicity
Not available.

### Mobility in soil
Not available.

### PBT and vPvB assessment
PBT/vPvB assessment not available as chemical safety assessment not required/not
Section 13. Disposal Considerations

**Waste Disposal**
Dispose of material according to all federal, state, and local regulations.
Offer material to a licensed, professional waste disposal company to dispose of as unused product.

Section 14. Transport Information

**DOT (US)** Not dangerous goods.

**IATA** Not dangerous goods.

**IMDG** Not dangerous goods.

Further Information

Section 15. Regulatory Information

**Reach No.**

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

**SARA 313 Components** SARA 313: This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

**SARA 311/312 Components** No SARA hazards.

**Massachusetts Right To Know Components** No components are subject to the Massachusetts Right to Know Act.

**Pennsylvania Right To Know Components** Atatinib CAS: 850140-72-6 Revision Date:

**New Jersey Right To Know Components** Atatinib CAS: 850140-72-6 Revision Date:

**California Prop 65 Components** This product does not contain any chemicals known to the State of California to cause cancer, birth defects, or any other reproductive harm.

Section 16. Other Information

Other information The information in this document is believed to be correct but is not necessarily complete. LKT does not guarantee the accuracy of the information. The burden of verifying the information in this document rests solely upon the user.