

# Selumetinib: sc-364613



The Power to Question

## MATERIAL SAFETY DATA SHEET

### 1. PRODUCT AND COMPANY IDENTIFICATION:

**Product Name:** Selumetinib  
**Catalog number:** sc-364613  
**Supplier:** Santa Cruz Biotechnology, Inc.  
2145 Delaware Avenue  
Santa Cruz, CA 95060  
800.457.3801 or 831.457.3800  
**Emergency:** ChemWatch  
Within the US & Canada: 877-715-9305  
Outside the US & Canada: +800 2436 2255 (1-800-CHEMCALL) or call +613 9573 3112

### 2. COMPOSITION/DATA ON COMPONENTS:

**Chemical Name:** 5-[(4-bromo-2-chlorophenyl)amino]-4-fluoro-N-(2-hydroxyethoxy)-1-methyl-1H-benzimidazole-6-carboxamide  
**Synonyms:** AZD6244; 6-(4-bromo-2-chlorophenylamino)-7-fluoro-N-(2-hydroxyethoxy)-3-methyl-3H-benzo[d]imidazole-5-carboxamide; ARRY-142886; ARRY-886; 5-[(4-Bromo-2-chlorophenyl)amino]-4-fluoro-N-(2-hydroxyethoxy)-1-methyl-1H-benzimidazole-6-carboxamide  
**Hazardous Ingredient:** Selumetinib, Free Base  
**CAS Registry Number:** 606143-52-6  
**Molecular Weight:** 457.68  
**Molecular Formula:** C<sub>17</sub>H<sub>15</sub>BrClFN<sub>4</sub>O<sub>3</sub>

### 3. HAZARDS IDENTIFICATION:

**Hazard Description:** pharmaceutically active ingredient

<b>Ingestion</b>	Has been shown to produce a number of adverse dermatological effects including papulopustular rash (skin eruption consisting of papules and pustules), xerosis (dry skin), pruritus (itching), fissures, telangiectasias (small dilated blood vessels near the surface of the skin or mucous membranes), hyperpigmentation, alopecia (hair loss), angular cheilitis (inflammatory lesion at the corner of the mouth), paronychia (infection at the base of the nails), and secondary bacterial infection by Staphylococcus aureus. Ingestion may also cause fatigue, nausea, vomiting, diarrhea, peripheral edema, and xerostomia (dry mouth).
<b>Eyes</b>	May cause serious damage.
<b>Chronic</b>	May cause genotoxicity and have possible teratogenic effects.

### 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. FIRE FIGHTING 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:** May emit toxic fumes under fire conditions such as carbon monoxide, etc.

### 6. ACCIDENTAL RELEASE MEASURES:

**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:** Avoid contact with skin, eyes and clothing; material may be an irritant.

**Storage:** store solid and solutions at -20 °C

## 8. EXPOSURE CONTROLS AND PERSONAL PROTECTION:

**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	Odor	none
Melting point/Melting range	208-214 °C	Danger of explosion	none

**Solubility in / Miscibility with water:** Very poorly soluble in water; maximum solubility in plain water is estimated to be about 25-50µM; buffers, serum, or other additives may increase or decrease the aqueous solubility

**Organic solvents:** Soluble in DMSO at 200 mg/mL; soluble in ethanol at 2.5 mg/mL with warming

## 10. STABILITY AND REACTIVITY:

**Stability:** avoid acids and bases

**Thermal decomposition / conditions to be avoided:** protect from light and heat

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

## 11. TOXICOLOGICAL INFORMATION:

**RTECS No:** not available

**Acute toxicity:** oral toxicity (LD50): >300 mg/kg (rat)

**Primary irritant effect:**

<b>On the skin</b>	may cause sensitization
<b>On the eye</b>	may cause serious damage
<b>Inhalation</b>	not known; may be harmful if inhaled
<b>Ingestion</b>	not known; may be harmful if swallowed

## 12. ECOLOGICAL INFORMATION:

**General notes:** no data available

## 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:**

S22	Do not breathe dust
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 suitable protective clothing, gloves and eye/face protection
R41	Risk of serious damage to eyes

## 16. OTHER INFORMATION:

*The above information is believed to be correct but does not purport to be complete and should be used only as a guide. The burden of safe use of this material rests entirely with the user.*

2/8/2013