

# Vemurafenib, Free Base

CAT#: orb61192 [MSDS]

1. IDENTIFICATION:

**Product name:** Vemurafenib, Free Base

**Product Number:** orb61192

Manufacturer: Biorbyt Ltd.

2. HAZARD(S) IDENTIFICATION:

Hazard Description: Harmful; pharmaceutically active substance

Causes phototoxicity (skin irritation resulting from exposure to light)

May cause skin cancer

Ingestion may cause arthralgia (joint pain), rash, pruritus (itch), fatigue, headache, nausea, anorexia (decreased appetite), diarrhea, alopecia (hair loss), folliculitis (inflammation of hair follicles), keratoacanthoma (hair follicle skin tumor), cutaneous squamous cell carcinoma, photosensitivity, hypersensitivity, Stevens-Johnson syndrome and toxic epidermal necrolysis (two life-threatening skin conditions in which cell death causes the epidermis to separate from the dermis), uveitis (inflammation of the middle layer of the eye), QT prolongation (abnormal heart rate), serious hypersensitivity reactions including anaphylaxis (immune system disorder), and hepatotoxicity causing liver damage)

Signal Word: Warning

# **GHS Hazard Statements:**

H302 - Harmful if swallowed

H313 - May be harmful in contact with skin

H333 - May be harmful if inhaled

H335 - May cause respiratory irritation

H350 - May cause cancer

## **GHS Precautionary Statements:**

P261 - Avoid breathing dust/fume/gas/mist/vapours/spray

P264 - Wash skin thoroughly after handling



P280 - Wear protective gloves/eye protection/face protection

P314 - Get medical advice/attention if you feel unwell

## 3. **COMPOSITION/INFORMATION ON INGREDIENTS:**

ChemicalName: N-[3-[[5-(4-chlorophenyl)-1H-pyrrolo[2,3-b]pyridin-3-yl]carbonyl]-2,4-difluorophenyl]-1-

propanesulfonamide

Synonyms: PLX4032, R7204, RG7204, RO5185426, Zelboraf

Hazardous Ingredient: Vemurafenib, Free Base

CAS Registry Number: 918504-65-1

Molecular Weight: 489.92

Molecular Formula: C23H18ClF2N3O3S

#### 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/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; granular or powder

**Color:** white to off-white

Odor: none

Melting point/Melting range: 262-275 ºC

Danger of explosion: none

Solubility in / Miscibility with water: very poorly soluble in water; maximum solubility in plain water is

estimated to be about 25-50 µM; buffers, serum, or other additives may

increase or decrease the aqueous solubility

Solvent content:

**Organic solvents:** soluble in DMSO at 100 mg/mL; very poorly soluble in ethanol

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 #: not available

Acute toxicity: oral toxicity (LD50): >2500 mg/kg (rat) - toxicity data from the Hoffmann-

La Roche MSDS dated October 19, 2011 for Zelboraf

**Primary irritant effect:** 

On the skin: phototoxic, may cause skin irritation, may be harmful if absorbed through

the skin

On the eye: may cause eye irritation

**Inhalation:** may be harmful if inhaled

**Ingestion:** harmful if swallowed

12. ECOLOGICAL INFORMATION:

**General notes**: no data available

Treat as potentially toxic if released into the environment

13. DISPOSAL CONSIDERATIONS:

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. REGULATORY INFORMATION:

Code letter and hazard designation of product:

Xn: Harmful



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

S45: In case of accident or if you feel unwell, seek medical advice immediately

(show the label where possible)

R22: Harmful if swallowed

## 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. Biorbyt disclaims all liability