

# **Vandetanib**

Cat#: orb546013 (MSDS)

#### 1. PRODUCT AND COMPANY IDENTIFICATION

#### 1.1 Product identifier

Product name: Vandetanib (ZD6474)

CAS No.: 443913-73-3

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

Identified uses: Laboratory chemicals, manufacture of substances.

## 2. HAZARDS IDENTIFICATION

# 2.1 Classification of the substance or mixture GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

H302 #Harmful if swallowed.

H315 #Causes skin irritation.

H319 #Causes serious eye irritation.

H335 #May cause respiratory irritation.

H360 #May damage fertility or the unborn child.

H360Df #May damage the unborn child; Suspected of damaging fertility.

H373 #Causes damage to organs through prolonged or repeated exposure.

H400 #Very toxic to aquatic life.

H410 #Very toxic to aquatic life with long lasting effects.

# 2.2 GHS Label elements, including precautionary statements





Signal word No data available

## Hazard statement(s)

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H360 May damage fertility or the unborn child.

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# Precautionary statement(s)

P201 Obtain special instructions before use.

P202 Do not handle until all safety precautions have been read and understood.

P260 Do not breathe dust/fume/gas/mist/vapors/spray.

P261 Avoid breathing dust/fume/gas/mist/vapors/spray.

P264 Wash skin thoroughly after handling.

P270 Do not eat, drink or smoke when using this product.

P271 Use only outdoors or in a well-ventilated area.

P273 Avoid release to the environment.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P281 Use personal protective equipment as required.

P312 Call a POISON CENTER or doctor/ physician if you feel unwell.

P314 Get medical advice/attention if you feel unwell.

P330 Rinse mouth.

P362 Take off contaminated clothing.

P391 Collect spillage.

P301+P312 IF SWALLOWED: call a POISON CENTER/doctor/physician IF you feel unwell.

P302+P352 IF ON SKIN: wash with plenty of water.

P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

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.

P332+P313 IF SKIN irritation occurs: Get medical advice/attention.

P337+P313 IF eye irritation persists: Get medical advice/attention.

P405 Store locked up.

P403+P233 Store in a well-ventilated place. Keep container tightly closed.

P501 Dispose of contents/ container to an approved waste disposal plant.

## 2.3 Other hazards

None.

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

#### 3.1 Substances

Synonyms: N-(4-bromo-2-fluorophenyl)-6-methoxy-7-((1-methylpiperidin-4-yl)methoxy)quinazolin-4-amine

N/A

Formula: C22H24BrFN4O2 Molecular Weight: 475.35 CAS No.: 443913-73-3



#### 4. FIRST AID MEASURES

#### 4.1 Description of first aid measures

#### Eye contact

Remove any contact lenses, locate eye-wash station, and flush eyes immediately with large amounts of water. Separate eyelids with fingers to ensure adequate flushing. Promptly call a physician.

#### Skin contact

Rinse skin thoroughly with large amounts of water. Remove contaminated clothing and shoes and call a physician.

#### **Inhalation**

Immediately relocate self or casualty to fresh air. If breathing is difficult, give cardiopulmonary resuscitation (CPR). Avoid mouth-to-mouth resuscitation.

#### Ingestion

Wash out mouth with water; Do NOT induce vomiting; call a physician.

# 4.2 Most important symptoms and effects, both acute and delayed

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

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

Treat symptomatically.

#### 5. FIRE FIGHTING MEASURES

# 5.1 Extinguishing media

## Suitable extinguishing media

Use water spray, dry chemical, foam, and carbon dioxide fire extinguisher.

## 5.2 Special hazards arising from the substance or mixture

During combustion, may emit irritant fumes.

# 5.3 Advice for firefighters

Wear self-contained breathing apparatus and protective clothing.

#### **6. ACCIDENTAL RELEASE MEASURES**

## 6.1 Personal precautions, protective equipment and emergency procedures

Use full personal protective equipment. Avoid breathing vapors, mist, dust or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Refer to protective measures listed in sections 8.

#### 6.2 Environmental precautions

Try to prevent further leakage or spillage. Keep the product away from drains or water courses.

## 6.3 Methods and materials for containment and cleaning up

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

# 7.1 Precautions for safe handling

Avoid inhalation, contact with eyes and skin. Avoid dust and aerosol formation. Use only in areas with appropriate exhaust ventilation.

## 7.2 Conditions for safe storage, including any incompatibilities

Keep container tightly sealed in cool, well-ventilated area. Keep away from direct sunlight and sources of ignition. Store at -20°C(powder) or -80°C( in solvent)

## 7.3 Specific end use(s)

No data available.

# 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

## 8.1 Control parameters

# Components with workplace control parameters

This product contains no substances with occupational exposure limit values.

# 8.2 Exposure controls

# **Engineering controls**

Ensure adequate ventilation. Provide accessible safety shower and eye wash station.

## Personal protective equipment

**Eye protection** Safety goggles with side-shields.

Hand protection Protective gloves.

Skin and body protection Impervious clothing.

**Respiratory protection** Suitable respirator.

**Environmental exposure controls** Keep the product away from drains, water courses or the soil.

Clean spillages in a safe way as soon as possible.

#### 9. PHTSICAL AND CHEMICAL PROPERTIES

# 9.1 Information on basic physical and chemical properties

Appearance solid

**Odor** No data available

Odor threshold No data available

**pH** No data available

Melting/freezing point No data available

Boiling point/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

Water solubility <1 mg/mL

Partition coefficient 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.

#### 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 acids/alkalis, strong oxidising/reducing agents.

## 10.6 Hazardous decomposition products

Under fire conditions, may decompose and emit toxic fumes. Other decomposition products - no data available.

# 11. TOXICOLOGICAL INFORMATION

## 11.1 Information on toxicological effects

# **Acute toxicity**

Classified based on available data. For more details, see section 2.



## Skin corrosion/irritation

Classified based on available data. For more details, see section 2.

## Serious eye damage/irritation

Classified based on available data. For more details, see section 2.

## Respiratory or skin sensitization

Classified based on available data. For more details, see section 2.

# Germ cell mutagenicity

Classified based on available data. For more details, see section 2.

# Carcinogenicity

IARC: No component of this product present at a level equal to or greater than 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

ACGIH: No component of this product present at a level equal to or greater than 0.1% is identified as a potential or confirmed carcinogen by ACGIH.

NTP: No component of this product present at a level equal to or greater than 0.1% is identified as a anticipated or confirmed carcinogen by NTP.

OSHA: No component of this product present at a level equal to or greater than 0.1% is identified as a potential or confirmed carcinogen by OSHA.

# Reproductive toxicity

Classified based on available data. For more details, see section 2.

# Specific target organ toxicity - single exposure

Classified based on available data. For more details, see section 2.

# Specific target organ toxicity - repeated exposure

Classified based on available data. For more details, see section 2.

## **Aspiration hazard**

Classified based on available data. For more details, see section 2.

#### **Additional information**

RTECS No.: Unavailable

This information is based on our current knowledge. However the chemical, physical, and toxicological properties have not been completely investigated.

#### 12. ECOLOGICAL INFORMATION

# 12.1 Toxicity

No data available.

## 12.2 Persistence and degradability

No data available.

## 12.3 Bioaccumlative potential

No data available.

# 12.4 Mobility in soil

No data available.



## 12.5 Results of PBT and vPvB assessment

PBT/vPvB assessment unavailable as chemical safety assessment not required or not conducted.

#### 12.6 Other adverse effects

No data available.

#### 13. DISPOSAL CONSIDERATIONS

# 13.1 Waste treatment methods

#### **Product**

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

# **Contaminated packaging**

Conduct recycling or disposal in accordance with prevailing country, federal, state and local regulations.

#### 14. TRANSPORT INFORMATION

## DOT (US)

This substance is considered to be non-hazardous for transport.

#### **IMDG**

This substance is considered to be non-hazardous for transport.

#### **IATA**

This substance is considered to be non-hazardous for transport.

#### 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:**

This material does not contain any chemical components with known CAS numbers that exceed the thres xd808 xd87c