

## Nintedanib, Ethanesulfonate Salt

Cat#: orb180030 (MSDS)

### SECTION 1. IDENTIFICATION:

Trade name: Nintedanib, Ethanesulfonate Salt

Product Number: orb180030

### SECTION 2. HAZARD(S) IDENTIFICATION:

Hazard Description: pharmaceutically active substance

May be harmful if swallowed, inhaled, or absorbed through the skin

Ingestion can cause diarrhea, nausea, fatigue, vomiting, upper abdominal pain, and reversible elevation of hepatic enzymes

Exposure may cause irritation of the respiratory tract, eye, and skin and allergic respiratory and skin reaction

This substance is a triple angiokinase inhibitor that inhibits three growth factor receptors simultaneously: vascular endothelial growth factor receptor (VEGFR), platelet-derived growth factor receptor (PDGFR) and fibroblast growth factor receptor (FGFR)

Signal Word: Warning

#### GHS Hazard Statements:

H302+312+332 - Harmful if swallowed, in contact with skin or if inhaled

#### GHS Precautionary Statements:

P2562 - Do not get in eyes, on skin or on clothing

WARNING: For Laboratory Research Use Only

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

Chemical Name: (3Z)-2,3-Dihydro-3-[[[4-[methyl[2-(4-methyl-1-piperazinyl) acetyl] amino] phenyl] amino] phenylethylene]-2-oxo-1H-indole-6-carboxylic acid methyl ester Ethanesulfonate

Synonyms: BIBF1120 Esylate, Intedanib Esylate, Nintedanib Esylate, Vargatef Esylate

Hazardous Ingredient: Nintedanib, Ethanesulfonate Salt

CAS Registry Number: 656247-18-6

Molecular Weight: 649.76

Molecular Formula: C<sub>31</sub>H<sub>33</sub>N<sub>5</sub>O<sub>4</sub>•C<sub>2</sub>H<sub>6</sub>O<sub>3</sub>S

### SECTION 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

#### **SECTION 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.

#### **SECTION 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

#### **SECTION 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

#### **SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION:**

Personal protective equipment as follows:

Breathing equipment: NIOSH/MSHA-approved respirator

Protection of hands: handle with Nitrile rubber gloves with minimum thickness of 0.11 mm (4.3 mil). This recommendation should not be interpreted as offering an approval for any specific use conditions. Please review this recommendation with a safety officer to evaluate if it is appropriate for the anticipated use.

Eye protection: chemical safety goggles

#### **SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES:**

Form: crystalline solid; granular or powder

Color: yellow

Odor: none

Melting point/Melting range: not determined

Danger of explosion: none

Solubility in / Miscibility with water: soluble in water at 25 mg/mL with warming; buffers, serum, or other additives may increase or decrease the aqueous solubility

Solvent content: none

Organic solvents: soluble in DMSO at 25 mg/mL with warming; soluble in ethanol at 8 mg/mL with warming

**SECTION 10. STABILITY AND REACTIVITY:**

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

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, carbon dioxide, and nitrogen oxides

**SECTION 11. TOXICOLOGICAL INFORMATION:**

RTECS #: not available

Acute toxicity:

Primary irritant effect:

On the skin: may be an irritant; may be harmful if absorbed through the skin

On the eye: may be an irritant

Inhalation: may be an irritant; may be harmful if inhaled

Ingestion: may be harmful if swallowed

**SECTION 12. ECOLOGICAL INFORMATION:**

General notes: no data available

Treat as potentially toxic if released into the environment

**SECTION 13. DISPOSAL CONSIDERATIONS:**

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

**SECTION 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

**SECTION 15. REGULATORY INFORMATION:**

Code letter and hazard designation of product:

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)

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