

**Ofev® Capsules**

Version 1.1      Revision Date: 06/03/2015      MSDS Number: 000000036035      Date of last issue: 05/28/2015  
Date of first issue: 05/28/2015

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**SECTION 1. IDENTIFICATION**

Product name : Ofev® Capsules

Synonyms : Active ingredient: Nintedanib <= 43 %  
Ofev® Capsules 100 and 150 mg,

Product code : 000000036035

**Manufacturer or supplier's details**

Company name of supplier : Boehringer-Ingelheim Pharmaceuticals, Incorporated

Address : 900 Ridgebury Road  
Ridgefield, Connecticut  
06877-0368

Emergency telephone number : +1-800-424-9300 CHEMTREC Emergency Phone Number  
CHEMTREC – 24 Hours

Routine Contact Number : (203) 778-7759

**Recommended use of the chemical and restrictions on use**

Recommended use : Mixture for production of finished medicinal products.

Prepared by : Corp. Div. EHS & Sustainability / Global EHS Services  
[EHS-service@boehringer-ingelheim.com](mailto:EHS-service@boehringer-ingelheim.com)


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**SECTION 2. HAZARDS IDENTIFICATION****GHS Classification (Hazard Communication Standard (HCS) 29 CFR 1910.1200)**

Reproductive toxicity : Category 1B

Specific target organ toxicity : Category 2  
- repeated exposure

**GHS Label element (Hazard Communication Standard (HCS) 29 CFR 1910.1200)**

Hazard pictograms : 

Signal word : Danger

Hazard statements : H360 May damage fertility or the unborn child.  
H373 May cause damage to organs through prolonged or repeated exposure.

Precautionary statements : **Prevention:**

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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/ vapours/ spray.  
P281 Use personal protective equipment as required.  
**Response:**  
P308 + P313 IF exposed or concerned: Get medical advice/ attention.  
**Storage:**  
P405 Store locked up.  
**Disposal:**  
P501 Dispose of contents/ container to an approved waste disposal plant.

**Other hazards**

None known.

**SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS**

Substance / Mixture : Mixture

**Hazardous components**

| Chemical Name      | CAS-No.     | Concentration (%) |
|--------------------|-------------|-------------------|
| Nintedanib esylate | 656247-18-6 | 43                |

**SECTION 4. FIRST AID MEASURES**

General advice : Remove from exposure, lie down.  
Take off immediately all contaminated clothing.  
Victim to lie down in the recovery position, cover and keep him warm.  
First Aid responders should pay attention to self-protection and use the recommended protective clothing

If inhaled : Keep patient calm, remove to fresh air, seek medical attention.

In case of skin contact : Wash off thoroughly with ample water.  
Seek medical attention.

In case of eye contact : Immediately wash affected eyes for at least 15 minutes under running water with eyelids held open, consult an eye specialist.

If swallowed : Rinse mouth immediately and then drink plenty of water, seek medical attention.

Most important symptoms and effects, both acute and delayed : May damage fertility or the unborn child.  
May cause damage to organs through prolonged or repeated exposure.

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Notes to physician : Observe the summary of product characteristics of proprietary medicinal products

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**SECTION 5. FIREFIGHTING MEASURES**

- Suitable extinguishing media : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.  
Water  
Dry chemical  
Foam  
Carbon dioxide (CO<sub>2</sub>)
- Specific hazards during fire-fighting : In case of fire and/or explosion do not breathe fumes.  
Can be released in case of fire:  
Carbon oxides  
Nitrogen oxides (NO<sub>x</sub>)  
Sulphur oxides
- Further information : Collect contaminated fire extinguishing water separately. This must not be discharged into drains.  
Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.  
Avoid generating dust; fine dust dispersed in air in sufficient concentrations, and in the presence of an ignition source is a potential dust explosion hazard.
- Special protective equipment for firefighters : Wear self-contained breathing apparatus and chemical-protective clothing.
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**SECTION 6. ACCIDENTAL RELEASE MEASURES**

- Personal precautions, protective equipment and emergency procedures : Wear personal protective equipment.  
Ensure adequate ventilation.  
Never return spills in original containers for re-use.
- Environmental precautions : Do not flush into surface water or sanitary sewer system.
- Methods and materials for containment and cleaning up : Wear personal protective equipment.  
Clean-up methods - large spillage  
Dampen, pick up mechanically and dispose of.  
Clean-up methods - small spillage  
Use approved industrial vacuum cleaner for removal.  
Keep in suitable, closed containers for disposal.
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**SECTION 7. HANDLING AND STORAGE**

- Advice on protection against fire and explosion : No special protective measures against fire required.
- Advice on safe handling : Provide sufficient air exchange and/or exhaust in work rooms.
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Routine housekeeping should be instituted to ensure that dusts do not accumulate on surfaces.  
Minimize dust generation and accumulation.  
Dry powders can build static electricity charges when subjected to the friction of transfer and mixing operations.  
Provide adequate precautions, such as electrical grounding and bonding, or inert atmospheres.  
Breathing must be protected when large quantities are decanted without local exhaust ventilation.  
Keep container closed when not in use.

Conditions for safe storage : Store in original container.  
Protect from heat and direct sunlight.  
Jointless smooth floor  
Keep container tightly closed.

Materials to avoid : Keep away from food, drink and animal feedingstuffs.  
Advice on Segregation

**SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION****Components with workplace control parameters**

| Components  | Basis | Factor | Cateryory | Values   | Remark |
|---|-------|--------|-----------|----------|--------|
| 3-(1-(4-(Methyl-(2-(4-methylpiperazin-1-yl)-acetyl)-amino)-phenylamino)-1-phenylmeth-(Z)-yliden)-2-oxo-2,3-dihydro-1H-indole-6-carbx<br>656247-18-6 | ECL   |        | 3A        | 60 µg/m3 |        |
|   | BIPC  |        | 3         |          |        |
| ECL (BIPI Exposure Control Limit)   |       |        |           |          |        |

**Engineering measures** : Use only appropriately classified electrical equipment and powered industrial trucks.

**Personal protective equipment**

Respiratory protection : Use breathing apparatus if exposed to vapours/dust/aerosol.  
half mask (EN 140)  
particle filter P2

Hand protection    Material : Chemical resistant gloves made of butyl rubber or nitrile rubber category III according to EN 374.  
Directive : Protective gloves against chemicals and micro-organisms

Eye protection : Safety glasses with side-shields

Skin and body protection : Laboratory: laboratory coat; factory: disposable Overall.

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- Protective measures : Handle in accordance with good industrial hygiene and safety practice.  
Do not breathe dust.  
Avoid contact with skin, eyes and clothing.  
Only use protective equipment in accordance with national/international regulations. Follow the national regulations about wearing personal protective equipment and the warranty given by the manufacturer for the safe function.
- Hygiene measures : General industrial hygiene practice.  
Wash hands and face before breaks and immediately after handling the product.  
Keep working clothes separately.

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**SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES**

- Appearance : Solid form
- Colour : yellow
- Odour : No data available
- Odour Threshold : No data available
- pH : No data available
- Melting point/range : No data available
- Boiling point/boiling range : Not applicable
- Flash point : Not applicable
- Evaporation rate : Not applicable
- Flammability (solid, gas) : No data available
- Upper explosion limit : No data available
- Lower explosion limit : No data available
- Vapour pressure : Not applicable
- Relative vapour density : Not applicable
- Relative density : No data available
- Bulk density : No data available
- Solubility(ies)  
Water solubility : No data available

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Partition coefficient: n-octanol/water : No data available

Auto-ignition temperature : No data available

Decomposition temperature : No data available

Viscosity  
Viscosity, dynamic : Not applicable

Explosive properties : No data available

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**SECTION 10. STABILITY AND REACTIVITY**

Reactivity : No dangerous reaction known under conditions of normal use.

Chemical stability : No decomposition if stored and applied as directed.

Conditions to avoid : No data available

Incompatible materials : No data available

Hazardous decomposition products : No data available

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**SECTION 11. TOXICOLOGICAL INFORMATION****Acute toxicity**

Not classified based on available information.

**Product:**

Acute oral toxicity : Acute toxicity estimate: 4,651 mg/kg  
Method: Calculation method

**Components:****Nintedanib esylate:**

Acute oral toxicity : LD50 (Rat): > 2,000 mg/kg  
LD50 (Mouse): > 2,000 mg/kg

Acute inhalation toxicity : Remarks: No data available

Acute dermal toxicity : Remarks: No data available

**Skin corrosion/irritation**

Not classified based on available information.

**Components:****Nintedanib esylate:**

Species: Rabbit  
Method: OECD Test Guideline 404  
Result: No skin irritation

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**Serious eye damage/eye irritation**

Not classified based on available information.

**Components:****Nintedanib esylate:**

Species: Rabbit

Result: Mild eye irritation

Method: OECD Test Guideline 405

**Respiratory or skin sensitisation**

Skin sensitisation: Not classified based on available information.

Respiratory sensitisation: Not classified based on available information.

**Components:****Nintedanib esylate:**

Method: DEREK

Result: No alert for skin sensitization

**Germ cell mutagenicity**

Not classified based on available information.

**Components:****Nintedanib esylate:**

Genotoxicity in vitro      : Test Type: Ames-test  
Species: Salmonella typhimurium  
Result: negative  
Remarks: The substance was not mutagenic in bacteria.

: Test Type: Mouse lymphoma assay  
Species: mouse lymphoma cells  
Result: negative

Genotoxicity in vivo      : Test Type: Micronucleus test  
Species: Rat  
Result: negative  
Remarks: No mutagenic effects reported.

**Carcinogenicity**

Not classified based on available information.

**Components:****Nintedanib esylate:**

Remarks: No data available

**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.

**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.

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**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.

**Reproductive toxicity**

May damage fertility or the unborn child.

**Components:****Nintedanib esylate:**

Reproductive toxicity - Assessment : May damage the unborn child.

**STOT - single exposure**

Not classified based on available information.

**STOT - repeated exposure**

May cause damage to organs through prolonged or repeated exposure.

**Repeated dose toxicity****Components:****Nintedanib esylate:**

Species: Rat  
NOAEL: 20 mg/kg  
Application Route: Oral  
Exposure time: 28-day

Species: Rat  
NOAEL: 3 mg/kg  
Application Route: Oral  
Exposure time: 13 weeks

Species: Rat  
NOAEL: 5 mg/kg  
Application Route: Oral  
Exposure time: 26 weeks

Species: Monkey  
NOAEL: 3 mg/kg  
Application Route: Oral  
Exposure time: 13 weeks

Species: Monkey  
NOAEL: 10 mg/kg  
Application Route: Oral  
Exposure time: 52 weeks

Species: Monkey  
NOAEL: 5 mg/kg  
Application Route: intravenous  
Exposure time: 14 d

**Aspiration toxicity**

Not classified based on available information.



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**Components:****Nintedanib esylate:**

No data available

**SECTION 12. ECOLOGICAL INFORMATION****Ecotoxicity****Components:****Nintedanib esylate:**

Toxicity to fish : Remarks: No data available

Toxicity to daphnia and other aquatic invertebrates : Remarks: No data available

Toxicity to algae : EC50 (Algae): > 1 mg/l  
 End point: Growth rate  
 Exposure time: 72 h  
 Method: OECD Test Guideline 201  
 Remarks: No toxicity up to solubility limit.

EC50 (Algae): > 1 mg/l  
 End point: Biomass  
 Exposure time: 72 h  
 Method: OECD Test Guideline 201  
 Remarks: No toxicity up to solubility limit.

NOEC (Algae):  $\geq$  1 mg/l  
 Exposure time: 72 h  
 Method: OECD Test Guideline 201  
 Remarks: No toxicity up to solubility limit.

Toxicity to fish (Chronic toxicity) : NOEC (fish): = 0.038 mg/l  
 Test Type: semi-static test  
 Method: Fish, Early-Life Stage Toxicity Test

Lowest Observed Effect Concentration: = 0.12 mg/l  
 Method: Fish, Early-Life Stage Toxicity Test

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : NOEC (Daphnia (water flea)): = 0.24 mg/l  
 Exposure time: 21 d

Lowest Observed Effect Concentration (Daphnia (water flea)): = 0.81 mg/l  
 Exposure time: 21 d

Toxicity to bacteria : NOEC (activated sludge):  $\geq$  1,000 mg/l  
 Exposure time: 3 h  
 Method: OECD 209

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**Persistence and degradability**

No data available

**Bioaccumulative potential****Components:****Nintedanib esylate:**

Partition coefficient: n-  
octanol/water      : log Pow: 2.7  
GLP: yes

**Mobility in soil**

No data available

**Other adverse effects****Product:**

Ozone-Depletion Potential      : Regulation: 40 CFR Protection of Environment; Part 82 Protection of Stratospheric Ozone - CAA Section 602 Class I Substances  
Remarks: This product neither contains, nor was manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A + B).

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**SECTION 13. DISPOSAL CONSIDERATIONS****Disposal methods**

Waste from residues      : Dispose of in accordance with local regulations.

Contaminated packaging      : Packs that cannot be cleaned should be disposed of in the same manner as the contents.  
Uncontaminated packaging can be recycled.

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**SECTION 14. TRANSPORT INFORMATION****International Regulation****Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code**

Not applicable for product as supplied.

**National Regulations****SECTION 15. REGULATORY INFORMATION****EPCRA - Emergency Planning and Community Right-to-Know Act**

**SARA 311/312 Hazards**      : Acute Health Hazard

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

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**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.

**Clean Air Act**

This product neither contains, nor was manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A + B).

This product does not contain any hazardous air pollutants (HAP), as defined by the U.S. Clean Air Act Section 12 (40 CFR 61).

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 112(r) for Accidental Release Prevention (40 CFR 68.130, Subpart F).

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 111 SOCM I Intermediate or Final VOC's (40 CFR 60.489).

**Clean Water Act**

This product does not contain any Hazardous Substances listed under the U.S. CleanWater Act, Section 311, Table 116.4A.

This product does not contain any Hazardous Chemicals listed under the U.S. CleanWater Act, Section 311, Table 117.3.

This product does not contain any toxic pollutants listed under the U.S. Clean Water Act Section 307

**Massachusetts Right To Know**

No components are subject to the Massachusetts Right to Know Act.

**Pennsylvania Right To Know**

|                                  |              |           |
|----------------------------------|--------------|-----------|
| Non-hazardous galenic excipients | Not Assigned | 50 - 70 % |
| Nintedanib esylate               | 656247-18-6  | 30 - 50 % |

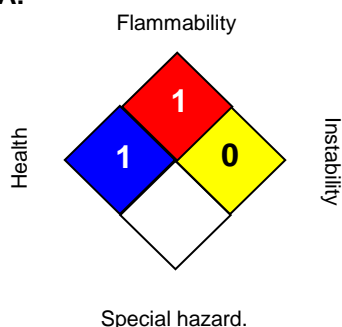
**New Jersey Right To Know**

|                                  |              |           |
|----------------------------------|--------------|-----------|
| Non-hazardous galenic excipients | Not Assigned | 50 - 70 % |
| Nintedanib esylate               | 656247-18-6  | 30 - 50 % |

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

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**SECTION 16. OTHER INFORMATION****Further information****NFPA:****HMIS III:**

|                        |          |
|------------------------|----------|
| <b>HEALTH</b>          | <b>1</b> |
| <b>FLAMMABILITY</b>    | <b>1</b> |
| <b>PHYSICAL HAZARD</b> | <b>0</b> |

0 = not significant, 1 =Slight,  
 2 = Moderate, 3 = High  
 4 = Extreme, \* = Chronic

Vertical lines in the left hand margin indicate an amendment from the previous version. Refer to NFPA 654, Standard for the Prevention of Fire and Dust Explosions from the Manufacturing, Processing, and Handling of Combustible Particulate Solids, for safe handling. Sources of key data used to compile the Safety Data Sheet : The specifications are based on own tests and/or literature data.

Revision Date : 06/03/2015

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.