

MDV3100 (Enzalutamide) SDS | MSDS

1.PRODUCT AND COMPANY IDENTIFICATION

Product identifier

- **Product Name:** MDV3100 (Enzalutamide)
- **Catalog Number:** S1250
- **CAS Number:** 915087-33-1
- **IUPAC Name:** 4-[3-[4-cyano-3-(trifluoromethyl)phenyl]-5,5-dimethyl-4-oxo-2-thioxo-1-imidazolidinyl]-2-fluoro-N-methyl-benzamide

Relevant identified uses and uses advised against

- **Identified uses:** For research and development use only; laboratory chemicals; manufacture of substances.
- **Uses advised against:** Not for pharmaceutical, household, or other unapproved uses.

Details of the supplier

- **Company :** Selleck Chemicals
- **TollFree :** +1 877 796-6397
- **Tel :** +1 832 582-8158
- **Fax :** +1 832 582-8590

Emergency telephone number

- **Emergency phone #:** +1 832 582-8158

2. Hazard(s) identification

Classification of the substance or mixture:

- Reproductive toxicity 1A (H360): May damage fertility or the unborn child.
- Specific target organ toxicity (repeated exposure) 1 (H372): Causes damage to organs through prolonged or repeated exposure.
- Aquatic Chronic 2 (H411): Toxic to aquatic life with long lasting effects.
- Acute toxicity - oral 4 (H302): Harmful if swallowed.

Pictogram:



Signal word: Danger

Hazard statements:

- H302: Harmful if swallowed.

- H360: May damage fertility or the unborn child.
- H372: Causes damage to organs through prolonged or repeated exposure.
- H411: Toxic to aquatic life with long lasting effects.

Precautionary statements:

- 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.
- P264: Wash thoroughly after handling.
- P270: Do not eat, drink or smoke when using this product.
- P273: Avoid release to the environment.
- P280: Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.
- P301+P312: If swallowed: Call a poison center/doctor if you feel unwell.
- P330: Rinse mouth.
- P308+P313: IF exposed or concerned: Get medical advice/attention.
- P314: Get medical advice/attention if you feel unwell.
- P391: Collect spillage.
- P405: Store locked up.
- P501: Dispose of contents/container in accordance with local/regional/national/international regulations.

Classification system:

- NFPA ratings (scale 0 - 4): Health = 2, Fire = 0, Reactivity = 0.
- HMIS-ratings (scale 0 - 4): Health = *2, Fire = 0, Reactivity = 0.

Other hazards:

Results of PBT and vPvB assessment: Not applicable.

3. Composition/information on ingredients

Chemical characterization: Substances

CAS No. Description: 915087-33-1 Enzalutamide

Structural Formula Name: 4-[3-[4-cyano-3-(trifluoromethyl)phenyl]-5,5-dimethyl-4-oxo-2-thioxo-1-imidazolidinyl]-2-fluoro-N-methyl-benzamide

4. First-aid measures

Description of first aid measures:

- **General information:** Symptoms of poisoning may even occur after several hours; therefore, medical observation for at least 48 hours after the accident is recommended.
- **After inhalation:** Supply fresh air; consult doctor in case of complaints.
- **After skin contact:** Generally the product does not irritate the skin.
- **After eye contact:** Rinse opened eye for several minutes under running water.

- **After swallowing:** Immediately call a doctor.

Most important symptoms and effects, both acute and delayed: No further relevant information available.

Indication of any immediate medical attention and special treatment needed: No further relevant information available.

5. Fire-fighting measures

Extinguishing media:

- **Suitable extinguishing agents:** Use fire fighting measures that suit the environment. A solid water stream may be inefficient.

Special hazards arising from the substance or mixture: No further relevant information available.

Advice for firefighters:

- **Protective equipment:** No special measures required.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures: Not required.

Environmental precautions:

- Inform respective authorities in case of seepage into water course or sewage system.
- Do not allow to enter sewers/surface or ground water.

Methods and material for containment and cleaning up: Dispose of contaminated material as waste according to section 13.

Protective Action Criteria for Chemicals:

- PAC-1: Substance is not listed.
- PAC-2: Substance is not listed.
- PAC-3: Substance is not listed.

Reference to other sections:

- See Section 7 for information on safe handling.
- See Section 8 for information on personal protection equipment.
- See Section 13 for disposal information.

7. Handling and storage

Precautions for safe handling:

- No special precautions are necessary if used correctly.

- Avoid breathing dust/fume/gas/mist/vapours/spray.
- Avoid prolonged or repeated exposure.
- Keep away from sources of ignition.
- Take precautionary measures against static discharge.

Information about protection against explosions and fires: No special measures required.

Conditions for safe storage, including any incompatibilities:

- **Storage:** Store in accordance with information listed on the product insert.
- **Requirements to be met by storerooms and receptacles:** No special requirements.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:** None.

Specific end use(s): No further relevant information available.

8. Exposure controls/personal protection

Control parameters:

- **Components with limit values that require monitoring at the workplace:** Not required.
- **Additional information:** The lists that were valid during the creation were used as a basis.

Exposure controls:

- **Appropriate engineering controls:** No further data; see section 7.
- **Personal protective equipment:**
 - **General protective and hygienic measures:** Keep away from foodstuffs, beverages and feed. Wash hands before breaks and at the end of work. Store protective clothing separately.
 - **Breathing equipment:** In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.
 - **Protection of hands:** Protective gloves. The glove material has to be impermeable and resistant to the product/the substance/the preparation. Selection of the glove material should consider penetration times, rates of diffusion, and degradation.
 - **Material of gloves:** The selection of suitable gloves depends not only on the material but also on further marks of quality and varies from manufacturer to manufacturer.
 - **Penetration time of glove material:** The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.
 - **Eye protection:** Tightly sealed goggles.

9. Physical and chemical properties

Information on basic physical and chemical properties:

- **Physical state:** powder
- **Color:** Not determined.
- **Odor:** Characteristic

- **Structural Formula:** C₂₁H₁₆F₄N₄O₂S
- **Molecular Weight:** 464.4 g/mol
- **Odor threshold:** Not determined.
- **Melting point/Melting range:** Undetermined.
- **Boiling point/Boiling range:** Undetermined.
- **Flammability:** Product is not flammable.
- **Explosion limits:** Lower: Not determined; Upper: Not determined.
- **Flash point:** Not applicable.
- **Decomposition temperature:** Not determined.
- **pH-value:** Not applicable.
- **Viscosity (Kinematic/Dynamic):** Not applicable.
- **SOLUBILITY:** DMF: 25 mg/ml; DMF:PBS (pH 7.2) (1:4): 0.2 mg/ml; DMSO: 20 mg/ml; Ethanol: 0.5 mg/ml.
- **Solubility in / Miscibility with Water:** Not determined.
- **Partition coefficient (n-octanol/water):** Not determined.
- **Vapor pressure:** Not applicable.
- **Density:** Not determined.
- **Relative density:** Not determined.
- **Vapor density:** Not applicable.
- **Particle characteristics:** Not determined.
- **Appearance (Form):** powder
- **Ignition temperature:** Not determined.
- **Danger of explosion:** Product does not present an explosion hazard.
- **Evaporation rate:** Not applicable.

10. Stability and reactivity

Reactivity: No further relevant information available.

Chemical stability:

• **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.

Possibility of hazardous reactions: No dangerous reactions known.

Conditions to avoid: No further relevant information available.

Incompatible materials: strong oxidizing agents

Hazardous decomposition products: carbon dioxide, carbon monoxide, hydrogen cyanide, hydrogen fluoride, hydrogen sulfide, nitrogen oxides.

11. Toxicological information

Information on toxicological effects:

- **Acute toxicity:** Harmful if swallowed.
- **Primary irritant effect:**
 - **On the skin:** No irritant effect.
 - **On the eye:** No irritating effect.
- **Sensitization:** No sensitizing effects known.
- **Interactive effects:** No interactive effects between components are known.
- **Carcinogenic categories:**
 - **IARC (International Agency for Research on Cancer):** Substance is not listed.
 - **NTP (National Toxicology Program):** Substance is not listed.
 - **OSHA-Ca (Occupational Safety & Health Administration):** Substance is not listed.
- **Alternative sources for toxicological information:** No non-standard sources for toxicological information were used.

12. Ecological information

Toxicity:

- **Aquatic toxicity:** No further relevant information available.

Persistence and degradability: No further relevant information available.

Bioaccumulative potential: No further relevant information available.

Mobility in soil: No further relevant information available.

Results of PBT and vPvB assessment:

- **PBT:** Not applicable.
- **vPvB:** Not applicable.

Other adverse effects:

- **Remark:** Toxic for fish.
- **General notes:** Water hazard class 3 (Self-assessment): extremely hazardous for water. Do not allow product to reach ground water, water course or sewage system, even in small quantities. Danger to drinking water if even extremely small quantities leak into the ground. Also poisonous for fish and plankton in water bodies. Toxic for aquatic organisms.

13. Disposal considerations

Waste treatment methods:

- **Recommendation:** Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

Uncleaned packagings:

- **Recommendation:** Disposal must be made according to official regulations.

14. Transport information

UN-Number:

- DOT, IMDG, IATA: UN3077

UN proper shipping name:

- DOT, IATA: Environmentally hazardous substance, powder, n.o.s. (Enzalutamide)
- IMDG: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, powder, N.O.S. (Enzalutamide)

Transport hazard class(es):

- DOT, IMDG, IATA: Class 9 Miscellaneous dangerous substances and articles.
- Label: 9

Packing group:

- DOT, IMDG, IATA: III

Environmental hazards:

- Marine pollutant: Symbol (fish and tree)
- Special marking (IATA): Symbol (fish and tree)

Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code: Not applicable.

Transport/Additional information:

- DOT Quantity limitations: On passenger aircraft/rail: 400 kg; On cargo aircraft only: 400 kg.
- IMDG Limited quantities (LQ): 5 kg.
- IMDG Excepted quantities (EQ): Code: E1 (Maximum net quantity per inner packaging: 30 g; Maximum net quantity per outer packaging: 1000 g).
- IATA Remarks: When sold in quantities of less than or equal to 1 mL, or 1 g, with an Excepted Quantity Code of E1, E2, E4, or E5, this item meets the De Minimis Quantities exemption, per IATA 2.6.10. Therefore packaging does not have to be labeled as Dangerous Goods/Excepted Quantity.

Special precautions for user: Warning: Miscellaneous dangerous substances and articles.

- Hazard identification number (Kemler code): 90
- EMS Number: F-A, S-F
- Stowage Category: A
- Stowage Code: SW23 When transported in BK3 bulk container, see 7.6.2.12 and 7.7.3.9.

UN "Model Regulation": UN 3077 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, powder, N.O.S. (ENZALUTAMIDE), 9, III

15. Regulatory information

- Safety, health and environmental regulations/legislation specific for the substance or mixture

No further relevant information available.

- Sara
- Section 355 (extremely hazardous substances):Substance is not listed.
- Section 313 (Specific toxic chemical listings):Substance is not listed.
- TSCA (Toxic Substances Control Act):Substance is not listed.
- Hazardous Air PollutantsSubstance is not listed.
- Chemicals known to cause cancer:Substance is not listed.
- Chemicals known to cause reproductive toxicity for females:Substance is not listed.
- Chemicals known to cause reproductive toxicity for males:Substance is not listed.
- Chemicals known to cause developmental toxicity:Substance is not listed.
- Carcinogenic categories
- EPA (Environmental Protection Agency)Substance is not listed.
- TLV (Threshold Limit Value)Substance is not listed.
- NIOSH-Ca (National Institute for Occupational Safety and Health)Substance is not listed.
- Chemical safety assessment:A Chemical Safety Assessment has not been carried out.

Structural Formula Name: 4-[3-[4-cyano-3-(trifluoromethyl)phenyl]-5,5-dimethyl-4-oxo-2-thioxo-1-imidazolidinyl]-2-fluoro-N-methyl-benzamide

16. OTHER INFORMATION

Revision Date: 2026/07/07

Further Information: The information provided is believed to be correct but is not exhaustive and should be used only as a guideline based on current knowledge. It does not represent a guarantee of the properties of the product. Selleck Chemicals Corporation and its Affiliates shall not be held liable for any damage resulting from handling or contact with the product.