

Z-VAD-FMK SDS | MSDS

1. PRODUCT AND COMPANY IDENTIFICATION

Product identifier

- **Product Name:** Z-VAD-FMK
- **Catalog Number:** S7023
- **CAS Number:** 187389-52-2
- **IUPAC Name:** L-Alaninamide, N-[(phenylmethoxy)carbonyl]-L-valyl-N-[(1S)-3-fluoro-1-(2-methoxy-2-oxoethyl)-2-oxopropyl]-

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. HAZARDS IDENTIFICATION

GHS Classification

This product is not classified as a hazardous substance or mixture according to the OSHA Hazard Communication Standard (29 CFR 1910.1200).

GHS Label Elements

The product does not require any special GHS labeling as it is not classified as a hazardous substance or mixture.

Other Hazards

None known.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance/Mixture: Substance

This product is a single substance. According to the OSHA Hazard Communication Standard (29 CFR 1910.1200), it contains no hazardous ingredients. No chemical structural formula is provided in the source text.

4. FIRST AID MEASURES

Inhalation: If inhaled, move the person to fresh air.

Skin Contact: Immediately remove all contaminated clothing. Rinse the skin with water or shower.

Eye Contact: Rinse eyes thoroughly with plenty of water. Remove contact lenses if present.

Ingestion: If swallowed, have the victim drink a maximum of two glasses of water. Consult a physician if the individual feels unwell.

Most Important Symptoms and Effects: The most significant known symptoms and effects are described in the hazard identification (Section 2) and toxicological information (Section 11).

Protection of First-Aiders: Refer to Section 8 for personal protective equipment.

Notes to Physician: No specific data provided for this section.

5. FIRE-FIGHTING MEASURES

Extinguishing Media: There are no limitations on extinguishing agents for this substance.

Hazardous Combustion Products: Combustion may produce carbon oxides, nitrogen oxides (NO_x), and hydrogen fluoride.

Specific Extinguishing Methods: No specific data provided for this section.

Further Information: Use water spray to suppress gases, vapors, or mists. Prevent fire-extinguishing water from entering surface water or groundwater systems.

Special Protective Equipment: Firefighters should wear self-contained breathing apparatus in the event of a fire.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions and Emergency Procedures:

- **For non-emergency personnel:** Avoid inhalation of powder. Evacuate the danger area, follow emergency procedures, and consult an expert.
- **For emergency responders:** Refer to Section 8 for personal protection.

Environmental Precautions: Do not allow the product to enter drains.

Methods and Materials for Containment and Cleaning Up: Cover drains. Collect, bind, and pump off spills. Observe material restrictions as noted in Sections 7 and 10. Take up the material dry and dispose of it properly. Clean the affected area and avoid the generation of powder.

7. HANDLING AND STORAGE

Precautions for Safe Handling: Refer to Section 2.2 for precautions.

Conditions for Safe Storage: Keep the container tightly closed and in a dry location.

Storage Class: 11, Combustible powder.

Recommended Storage Temperature: -4 °F / -20 °C.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control Parameters: Contains no substances with occupational exposure limit values.

Engineering Measures: No specific data provided for this section.

Personal Protective Equipment:

- **Respiratory Protection:** Required when powder is generated. Recommended filter type: P1 (based on DIN EN 143, DIN 14387, and related standards).
- **Hand Protection:** Use nitrile rubber gloves (Full contact/Splash contact: 0.11 mm thickness, 480 min breakthrough time). Inspect gloves before use and use proper removal techniques to avoid skin contact.
- **Eye Protection:** Use safety glasses tested and approved under standards such as NIOSH (US) or EN 166 (EU).
- **Hygiene Measures:** Change contaminated clothing and wash hands after handling the substance.

9. PHYSICAL AND CHEMICAL PROPERTIES

- **Appearance:** powder
- **Color:** N/A
- **Odor:** N/A
- **Odor Threshold:** N/A
- **pH:** N/A
- **Melting Point:** N/A
- **Boiling Point/Range:** N/A
- **Flash Point:** N/A
- **Evaporation Rate:** N/A
- **Flammability (powder, gas):** N/A
- **Flammability (liquids):** N/A
- **Burning Rate:** N/A
- **Upper/Lower Explosion Limits:** N/A
- **Vapor Pressure:** N/A
- **Relative Vapor Density:** N/A
- **Relative Density:** N/A
- **Density:** N/A
- **Water Solubility:** N/A
- **Partition Coefficient (n-octanol/water):** N/A
- **Autoignition Temperature:** N/A
- **Decomposition Temperature:** N/A
- **Viscosity (dynamic/kinematic):** N/A
- **Explosive Properties:** N/A

- **Oxidizing Properties:** N/A
- **Molecular Weight:** 467.49 g/mol
- **Particle Size:** N/A

10. STABILITY AND REACTIVITY

Reactivity: N/A.

Chemical Stability: The product is chemically stable under standard ambient conditions (room temperature).

Possibility of Hazardous Reactions: N/A.

Conditions to Avoid: No information available.

Incompatible Materials: Strong acids and strong bases.

Hazardous Decomposition Products: In the event of fire, see Section 5.

11. TOXICOLOGICAL INFORMATION

Acute Toxicity: N/A for oral, inhalation, or dermal exposure.

Skin Corrosion/Irritation: N/A.

Serious Eye Damage/Irritation: N/A.

Respiratory or Skin Sensitization: N/A.

Germ Cell Mutagenicity: N/A.

Carcinogenicity:

- **IARC:** No ingredient present at levels $\geq 0.1\%$ is identified as a probable, possible, or confirmed human carcinogen.
- **ACGIH:** No ingredient present at levels $\geq 0.1\%$ is identified as a carcinogen or potential carcinogen.
- **NTP:** No ingredient present at levels $\geq 0.1\%$ is identified as a known or anticipated carcinogen.
- **OSHA:** No component present at levels $\geq 0.1\%$ is on OSHA's list of regulated carcinogens.

Reproductive Toxicity: N/A.

STOT - Single and Repeated Exposure: N/A.

Aspiration Hazard: N/A.

Additional Information: To the best of current knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

12. ECOLOGICAL INFORMATION

Ecotoxicity: N/A.

Persistence and Degradability: N/A.

Bioaccumulative Potential: N/A.

Mobility in Soil: N/A.

Other Adverse Effects: N/A.

13. DISPOSAL CONSIDERATIONS

Disposal Methods: Waste material must be disposed of in accordance with national and local regulations. Leave chemicals in their original containers and do not mix with other waste. Handle uncleaned containers in the same manner as the product itself.

14. TRANSPORT INFORMATION

IATA-DGR: Not regulated as a dangerous good.

IMDG-Code: Not regulated as a dangerous good.

IMO Instruments: Not applicable for the product as supplied.

49 CFR Road: Not regulated as a dangerous good.

Poison Inhalation Hazard: No.

Special Precautions for User: Not classified as dangerous in the meaning of transport regulations.

15. REGULATORY INFORMATION

SARA 302 Extremely Hazardous Substances Threshold Planning Quantity

Components CAS-No. Component TPQ (lbs)

SARA 311/312 : No SARA Hazards

Hazards

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.

US State Regulations

Massachusetts Right To Know

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

Pennsylvania Right To Know

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New Jersey Right To Know

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California Prop. 65

This product does not contain any chemicals known to the State of California to cause cancer, birth, or any other reproductive defects.

The ingredients of this product are reported in the following inventories:

TSCA : Product contains substance(s) not listed on TSCA inventory.

TSCA list

No substances are subject to a Significant New Use Rule.

No substances are subject to TSCA 12(b) export notification requirements.

16. OTHER INFORMATION

Revision Date: 2026/05/28

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.