Section 1 - Product and Company Information

Product Name: FLA-ST, FLA-ST Ultrapure, RecFLA-ST, Flagellin FliC VacciGrade™

Cat. Code: tlr1-stfla, tlr1-epstfla, tlr1-epstfla-5, tlr1-flic-10, tlr1-flic-50, vac-fla

InvivoGen USA, 3950 Sorrento Valley Blvd, Suite 100
San Diego, California 92121, USA
(+1) 888 457 5873

InvivoGen Europe, 5 rue Jean Rodier
31400 Toulouse, France
+33 (0) 5 62 71 69 39

InvivoGen Hong Kong, Unit 709A, Bio-Informatics Center
2 Science Park West Avenue, Hong Kong Science Park
Shatin, Hong Kong
+852 3622 3480

Emergency number: ORFILA (INRS): +33 (0)1 45 42 59 59

Disclaimer: All InvivoGen products are supplied for research and laboratory use only. Not for drug, household or other uses.

Section 2 – Hazards Identification

Emergency Overview:
OSHA Hazards
No known OSHA hazards

2.1 Classification of substance
Not a hazardous substance or mixture according to EC-Directives 67/548/EEC or 1999/45/EC.
Not a hazardous substance or mixture according to CLP-Regulation (EC) No. 1272/2008.

2.2 Label elements
The product does not need to be labeled in accordance with EC-Directives 67/548/EEC, to CLP-Regulation (EC) No. 1272/2008 or respective national laws.

2.3 Other hazards - none

Section 3 – Composition/Information on Ingredient

Synonyms: Flagellin from S.typhimurium
CAS number: Not available

Section 4 – First Aid Measures

General advice: Consult a physician. Show this safety data sheet to the doctor in attendance.
After skin contact: Immediately wash skin with soap and plenty of water. Consult a physician.
After swallowing: Never give anything by mouth to an unconscious person. Rinse mouth with water provided person is conscious. Consult a physician.
After inhalation: Remove to fresh air. If not breathing give artificial respiration. Consult a physician.
After eye contact: Immediately flush eyes with plenty of water for at least 15 minutes. Consult a physician.
Section 5 – Fire Fighting Measures

Suitable extinguishing media: Water spray, carbon dioxide, dry chemical powder or appropriate foam.
Specific hazards arising from the chemical: No data available
Special Firefighting Procedures: Wear self-contained breathing apparatus for fire fighting if necessary.

Section 6 – Accidental Release Measures

Personal precautions: Wear protective equipment. Keep unprotected persons away. Avoid dust formation.
Method for Cleaning Up: Sweep up and place in closed containers for disposal. Dispose contaminated material as waste according to section 13. Ventilate area and wash spill site after material clean-up is complete.

Section 7 – Handling and Storage

Handling: Avoid contact with eyes, skin and clothing. Avoid prolonged or repeated exposure.
User Exposure: Avoid inhalation. Use personal protective equipment (i.e. impermeable gloves, lab coat or apron).
Storage: Store at -20 °C.

Section 8 – Exposure Controls/PPE

Personal protective equipment
Eye protection
Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).
Hand protection
Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.
Hygiene measures
Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product.

Section 9 – Physical/Chemical Properties

Appearance
Physical state: Powder
Color: White
Safety Data
Odor: No data available
Odor threshold: No data available
pH: No data available
Melting point/freezing point: No data available
Initial boiling point and boiling range: No data available
Flash point: No data available
Evaporation rate: No data available
Flammability: No data available
Upper/lower flammability or explosive limits: No data available
Vapor pressure: No data available
Relative density: No data available
Solubility: No data available
Partition coefficient (n-octanol/water): No data available
Auto-ignition temperature: No data available
Decomposition temperature: No data available
Viscosity: No data available
Section 10 – Stability and Reactivity

- **Reactivity:** No data available
- **Chemical stability:** Stable under recommended storage conditions
- **Possibility of hazardous reactions:** No data available
- **Conditions to avoid:** No data available
- **Incompatible materials:** Strong oxidizing agents, strong bases
- **Hazardous decomposition products:** No data available

Section 11 – Toxicological Information

- **Acute toxicity:**
  - Oral LD50: No data available
  - Inhalation LC50: No data available
  - Dermal LD50: No data available
  - Other information on acute toxicity: Flagellin has no detectable toxicity in rabbits when given intranasally or intramuscularly using a two-dose protocol (100–500 µg) over 28 days (Mizel and Bates. Flagellin as an Adjuvant: Cellular Mechanisms and Potential. J Immunol 2010;185: 5677-5682).

- **Skin corrosion/irritation:** No data available
- **Serious eye damage/irritation:** No data available
- **Respiratory or skin sensitization:** No data available
- **Germ cell mutagenicity:** No data available
- **Carcinogenicity:** No data available
- **Reproductive toxicity:** No data available
- **Additional information:** No data available

Section 12 – Ecological Information

- **Ecotoxicity:** No data available
- **Persistence and degradability:** No data available
- **Bioaccumulative potential:** No data available
- **Mobility in soil:** No data available.

Section 13 – Disposal Considerations

- **Product:** Observe all federal, state and local environmental regulations. Contact a licensed professional waste disposal service to dispose of this material. Must not be disposed of together with household garbage.
- **Contaminated Packaging:** Dispose of as unused product.

Section 14 – Transport Information

- **ADR/RID:** Not dangerous goods
- **DOT (US):** Not dangerous goods
- **IMDG:** Not dangerous goods
- **IATA:** Not dangerous goods

Section 15 – Regulatory Information

- **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture:**
  - no data available

- **15.2 Chemical Safety Assessment:**
  - no data available
Section 16 – Other Information

The information contained in this SDS relates only to the material(s) designated and does not relate to use(s) in combination with any other material, process(es) and/or chemical reaction(s). InvivoGen provides this information in good faith and is based on our present knowledge. This SDS is provided without warranty of any kind. The recipient is responsible for ensuring that, where applicable, existing laws and guidelines are observed.