

Section 1 - Product and Company Identification

1.1 Product identifiers

Product name: **TLR2 Agonist Kit (7 ligands)**

Catalog code: tlrl-kit2hm

CAS number: Not available

1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified use: Laboratory chemicals

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

1.3 Details of the supplier of the safety data sheet

Company: InvivoGen USA, 10515 Vista Sorrento Parkway
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 106, 1F,
15W Phase 3 Hong Kong Science Park,
Pak Shek Kok, Hong Kong
+852 3622 3480

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

Section 2 – Hazards Identification

2.1 Classification of substance according to Regulation (EC) No 1272/2008 [EU-GHS/CLP] and GHS

Acute toxicity, Oral (Category 4) H302

2.2 Label elements according to Regulation (EC) No 1272/2008 [CLP] and GHS

Pictogram



Signal word: Warning

Hazard statement
H302 Harmful if swallowed.

Precautionary statements
P264 Wash hands thoroughly after handling.
P270 Do not eat, drink or smoke when using this product.


P301 + P312 IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.
 P330 Rinse mouth.
 P501 Dispose of contents/container to an approved waste disposal plant.

2.3 Other hazards - none

Section 3 – Composition/Information on Ingredient

3.2 Mixtures

TLR2 Agonist Kit (7 ligands) contains the components listed below.

Ingredient	CAS Number	GHS Classification	Pictogram
Pam2CSK4	868247-72-7	Not dangerous	None
Pam3CSK4	112208-00-1	Not dangerous	None
FSL-1	Not available	Not dangerous	None
HKLM (Heat Killed <i>Listeria monocytogenes</i>)	Not available	Not dangerous	None
LPS-PG (Lipopolysaccharide from <i>Porphyromonas gingivalis</i>)	Not available	Acute toxicity, Oral (Category 4), H302	
LTA-SA (Lipoteichoic acid from <i>Staphylococcus aureus</i>)	56411-57-5	Not dangerous	None
PGN-SA (Peptidoglycan from <i>Staphylococcus aureus</i>)	Not available	Not dangerous	None

Section 4 – First Aid Measures

4.1 Description of first aid measures

General advice: Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

If inhaled: If breathed in, remove to fresh air. If not breathing, give artificial respiration. Consult a physician.

In case of skin contact: Wash skin with soap and plenty of water. Consult a physician.

In case of eye contact: Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

If swallowed: Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

4.2 Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in the labeling (see section 2.2) and/or in section 11.

4.3 Indication of any immediate medical attention and special treatment needed

No data available

Section 5 – Fire Fighting Measures

5.1 Extinguishing media

Suitable extinguishing media: Use water spray, carbon dioxide, dry chemical powder or appropriate foam.

5.2 Specific hazards arising from the chemical

No data available

5.3 Special Firefighting Procedures

Wear self-contained breathing apparatus for firefighting if necessary.

Section 6 – Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency

Use personal protective equipment. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapors accumulating to form explosive concentrations. Vapors can accumulate in low areas.

For personal protection see section 8.

6.2 Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

6.3 Methods and materials for containment and cleaning up

Soak up with inert absorbent material and dispose of as hazardous waste. Keep in suitable, closed containers for disposal according to local regulations (see section 13).

6.4 Reference to other sections

For disposal see section 13.

Section 7 – Handling and Storage

7.1 Precautions for safe handling

Provide appropriate exhaust ventilation at places where dust is formed.

For precautions see section 2.2.

7.2 Conditions for safe storage, including any incompatibilities

Keep container tightly closed in a dry and well-ventilated place.

Recommended storage temperature: See technical datasheet.

7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated.

Section 8 – Exposure Controls/PPE

8.1 Control parameters

Components with workplace control parameters

Contains no substances with occupational exposure limit values.

8.2 Exposure controls

Appropriate engineering controls

General industrial hygiene practice.

Personal protective equipment

Eye/face protection

Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin 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.

Body Protection

Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific workplace. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection

Respiratory protection is not required. Where protection from nuisance levels of dusts are desired, use type N95 (US) or type P1 (EN 143) dust masks. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Control of environmental exposure

Do not let product enter drains.

Section 9 – Physical/Chemical Properties**9.1 Information on basic physical and chemical properties****Appearance**

Physical state: Solid

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 in water: See technical datasheet

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

Autoignition temperature: No data available

Decomposition temperature: No data available

Viscosity: No data available

9.2 Other safety information

no data available

Section 10 – Stability and Reactivity

10.1 Reactivity: No data available

10.2 Chemical stability: Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions: No data available

10.4 Conditions to avoid: No data available

10.5 Incompatible materials: No data available

10.6 Hazardous decomposition products: No data available

In case of fire: See section 5

Section 11 – Toxicological Information**11.1 Information on toxicological effects****Acute toxicity:**

Oral LD50: No data available

Inhalation LC50: No data available

Dermal LD50: No data available

Other information on acute toxicity: No data available

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

12.1 Toxicity: No data available
12.2 Persistence and degradability: No data available
12.3 Bioaccumulative potential: No data available
12.4 Mobility in soil: No data available
12.5 Results of PBT and vPvB assessment: PBT/vPvB assessment not available as chemical safety assessment not required or not conducted.
12.6 Other adverse effects: No data available

Section 13 – Disposal Considerations

13.1 Waste treatment methods
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

14.1 UN number
ADR/RID: - DOT (US): - IMDG: - IATA: -

14.2 UN proper shipping name
not dangerous goods

14.3 Transport hazard class(es)
ADR/RID: - DOT (US): - IMDG: - IATA: -

14.4 Packaging group
ADR/RID: - DOT (US): - IMDG: - IATA: -

14.5 Environmental hazards
ADR/RID: no DOT (US): no IMDG Marine pollutant: no IATA: no

14.6 Special precautions for user
no data available

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code
not applicable

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.