SECTION 1. IDENTIFICATION OF THE MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product identifier
Tradename: **Pest Asia Ant Gel Bait**

1.2. Relevant identified uses of the substance or mixture and uses against:
1.2.1. Identified uses: Physical mode of action formulation.

1.2.2. Uses advised against: None

1.3. Details of the supplier of the safety data sheet:
PEST ASIA TRADING (M) SDN BHD
24, Jalan Antoi Kanan 1, Kepong Baru 52100 Kuala Lumpur
Phone: +6 0166019424
e-mail: pestasiatrading@gmail.com

1.4. Emergency telephone number:
+6016 6019424 (at working hours: 9.00 a.m. – 5 p.m.)

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture:

According to Regulation (EC) No 1272/2008 [CLP]:

Aquatic Chronic 3 (H412) — Harmful to aquatic life with long lasting effects

2.2. Label elements

Signal words : **NONE**

Hazard Statement:

H412: Harmful to aquatic life with long lasting effects

Precautionary statements:

P273: Avoid release to the environment.

P501: Dispose of contents/container in accordance with local regulations

2.3 Other hazards

This product does not meet the criteria for PBT (Persistent, Bioaccumulative and Toxic) or vPvB (Very Persistent and Very Bioaccumulative) as defined in Annex XIII of the REACH Regulation.

SECTION 3: COMPOSITION / INFORMATION ON INGREDIENTS

3.2 Mixtures.

Content of hazardous compounds (compounds below general and specific concentration thresholds, not identified as PBT/vPvB, not listed as SVHC and not having community TLVs are not mentioned):

Chemical name	CAS No	Content	Function
Fipronil	120068-37-3	0.05%	Active Ingredient
Other Ingredients (Trade Secret)	-	~99.95%	Inert/Formulation Base

Meaning of hazards classes and categories and full H phrases are given in Section 16.

SECTION 4: FIRST AID MEASURES

4.1. Description of first aid measures. General recommendations:
Remove injured person from a polluted environment. Remove any contaminated clothing, place in a comfortable position, provide fresh air and heat. Loosen tight clothing such as a collar, tie, belt or waistband. Never give anything by mouth to an unconscious person. In the event of health problems, immediately contact doctor, show SDS or label of the product. Inform medical personnel of first aid provided.

Skin contamination: wash contaminated skin with water and soap. In case of skin irritation get medical help. Contaminated clothing has to be washed before reuse.

Eye contamination: rinse widely open eyes with clean water or dedicated fluid for 15 minutes, get medical help.

Inhalation exposure: remove the victim from exposure area, when breathing difficulties provide oxygen, get medical help if needed.

Ingestion: rinse mouth with plenty of water, get medical help immediately. Do not induce vomiting. If occurs, keep victim’s head low to avoid getting the product into respiratory tract.

4.2. Most important symptoms and effects, both acute and delayed.Acute symptoms – eye irritation (lachrymation, reddening) **Delayed symptoms –** no data

4.3. Indication of any immediate medical attention and special treatment needed. Information for the physician: no known antidote, treat symptomatically.

SECTION 5: FIREFIGHTING MEASURES

5.1. Extinguishing media.
Suitable extinguishing media: for small fires use foam, snow or powder extinguisher. For large fires use foam or water mist.

Unsuitable extinguishing media: strong stream of water, risk of environment contamination spread.

5.2. Special hazards arising from the substance or mixture.
During the fire of the product following compounds might be emitted – carbon oxides, silica oxides, formaldehyde, other hazardous gases. Avoid breathing of combustion products, they might be hazardous to health.

5.3. Advice for firefighters:
Unconditionally use personal breathing apparatus and wear appropriate protective clothing during firefighting and cleaning after the fire inside closed and poorly ventilated rooms.

General advice: evacuate all unauthorized personnel not taking action during firefighting.

Additional remarks: containers and packages endangered by fire or high temperature should be cooled down by water from a safe distance or relocated from area of fire if possible and safe. Fire residues and contaminated extinguishing media has to be disposed according to current regulation. Do not dispose extinguishing media to sewers.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures:
Avoid contact with released product. Protect eyes and skin, do not inhale vapours/mist of the product. Use recommended personal protection measures. Ventilate closed areas.

6.2. Environmental precautions:
Do not allow the product to get to the severs, ground and surface waters. Do not rinse product to the severs. In case of water contamination - inform appropriate authorities immediately.

6.3. Methods and material for containment and cleaning up:
In case of unsealed container or spillage secure source of contamination and move product to empty container. Spillages should be treated by appropriate sorbent (sand, sawdust, diatomaceous earth, vermiculite, universal sorbent), collected to closed container, labelled and safely disposed. Area of spillage should be cleaned. Cleaning up should be conducted under appropriate ventilation.

6.4. Reference to other sections: Personal protection measures – Section 8 Waste management – Section 13

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for safe handling:
Read label before use of the product. Avoid direct contact with mouth, skin and eyes. Do not eat or drink during product handling. Wash hands and face after usage. Product should be used only as intended.

Special precautions against fire and explosion: None.

Industrial hygiene:
- sufficient ventilation of work area is recommended (general and local exhaust ventilation)
- provide place for eye and wash cleaning in case of contamination
- wash hands by water and soap before eating, smoking and after work end.
- follow common safety precautions of chemicals handling

7.2. Conditions for safe storage, including any incompatibilities:
Keep only in the original, closed containers. Avoid water and humidity during storage.
Keep the product away from children, food, beverage and animal feed. Store and transport at temperatures of 0 to 35 ºC.

7.3. Specific end use(s): See Section 1.2.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters Occupational Exposure Limit Value:
No DNELs available for mixture components at relevant concentrations.

DNELs (Derived No Effect Levels) for mixture components:

	Workers				General population (consumers)			
Route of exposure	Acute local Effects	Acute systemic effects	Chronic local effects	Chronic systemic effects	Acute local Effects	Acute systemic effects	Chronic local effects	Chronic systemic effects
Ingestion	n. d.	n. d.	n. d.	n. d.	n. d.	n. d.	n. d.	n. d.
Inhalation	n. d.	n. d.	n. d.	n. d.	n. d.	n. d.	n. d.	n. d.
Dermal	n. d.	n. d.	n. d.	n. d.	n. d.	n. d.	n. d.	n. d.

n. d. – no data

8.2. Exposure controls:
Technical control measures:
General or local mechanical ventilation of working area is sufficient.

Individual protection measures:
a) respiratory protection – not necessary under normal conditions with sufficient ventilation, required during exposure to high concentrations of vapours. When needed use half mask with SA type filter.
b) Hand protection – use protective gloves. Wear protective gloves made of: butyl rubber, neoprene, nitrile rubber, polyvinylchloride, thickness min. 0,4 – 0,7mm. The Breakthrough Time > 480 min. Material of gloves must be resistant to the product. As the product is a mixture of several substances, the resistance of material of gloves cannot be calculated in advance and therefore has to be checked before use. From the manufacturer's advice should be obtained information about the time of the penetration of substances and such time must be respected. The Breakthrough Time indicated by the manufacturer must exceed the period during which the product is being used. It is recommended to change gloves and replace them immediately if you notice any signs of wear, damage (rupture, perforation) or changes in appearance (color, flexibility, shape).
c) Eye protection – recommended protective glasses
d) Skin protection –protective clothing

Protective equipemnt standards:
EN 140:2001 Respiratory protective devices - Half masks and quarter masks - Requirements, testing, marking EN 143: 2004 Respiratory protective devices - Particle filters - Requirements, testing, marking

EN 149+A1:2010 Respiratory protective devices - Filtering half masks to protect against particles - Requirements, testing, marking
EN 14387+A1:2010 Respiratory protective devices - Gas filter(s) and combined filter(s) - Requirements, testing, marking
EN 374-1:2005 Protective gloves against dangerous chemicals and micro-organisms -- Part 1: Terminology and performance requirements for chemical risks
EN 374-2:2005 Protective gloves against chemicals and micro-organisms - Part 2: Determination of resistance to penetration
EN 374-3:2005 Protective gloves against chemicals and micro-organisms – Part 2: Determination of resistance to permeation by chemicals
PN-EN 166:2005 Personal eye protection. Specifications
PN-EN 14605+A1:2010 Protective clothing against liquid chemicals. Performance requirements for clothing with liquid-tight (Type 3) or spray-tight (Type 4) connections, including items providing protection to parts of the body only (Types PB [3] and PB [4])
PN-EN ISO 20344:2012 Personal protective equipment -- Test methods for footwear

Environmental exposure controls:
Do not allow the product to get to the soil, surface and ground water.

PNECs (Predicted No Effect Concentrations) for mixture components:

Compartment	
Fresh water	No data
Sediment – fresh water	No data
Marine water	No data
Sediment – marine water	No data
Intermittent releases (freshwater)	No data
Food chain	No data
Biological sewage treatment plant	No data
Soil (agriculture)	No data
Air	No data

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties:

Appearance:	Translucent or off-white gel
Odour:	Mild, slightly sweet or bland
Odour threshold:	Not determined
pH:	6.5 – 7.5 (at 1% dilution in water)
Melting point/freezing point:	Not applicable (gel formulation)
Initial boiling point and boiling range:	Not determined
Flash point:	Does not flash (non-flammable)
Evaporation rate:	Not determined
Flammability:	Non-flammable under normal conditions
Upper/lower flammability or explosive limits:	Not applicable
Vapour pressure:	Not available for formulation; Fipronil (pure) ≈ 3 x 10^{-4} Pa
Vapour density:	Approx. 1.2 g/cm³
Relative density (20°C):	1.01 – 1.02
Solubility in water:	Slightly soluble
Partition coefficient: n-octanol/water:	Fipronil: Log Kow ≈ 4.0 – 4.2
Auto-ignition temperature:	Not determined
Decomposition temperature:	No data available; stable under normal storage
Viscosity:	Gel-like; not measured in mPa·s
Explosive properties:	Not explosive
Oxidising properties:	Not oxidising

9.2. Other information: no data

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity:
Product is not reactive under recommended conditions of storage and handling.

10.2. Chemical stability:
Product is stable under recommended conditions of storage and handling.

10.3. Possibility of hazardous reactions:
No data.

10.4. Conditions to avoid:
High temperatures, direct sunlight, humidity.

10.5. Incompatible materials:
No data

10.6 Hazardous decomposition products:
Under recommended conditions of storage and handling product does not decompose with evolution of hazardous decomposition products.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects:
Classification of the product was conducted by calculation method according to regulation 1272/2008 based on the content of hazardous ingredients:

Acute toxicity (estimated):
Oral ATEmix: > 2000 mg/kg — Not classified
Dermal ATEmix: > 2000 mg/kg — Not classified
Inhalation ATEmix: Not classified — Not an exposure route under normal conditions

Respiratory or skin sensitization: No components present at sufficient concentrations to classify.
Germ cell mutagenicity: Product does not contain ingredients classified for mutagenicity.
Carcinogenicity: product does not contain any compounds with carcinogenic hazard Reproductive toxicity: product does not contain any compounds with reprotoxic hazard STOT-single exposure: based on data available classification criteria are not met STOT-repeated exposure: based on data available classification criteria are not met Aspiration hazard: based on data available classification criteria are not met

Potential health effects:
Ingestion – may cause digestive system irritation
Inhalation – product is harmful, may cause irritation to respiratory system.
Skin – Based on available data, the classification criteria are not met.
Eyes – Based on available data, the classification criteria are not met.

Toxicological data for product hazardous compound (polymeric silica compounds):
Acute toxicity, oral (rat): LD50 > 2000 mg/kg Acute toxicity, dermal (rat): LD50 > 4000 mg/kg
Acute toxicity, inhalation (rat): LC50 = 2 mg/l/4h (aerosol)
Acute toxicity, inhalation (rat): LC50 = 11.78 mg/l/4h (aerosol – 5% water emulsion) Skin irritation (rabbit): no skin irritation
Eye irritation (rabbit): strongly irritating Sensitization (guinea pig): not sensitizing

Repeated dose toxicity, oral (rat): NOAEL:150 mg/kg (28 days) Germ cell mutagenicity:
- Ames-Test, result: negative (not mutagenic)
- Chromosomal aberration, result: negative
- Mammalian cytogenicity test, result: negative
- Micronucleus Test (OECD 474), result: negative

SECTION 12: Ecological information

12.1. Toxicity:
Classification of the product was conducted by calculation method according to regulation 1272/2008 based on the content of hazardous ingredients.

Classified as toxic to aquatic life with long lasting effects.

12.2. Persistence and degradability:
Product has not been tested for biodegradation, but it is not expected to be readily biodegradable based on test results from a chemically similar product. However, this product is subject to rapid hydrolysis under acidic or basic conditions.

12.3. Bioaccumulative potential:
No data

12.4. Mobility in soil:
No data

12.5. Results of PBT and vPvB assessment:
Product does not met the criteria for PBT or vPvB.

12.6. Other adverse effects:
No data

Ecotxicological data for product hazardous compound (polymeric silica compounds):
Acute toxicity to fish (*Danio rerio*): LC50 (96 h): 6.8 mg/L
Acute toxicity to freshwater invertebrates (*Daphnia magna):* EC50 (48 h): 25 mg/L Acute toxicity to algae (*Pseudokirchneriella subcapitata*): EC50 (96h): 32 mg/L

SECTION 13: Disposal considerations

13.1. Waste treatment methods:

Wastes of the product: Unused remains keep in original containers. Get the wastes to the establishment authorized for transport, recovery and disposal of wastes. Do not enter product remains to the severs, surface waters, soil.

Suggested waste code: 16 03 05* organic wastes containing dangerous substances

Disposal of empty packaging: Recycling or disposal of empty packaging must be performed in compliance with current legislation (see Section 15)

Waste code: 15 01 10* packaging containing residues of or contaminated by dangerous substances.

SECTION 14: TRANSPORT INFORMATION

14.1. UN number: 3082

14.2. UN proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCES, LIQUID, N. O.S

(Polyalkyleneoxide modified heptamethyltrisiloxane)

14.3. Transport hazard class(es): 9

14.4. Packing group: III

14.5. Environmental hazards: Yes

14.6. Special precautions for user:

Road transport (ADR) Air transport (IATA DGR) Sea transport (IMDG):

Classification code: M6 Labels: 9
Hazard identification No: 90
Packing instructions: P001, IBC03, LP01, R001 Transport category (tunnel restriction code): 3 (E)
Special provision 375: These substances when carried in single or combination packagings containing a net quantity per single or inner packaging of 5 l or less for liquids or having a net mass per single or inner packaging 5 kg or less for solids, are not subject to any other provisions of ADR provided the packagings meet the general provisions of 4.1.1.1, 4.1.1.2 and 4.1.1.4 to 4.1.1.8
Class or Div.: 9
Hazard Label: Miscellaneous Passanger and Cargo Aircraft PI: 964
Cargo Aircraft Only PI: 964
Special provision A197: These substances when carried in single or combination packagings containing a net quantity per single or inner packaging of 5 l or less for liquids or having a net mass per single or inner packaging 5 kg or less for solids, are not subject to any other provisions of these Regulations provided the packagings meet the general provisions of 5.0.2.4.1, 5.0.2.6.1.1 and 5.0.2.8
EmS codes: F-A, S-F Marine pollutant: yes
Provision 2.10.2.7 of IMDG CODE: "Marine pollutants packaged in single or combination packagings containing a net quantity per single or inner packaging of 5 L or less for liquids or having a net mass per single or inner packaging of 5 kg or less for solids are not subject to any other provisions of this Code relevant to marine pollutants provided the packagings meet the general provisions of 4.1.1.1, 4.1.1.2 and 4.1.1.4 to 4.1.1.8. In the case of marine pollutants also meeting criteria for inclusion in another hazard class, all provision of this Code relevant to any additional continue to apply"

SECTION 15: REGULATORY INFORMATION

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture:
- Regulation (EC) No 1907/2006 of the European Parliament and of the Council from 18.12.2006 concerning the Registration, Evaluation, Authorization and Restriction from Chemicals (REACH)
- Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006
- Commission Regulation (EU) 2015/830 of 28 May 2015 amending Regulation (EC) No 1907/2006 of the

Directive 2012/18/UE:
Named dangerous substances - ANNEX I none of the product ingredients is listed Seveso category E2 Hazardous to the Aquatic Environment
Qualifying quantity (tonnes) of dangerous substances as referred to in Article 3(10) for the application of lower- tier requirements - 200 t
Qualifying quantity (tonnes) of dangerous substances as referred to in Article 3(10) for the application of upper- tier requirements - 500 t

15.2. Chemical safety assessment:
Chemical safety assessment was not conducted for the product.

SECTION 16: OTHER INFORMATION

Explanation of risk phrases and hazard category referring hazardous substance contained in product:

Explanation of abbreviations and acronyms used in the SDS:
CAS – Chemical Abstracts Service
EINECS – Number assigned to a substance in the European Inventory of Existing Commercial Chemical Substances PBT – persistence, bioaccumulation potential and toxicity vPvB – very high durability and very bioaccumulative TLV – threshold limit value in the workplace
STEL – short term exposure limits maximum of a substance harmful to health in the workplace ATEmix – acute toxicity estimate for mixture
LD50 – Lethal Dose, 50%
LC50 – Lethal Concentration, 50% EC50 – Effect Concentration 50%
UN number – identification number of the material (the number of UN, UN number)
ADR – European Agreement concerning the international carriage of dangerous goods by road IMDG – International Maritime Dangerous Goods Code
Classification of mixture was made according to content of hazardous components according to the Regulation (EC) No 1272/2008.
Recommendation and restriction of use: Use according to label.

Source of data: this SDS was prepared based on SDS of ingredients, data of product, literature, and our knowledge and experience according to actual legislation:
ECHA European Chemicals Agency
Disclaimer: information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. End user is responsible for inappropriate use of information enclosed in MSDS or inappropriate use of product.
Edition 5.3 – changes concerns Section 3.