

OPTIGARD TERMITE LIQUID

Version 8 - This version replaces all previous versions.
Revision Date 27.03.2015

Print Date 30.03.2015

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING**1.1 Product identifier**

Product name : OPTIGARD TERMITE LIQUID

Design code : A9795B

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

Use : Insecticide

1.3 Details of the supplier of the safety data sheet

Company : Syngenta Asia Pacific Pte. Ltd.
No. 1 HarbourFront Avenue
#03-03 Keppel Bay Tower
Singapore 098632

Telephone : +65 6333 6400

Telefax : +65 6338 1594

1.4 Emergency telephone number

Emergency telephone number : +65 6334 4366

SECTION 2: HAZARDS IDENTIFICATION**2.1 Classification of the substance or mixture**

Classification according to Regulation (EU) 1272/2008

Acute aquatic toxicity Category 1 H400

Chronic aquatic toxicity Category 1 H410

For the full text of the H-Statements mentioned in this Section, see Section 16.

Classification according to EU Directives 67/548/EEC or 1999/45/EC

N, Dangerous for the environment

R50/53: Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

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2.2 Label elements

Labelling: Regulation (EC) No. 1272/2008

Hazard pictograms



Signal word	:	Warning
Hazard statements	:	H410 Very toxic to aquatic life with long lasting effects.
Precautionary statements	:	P391 Collect spillage. P501 Dispose of contents/ container to an approved waste disposal plant.
Supplemental information	:	EUH208 Contains 1,2-benzisothiazol-3-one. May produce an allergic reaction. EUH401 To avoid risks to human health and the environment, comply with the instructions for use.

Hazardous components which must be listed on the label:

Labelling: EU Directives 67/548/EEC or 1999/45/EC

Symbol(s)



**Dangerous
for the envi-
ronment**

R-phrase(s)	:	R50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
S-phrase(s)	:	S 2 Keep out of the reach of children. S13 Keep away from food, drink and animal feedingstuffs. S20/21 When using do not eat, drink or smoke. S35 This material and its container must be disposed of in a safe way. S57 Use appropriate container to avoid environmental contamination.
Additional Labelling	:	To avoid risks to man and the environment, comply with the instructions for use. EUH208 Contains 1,2-benzisothiazol-3-one. May produce an allergic reaction.

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2.3 Other hazards

None known.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.2 Mixtures

Hazardous components

Chemical Name	CAS-No. EC-No. Registration number	Classification (67/548/EEC)	Classification (REGULATION (EC) No 1272/2008)	Concentration
thiamethoxam	153719-23-4 153719-23-4	F, Xn, N R11 R22 R50/53	Flam. Sol.1; H228 Acute Tox.4; H302 Aquatic Acute1; H400 Aquatic Chronic1; H410	21.6 % W/W
poly(oxy-1,2-ethanediyl), al-pha-phosphonome-ga-[2,4,6-tris(1-phenylethyl)phenoxy]-	90093-37-1 114535-82-9 90093-37-1 618-446-5	Xi R36	Eye Irrit.2; H319	1 - 5 % W/W
poly(oxy-1,2-ethanediyl), -[2,4,6-tris(1-phenylethyl)phenyl]-hydroxy-	99734-09-5 70559-25-0	R52/53	Aquatic Chronic3; H412	1 - 5 % W/W
lignosulfonic acid, ethoxylated, sodium salts	68611-14-3	Xi R36/37	Eye Irrit.2; H319 STOT SE3; H335	1 - 5 % W/W

Substances for which there are Community workplace exposure limits.

For the full text of the R-phrases mentioned in this Section, see Section 16.

For the full text of the H-Statements mentioned in this Section, see Section 16.

SECTION 4: FIRST AID MEASURES

4.1 Description of first aid measures

- General advice** : Have the product container, label or Material Safety Data Sheet with you when calling the Syngenta emergency number, a poison control center or physician, or going for treatment.
- Inhalation** : Move the victim to fresh air.
If breathing is irregular or stopped, administer artificial respiration.
Keep patient warm and at rest.
Call a physician or poison control centre immediately.

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- Skin contact** : Take off all contaminated clothing immediately.
Wash off immediately with plenty of water.
If skin irritation persists, call a physician.
Wash contaminated clothing before re-use.
- Eye contact** : Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.
Remove contact lenses.
Immediate medical attention is required.
- Ingestion** : If swallowed, seek medical advice immediately and show this container or label.
Do NOT induce vomiting.

4.2 Most important symptoms and effects, both acute and delayed

Symptoms : No information available.

4.3 Indication of any immediate medical attention and special treatment needed

Medical advice : There is no specific antidote available.
Treat symptomatically.

SECTION 5: FIREFIGHTING MEASURES**5.1 Extinguishing media**

Extinguishing media - small fires
Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
Extinguishing media - large fires
Alcohol-resistant foam
or
Water spray

Do not use a solid water stream as it may scatter and spread fire.

5.2 Special hazards arising from the substance or mixture

As the product contains combustible organic components, fire will produce dense black smoke containing hazardous products of combustion (see section 10).
Exposure to decomposition products may be a hazard to health.

5.3 Advice for firefighters

Wear full protective clothing and self-contained breathing apparatus.

Do not allow run-off from fire fighting to enter drains or water courses.
Cool closed containers exposed to fire with water spray.

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SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Refer to protective measures listed in sections 7 and 8.

6.2 Environmental precautions

Prevent further leakage or spillage if safe to do so.
Do not flush into surface water or sanitary sewer system.

6.3 Methods and materials for containment and cleaning up

Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13).

If the product contaminates rivers and lakes or drains inform respective authorities.

6.4 Reference to other sections

Refer to protective measures listed in sections 7 and 8.
Refer to disposal considerations listed in section 13.

SECTION 7: HANDLING AND STORAGE

7.1 Precautions for safe handling

No special protective measures against fire required.
Avoid contact with skin and eyes.
When using do not eat, drink or smoke.
For personal protection see section 8.

7.2 Conditions for safe storage, including any incompatibilities

No special storage conditions required.
Keep containers tightly closed in a dry, cool and well-ventilated place.
Keep out of the reach of children.
Keep away from food, drink and animal feedingstuffs.

: Physically and chemically stable for at least 2 years when stored in the original unopened sales container at ambient temperatures.

7.3 Specific end use(s)

Registered Crop Protection products: For proper and safe use of this product, please refer to the approval conditions laid down on the product label.

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SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

Components	Exposure limit(s)	Type of exposure limit	Source
thiamethoxam	3 mg/m ³	8 h TWA	SYNGENTA

The following recommendations for exposure controls/personal protection are intended for the manufacture, formulation and packaging of the product.

8.2 Exposure controls

- Engineering measures** : Containment and/or segregation is the most reliable technical protection measure if exposure cannot be eliminated.
The extent of these protection measures depends on the actual risks in use.
If airborne mists or vapors are generated, use local exhaust ventilation controls.
Assess exposure and use any additional measures to keep airborne levels below any relevant exposure limit.
Where necessary, seek additional occupational hygiene advice.
- Protective measures** : The use of technical measures should always have priority over the use of personal protective equipment.
When selecting personal protective equipment, seek appropriate professional advice.
Personal protective equipment should be certified to appropriate standards.
- Respiratory protection** : No personal respiratory protective equipment normally required.
A particulate filter respirator may be necessary until effective technical measures are installed.
- Hand protection** : Chemical resistant gloves are not usually required.
Select gloves based on the physical job requirements.
- Eye protection** : Eye protection is not usually required.
Follow any site specific eye protection policies.
- Skin and body protection** : No special protective equipment required.
Select skin and body protection based on the physical job requirements.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

- Physical state** : liquid
Form : liquid
Colour : beige to brown
Odour : weak

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Odour Threshold	: No data available
pH	: 5 - 7 at 1 % w/v
Melting point/range	: No data available
Boiling point/boiling range	: No data available
Flash point	: ≥ 100 °C
Evaporation rate	: No data available
Flammability (solid, gas)	: No data available
Lower explosion limit	: No data available
Upper explosion limit	: No data available
Vapour pressure	: No data available
Relative vapour density	: No data available
Density	: 1.11 - 1.15 g/cm ³ at 20 °C
Solubility in other solvents	: No data available
Partition coefficient: n-octanol/water	: No data available
Auto-ignition temperature	: 415 °C
Thermal decomposition	: No data available
Viscosity, dynamic	: 52.8 - 440 mPa.s at 20 °C : 46.0 - 403 mPa.s at 40 °C
Viscosity, kinematic	: No data available
Explosive properties	: Not explosive
Oxidizing properties	: not oxidizing

9.2 Other information**Surface tension** : 39.3 mN/m at 20 °C**SECTION 10: STABILITY AND REACTIVITY****10.1 Reactivity**

See section 10.3 "Possibility of hazardous reactions".

10.2 Chemical stability

The product is stable when used in normal conditions

10.3 Possibility of hazardous reactions

No hazardous reactions by normal handling and storage according to provisions.

10.4 Conditions to avoid

No decomposition if used as directed.

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10.5 Incompatible materials

No substances are known which lead to the formation of hazardous substances or thermal reactions.

10.6 Hazardous decomposition products

Combustion or thermal decomposition will evolve toxic and irritant vapors.

SECTION 11: TOXICOLOGICAL INFORMATION**11.1 Information on toxicological effects**

Acute oral toxicity : LD50 male and female Rat, > 5,000 mg/kg

Acute inhalation toxicity : LC50 male and female Rat, > 5.39 mg/l , 4 h

Acute dermal toxicity : LD50 male and female Rabbit, > 2,000 mg/kg

Skin corrosion/irritation : Rabbit: Slightly irritating

Serious eye damage/eye irritation : Rabbit: Slightly irritating

Respiratory or skin sensitisation : Buehler Test Guinea pig: Not a skin sensitizer in animal tests.

Germ cell mutagenicity
thiamethoxam : Did not show mutagenic effects in animal experiments.

Carcinogenicity
thiamethoxam : Liver tumours noted in mice that are not relevant to humans.

Reproductive toxicity
thiamethoxam : Did not show reproductive toxicity effects in animal experiments.

STOT - repeated exposure
thiamethoxam : Did not show neurotoxicity in animal experiments.

Further information
thiamethoxam : No adverse effects in humans are expected at levels below the occupational exposure limit and when the product is handled and used according to the label.

SECTION 12: ECOLOGICAL INFORMATION**12.1 Toxicity**

Toxicity to fish : LC50 *Oncorhynchus mykiss* (rainbow trout), > 495 mg/l , 96 h

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Toxicity to aquatic invertebrates : EC50 Daphnia magna (Water flea), > 490 mg/l , 48 h

Toxicity to aquatic plants : ErC50 Scenedesmus capricornutum (fresh water algae), > 416 mg/l , 72 h

12.2 Persistence and degradability

Biodegradability

thiamethoxam : No data available

Stability in water

thiamethoxam : Degradation half life: 11 d
Not persistent in water.

Stability in soil

thiamethoxam : Degradation half life: 51 d
Not persistent in soil.

12.3 Bioaccumulative potential

thiamethoxam : No data available

12.4 Mobility in soil

thiamethoxam : No data available

12.5 Results of PBT and vPvB assessment

thiamethoxam : No data available

12.6 Other adverse effects

Other information : Classification of the product is based on the summation of the concentrations of classified components.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Product : Do not contaminate ponds, waterways or ditches with chemical or used container.
Do not dispose of waste into sewer.
Where possible recycling is preferred to disposal or incineration.
If recycling is not practicable, dispose of in compliance with local regulations.

Contaminated packaging : Empty remaining contents.
Triple rinse containers.
Empty containers should be taken to an approved waste handling site for recycling or disposal.
Do not re-use empty containers.

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SECTION 14: TRANSPORT INFORMATION**Land transport (ADR/RID)**

14.1 UN number:	UN 3082
14.2 UN proper shipping name:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (THIAMETHOXAM)
14.3 Transport hazard class(es):	9
14.4 Packing group:	III
Labels:	9
14.5 Environmental hazards :	Environmentally hazardous
Tunnel restriction code:	E

Sea transport(IMDG)

14.1 UN number:	UN 3082
14.2 UN proper shipping name:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (THIAMETHOXAM)
14.3 Transport hazard class(es):	9
14.4 Packing group:	III
Labels:	9
14.5 Environmental hazards :	Marine pollutant

Air transport (IATA-DGR)

14.1 UN number:	UN 3082
14.2 UN proper shipping name:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (THIAMETHOXAM)
14.3 Transport hazard class(es):	9
14.4 Packing group:	III
Labels:	9

14.6 Special precautions for user

none

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**

GHS-Labeling

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Hazard pictograms



Signal word	:	Warning
Hazard statements	:	H410 Very toxic to aquatic life with long lasting effects.
Precautionary statements	:	P391 Collect spillage. P501 Dispose of contents/ container to an approved waste disposal plant.
Supplemental information	:	EUH208 Contains 1,2-benzisothiazol-3-one. May produce an allergic reaction.
Remarks	:	Classified using all GHS hazard classes and categories. Where the GHS contains options, the most conservative option has been chosen. Regional or national implementations of GHS may not implement all hazard classes and categories.

Hazardous components which must be listed on the label:

15.2 Chemical Safety Assessment

A Chemical Safety Assessment is not required for this substance.

SECTION 16: OTHER INFORMATION

Further information

Full text of R-phrases referred to under sections 2 and 3:

R11	Highly flammable.
R22	Harmful if swallowed.
R36	Irritating to eyes.
R36/37	Irritating to eyes and respiratory system.
R50/53	Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R52/53	Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

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Full text of H-Statements referred to under sections 2 and 3.

H228	Flammable solid.
H302	Harmful if swallowed.
H319	Causes serious eye irritation.
H335	May cause respiratory irritation.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.

Full text of other abbreviations

ADR:	European Agreement Concerning the International Carriage of Dangerous Goods by Road	RID:	Regulations concerning the International Carriage of Dangerous Goods by Rail
IMDG:	International Maritime Code for Dangerous Goods	IATA-DGR:	International Air Transport Association Dangerous Goods Regulations
LC50:	Lethal concentration, 50%	LD50:	Lethal dose, 50%
EC50:	Effective dose, 50%	GHS:	Globally Harmonized System of Classification and Labelling of Chemicals (GHS)

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