

MATERIAL SAFETY DATA SHEET

APIGUARD[®]

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1. PRODUCT AND COMPANY INFORMATION

Product Name: Apiguard[®] Acaricide - aqueous gel

Manufacturer

VITA (EUROPE) LIMITED
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2. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical characterization of the preparation:

Chemical Class: Phenol
 Formulation Type: Aqueous gel
 Sector: ACARICIDE

Active Ingredient (s): 25% (w/w) THYMOL (2-Isopropyl-5-methylphenol)

Hazardous Component (s):

Contains:	THYMOL (2-Isopropyl-5-methylphenol)
Empirical Formula:	C ₁₀ H ₁₄ O
Molecular Weight:	150.2
Content:	25% (w/w)
CAS-Reg. No.:	89-83-8
EC-No.:	2019448
EC-label:	R22 Harmful if swallowed.
	R34 Causes burns.
	S26 In cases of contact with eyes, rinse immediately with plenty of water and seek medical advice.
	S28 After contact with skin, wash immediately with plenty of soap and water.
	S36/37/39 Wear suitable protective clothing, gloves and eye/face protection.

3. HAZARDS IDENTIFICATION

Potential Health Hazards:

The active ingredient THYMOL resembles phenol in its systemic actions but it is less toxic.

Eyes:

Causes irreversible eye damage.

Skin:

Irritation of skin with redness and pain.

Inhalation:

May cause severe and permanent damage to the digestive tract. Causes gastrointestinal irritation with nausea, vomiting and diarrhea. Irritation of respiratory tract.

Ingestion:

Abdominal pain with possible nausea, vomiting and occasional convulsions. Oils and alcohol may promote absorption into the body.

Chronic Exposure:

No data found.

4. FIRST AID MEASURES

Eyes:

Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call poison control center or doctor for treatment advice.

Skin:

Rinse skin immediately with plenty of water for 15-20 minutes. Take off contaminated clothing. Call poison control center or doctor for treatment advice.

Inhalation:

If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth, if possible. Move person to fresh air. Call poison control center or doctor for treatment advice.

Ingestion:

Call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by poison control center or doctor. Do not give anything by mouth to an unconscious person.

Chronic Exposure:

No data found.

Note to Physician:

No specific antidote, treat symptomatically.

5. FIRE FIGHTING MEASURES

Extinguishing media:

Suitable agents:	alcohol-resistant foam, carbon dioxide dry powder
Not to be used:	full water jet

Special protective equipment for fire fighters:

Wear self-contained breathing apparatus.

6. ACCIDENTAL RELEASE MEASURES

Use personal protective clothing. Do not contaminate waterways or sewers. Collect the product in containers for safe disposal. Collect material in specially marked, tightly closing containers. Spilled product cannot be used further and must be disposed of. If safe disposal is not possible, contact the manufacturer, supplier or the local representatives.

7. HANDLING AND STORAGE

Handling:

Wash after handling. Avoid contact with the eyes, skin and clothing. Avoid digestion and inhalation.

Storage:

Store in a cool, dry place.

Maximum storage temperature: 80°F

Shelf life in original, sealed containers in a temperature climate is:

24 months minimum for the 50g aluminum-foil container (tray),

18 months minimum for the 3kg polypropylene container (tub).

Store in undamaged, properly sealed, original containers protected from light by secondary packaging.

Do not open until ready to use.

Keep away from incompatible materials.

Observe all warnings and precautions for the product.

8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

Occupational Toxicity Risk:

Low, when used as directed.

Engineering Controls:

Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower.

Use adequate ventilation.

Industrial Hygiene:

Keep away from food, drink and animal feedstuffs.

When using do not eat, drink or smoke.

Change contaminated clothes immediately.

Wash your hands after work and before taking breaks.

Personal Protective Equipment:

Respiratory protection:	Not required if the product is handled in the open air or properly ventilated in-door places, otherwise respiratory protection is recommended.
Eye protection:	Chemical safety goggles or glasses
Hand protection:	Gloves
Others:	Working clothes

9. PHYSICAL AND CHEMICAL PROPERTIES

Form:	Aqueous granular gel (a solid suspended in a liquid)
Color:	Slightly opalescent, colorless to pale pink
Odor:	Characteristic, strong aromatic, thyme-like
Change in Physical State:	
Melting point:	49.5°C for THYMOL (100%)
Boiling point:	233°C for THYMOL (100%)
Flash Point:	> 100°C
Ignition Temperature:	Not applicable
Explosion Limits:	Not applicable
Density (Specific Gravity):	1.005 - 1.025 g/cm ³ at 20°C
Vapor Pressure:	2.25 x 10 ³ at 20°C
Viscosity:	95,000 - 125,000 cps at 25°C
pH Value (1% aqueous suspension):	7.0 - 8.0 at 20°C
Solubility in / Miscibility with water:	77% (w/w) at 20°C
Partition coefficient n -octanol/water:	
Log p O/W:	3.30 at 20°C
Method: calculated	Test result for THYMOL (100%)

10. STABILITY AND REACTIVITY**Stability:**

Stable, but avoid any application of heat to the product.

Reactivity:

Non-reactive.

11. TOXICOLOGICAL INFORMATIONAcute Oral Toxicity LD₅₀: >2000 mg/kg (rat)Acute Dermal Toxicity LD₅₀: >2000 mg/kg (rat)**Irritation:**

Skin: Irritant (rabbit)

Eyes: Irritant (rabbit)

Sensitization:

Skin: None (guinea pig)

12. ECOLOGICAL INFORMATION**Data On Elimination (Persistence and Degradability):**

Information on the active ingredient THYMOL:

The product is readily biodegradable to OECD criteria.

Fish Toxicity:

Values for the active ingredient THYMOL (100%):

LC₀ (96 hours): 4.2 mg/LLC₅₀ (96 hours): 5.0 mg/L (approximately)*(Brachydanio rerio)***Daphnia Toxicity:**

Values for the active ingredient THYMOL (100%):

LC₅₀ (48 hours): 3.2 mg/L*(Water flea, Daphnia magna)***Bacterial Toxicity (growth inhibition):**

Values for the active ingredient THYMOL (100%):

EC₅₀: 40 mg/L

Method: OECD 209 / ISO 8192

Activated sludge

Behavior in Sewage Plant:

Information on the active ingredient THYMOL:

When low concentrations are discharged correctly into adapted biological sewage treatment plants, interference with the degradation activity of activated sludge is not likely.

Further Information:

Comment regarding the active ingredient THYMOL:

Do not discharge the product unmonitored into the environment.

13. DISPOSAL CONSIDERATIONS

The product must be disposed of according to the applicable local regulations in force, if no recycling is possible. Packaging that cannot be cleaned should be disposed of as for the product.

14. TRANSPORTATION INFORMATION

RID/GGVE:	Not classified as dangerous goods for transportation.
ADR/GGVS:	Not classified as dangerous goods for transportation.
IMDG/GGVSea:	Not classified as dangerous goods for transportation.

15. REGULATORY INFORMATION

Assessment by Vita (Europe) Limited in accordance with EC directives and UK legislation on dangerous substances:

R36/38	Irritating to eyes and skin.
S2	Keep out of the reach of children.
S13	Keep away from food, drink and animal feedstuffs.
S26	In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S28	After contact with skin, wash immediately with plenty of soap and water.
S36/37/39	Wear suitable protective clothing, gloves and eye/face protection.

16. OTHER INFORMATION

Product should be stored, handled and used in accordance with good industrial hygiene practices and in conformity with legal regulations.

The information contained herein is based on the present state of our knowledge and is intended to describe our products from the point of view of safety requirements. It should, therefore, not be construed as a warranty with regard to the product specific properties.

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