



MATERIAL SAFETY DATA SHEET

Solve Mite

IDENTIFICATION OF THE SUPPLIER:

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IDENTIFICATION OF PRODUCT:

Product Name: Solve Mite
Active ingredient: Acequinocyl
Formulation type: Suspension Concentrate (SC)
Chemical Name: 3-dodecyl-1,4-dihydro-1,4-dioxo-2-naphthyl acetate
Chemical formula: C₂₄H₃₂O₄
Molecular weight: 384.5

COMPOSITION/ INFORMATION:

| <i>Active ingredient</i> | CAS# | % w/v |
|---------------------------------------|--------------|-------|
| Acequinocyl | [57960-19-7] | 15 |
| <i>Inert ingredient:</i> up to 1liter | | |

HAZARDS IDENTIFICATION:

2.1. Classification of the substance or mixture
GHS classification
Acute Tox. 4 (Inhalation: dust, mist) H332
STOT SE 1 H370
STOT RE 2 H373

2.2. Label elements
GHS labelling
Hazard pictograms (GHS):





GHS07



GHS08

Signal word (GHS) : Danger

Hazard statements (GHS) : H332 - Harmful if inhaled H370 - Causes damage to organs H373 - May cause damage to organs through prolonged or repeated exposure

Precautionary statements (GHS) : P260 - Do not breathe mist, spray, vapours
P264 - Wash hands thoroughly after handling
P270 - Do not eat, drink or smoke when using this product
P271 - Use only outdoors or in a well-ventilated area
P304+P340 - If inhaled: Remove person to fresh air and keep comfortable for breathing
P307+P311 - If exposed: Call a poison center/doctor
P314 - Get medical advice/attention if you feel unwell
P321 - Specific treatment (see First aid measures on this label)
P405 - Store locked up
P501 - Dispose of contents/container to an authorised waste collection point

2.3. Other hazards: No additional information available

2.4. Unknown acute toxicity (GHS)

5.1 percent of the mixture consists of ingredient(s) of unknown acute toxicity (Oral)

5.1 percent of the mixture consists of ingredient(s) of unknown acute toxicity (Dermal)

5.1 percent of the mixture consists of ingredient(s) of unknown acute toxicity (Inhalation (Dust/Mist))





FIRST AID MEASURES:

4.1. Description of first aid measures :

First-aid measures general

Never give anything by mouth to an unconscious person. Call a POISON CENTER or doctor/physician.

First-aid measures after inhalation : If inhaled and if breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell.

First-aid measures after skin contact : Wash with plenty of soap and water.

First-aid measures after eye contact : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

First-aid measures after ingestion : Rinse mouth. Call a POISON CENTER or doctor/physician if you feel unwell.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms/injuries

Causes damage to organs (whole body, liver, blood). May cause damage to organs (whole body, liver, blood) through prolonged or repeated exposure.

Symptoms/injuries after inhalation : Danger of serious damage to health by prolonged exposure through inhalation. Harmful if inhaled.

4.3. Indication of any immediate medical attention and special treatment needed

All treatments should be based on observed signs and symptoms of distress in the patient.

FIRE FIGHTING MEASURES:

5.1. Extinguishing media Suitable :
extinguishing media

Dry powder. Foam. Carbon dioxide. Water spray.

Unsuitable extinguishing media : Do not use a heavy water stream.

5.2. Special hazards arising from the substance or mixture

Fire hazard: No particular fire or explosion hazard.

Reactivity: No dangerous reactions known.





5.3. Advice for firefighters :

- Firefighting instructions : Cool adjacent structures and containers with water spray to protect and prevent ignition. Exercise caution when fighting any chemical fire. Do not allow run-off from firefighting to enter drains or water courses.
- Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection. Use self-contained breathing apparatus. Wear fire/flame resistant/retardant clothing.

PHYSICAL AND CHEMICAL CHARACTERISTIC:

- Physical state : Liquid
Colour : pale Yellow
Odour : Characteristic odor
Odour threshold : No data available
pH : 7.1
Melting point : No data available
Freezing point : No data available
Boiling point : 100 °C
Flash point : > 93 °C
Relative evaporation rate (butyl acetate=1) : No data available
Flammability (solid, gas) : No data available
Explosive limits : No data available
Explosive properties : No data available
Oxidising properties : No data available
Vapour pressure: No data available
Relative density: 1.02 - 1.05 @ 20 °C
Relative vapour density at 20 °C: No data available
Solubility: No data available
Log P_{ow}: No data available
Log K_{ow} : No data available
Auto-ignition temperature: No data available
Decomposition temperature: No data available
Viscosity: No data available
Viscosity, kinematic: No data available
Viscosity, dynamic: 405.95 cP





ACCIDENTAL RELEASE MEASURE:

6.1. Personal precautions, protective equipme : and emergency procedures

General measures

Avoid all eye and skin contact and do not breathe vapour and mist. Process enclosures, closed systems, and local exhaust ventilation should be used to control exposures.

6.1.1. For non-emergency personnel : Protective equipment

Wear suitable gloves. In case of inadequate ventilation wear respiratory protection.

Emergency procedures

: Evacuate unnecessary personnel.

6.1.2. For emergency responders:

Protective equipment

: Wear suitable gloves. In case of inadequate ventilation wear respiratory protection.

: Ventilate area.

6.2. Environmental precautions:

Prevent entry to sewers and public waters. Prevent dispersion.

6.3. Methods and material for containment and cleaning up :

For containment:

Absorb and/or contain spill with inert material, then place in suitable container.

HANDLING AND STORAGE:

7.1. Precautions for safe handling:

Precautions for safe handling: Do not breathe mist, spray, vapours. Use only outdoors or in a well-ventilated area.

Hygiene measures: Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reuse. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.

7.2. Conditions for safe storage, including any incompatibilities





Storage conditions: Do not store near food, foodstuffs, drugs, or potable water supplies. Keep only in original container. Keep container tightly closed.

Incompatible products: None known.

Storage area: Store in dry, cool, well-ventilated area.

STABILITY AND REACTIVITY:

- . **Reactivity:** No dangerous reactions known.
- . **Chemical stability:** Stable under normal conditions.
- . **Possibility of hazardous reactions:** Hazardous polymerization will not occur.
- . **Conditions to avoid:** None known.
- . **Incompatible materials:** None known.
- . **Hazardous decomposition products:** Burning produces irritating, toxic and noxious fumes.

Exposure controls/personal protection:

Control parameters: Products & Acequinocyl: Not applicable

Exposure controls:

| | |
|-----------------------------------|---|
| Appropriate engineering controls: | Avoid creating mist or spray. Avoid splashing. Ensure good ventilation of the work station. |
| Personal protective equipment: | Avoid all unnecessary exposure. |
| Hand protection : | Wear suitable protective clothing and gloves. Impermeable protective nitrile gloves. |
| Eye protection: | Chemical goggles or safety glasses. |
| Respiratory protection: | Where exposure through inhalation may occur from use, respiratory protection equipment is recommended. Wear appropriate mask. Use an approved respirator equipped with oil/mist cartridges. |
| Other information: | Do not eat, drink or smoke when using this product. |

TOXICOLOGICAL INFORMATION:

Information on toxicological effects:

Likely routes of exposure: Inhalation; Skin and eye contact

Acute toxicity: Inhalation: dust, mist: Harmful if inhaled.





Product:

| | |
|----------------------------|---------------------------|
| LD50 oral rat | 5000 mg/kg |
| LD50 dermal rat | > 2000 mg/kg |
| LC50 inhalation rat (mg/l) | 4.49 mg/l/4h |
| ATE US (oral) | 5000.000 mg/kg bodyweight |
| ATE US (vapours) | 4.490 mg/l/4h |
| ATE US (dust,mist) | 4.490 mg/l/4h |

| | | |
|--|---|---|
| Skin corrosion/irritation | : | Not classified (Not irritating to rabbits on cutaneous application) |
| Serious eye damage/irritation | : | Not classified (Slightly irritating to eyes) |
| Respiratory or skin sensitisation | : | Not classified. (No sensitizing reaction was observed for guinea pigs) |
| Germ cell mutagenicity | : | Not classified |
| Carcinogenicity | : | Not classified |
| Reproductive toxicity | : | Not classified |
| Specific target organ toxicity (single exposure) | : | Causes damage to organs. |
| Specific target organ toxicity (repeated exposure) | : | May cause damage to organs through prolonged or repeated exposure. |
| Aspiration hazard | : | Not classified |

Symptoms/injuries after inhalation: Danger of serious damage to health by prolonged exposure through inhalation. Harmful if inhaled.

ECOLOGICAL INFORMATION:

Ecology - general: Very toxic to aquatic life with long lasting effects.

Product:

| | | |
|-------------------------------|-------------------|---------------------------------|
| LC50 fish 1 | 65 mg/l 96 h | Oncorhynchus mykiss |
| LC50 other aquatic organisms: | 0.93 mg/l 96 h | Pseudokirchneriella subcapitata |
| EC50 Daphnia 1: | 0.0154 mg/l 48 h | |
| EC50 Daphnia 2: | 0.00236 mg/l 48 h | |





Persistence and degradability: Not rapidly degradable. May cause long-term adverse effects in the environment.

Bioaccumulative potential: Acequinocyl

BCF fish 1 366

Log P_{ow} 6.2

Mobility in soil (Products +Acequinocyl): Immobile in soil.

DISPOSAL CONSIDERATIONS

Waste treatment methods:

Waste treatment methods: Dispose of in authorized waste collection plant.

Sewage disposal recommendations: Do not dispose of waste into sewer.

Waste disposal recommendations: Dispose in a safe manner in accordance with local/national regulations. Disposal via incineration is recommended.

