

**NOSB NATIONAL LIST
FILE CHECKLIST**

CROPS

MATERIAL NAME: #11 Soap-based algicides/demossers

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NOSB Database Form

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References

✓

MSDS (or equivalent)

✓

TAP Reviews from: Diana Tracy

**NOSB/NATIONAL LIST
COMMENT FORM
CROPS**

Material Name: #11 Soap-based algicides/demossers

Please use this page to write down comments, questions, and your anticipated vote(s).

COMMENTS/QUESTIONS:

1. In my opinion, this material is:

Synthetic Non-synthetic.

2. This material should be placed on the proposed National List as:

Prohibited Natural Allowed Synthetic.

TAP REVIEWER COMMENT FORM for USDA/NOSB

Use this page or an equivalent to write down comments and summarize your evaluation regarding the data presented in the file of this potential National List material. Complete both sides of page. Attach additional sheets if you wish.

This file is due back to us by: Aug. 5, 1996

Name of Material: Soap-based algicides-demossers

Reviewer Name: DIANA TRACY RECEIVED AUG 05 1996

Is this substance Synthetic or non-synthetic? Explain (if appropriate)

SYNTHETIC

If synthetic, how is the material made? (please answer here if our database form is blank)

This material should be added to the National List as:

Synthetic Allowed Prohibited Natural

or, Non-synthetic (This material does not belong on National List)

Are there any use restrictions or limitations that should be placed on this material on the National List?

Please comment on the accuracy of the information in the file:

Any additional comments? (attachments welcomed)

Do you have a commercial interest in this material? Yes; No

Signature Diana Lee Tracy Date 7/31

NOSB Materials Database

1

Identification

Common Name Soap-based
algicides-demossers

Chemical Name

Other Names

Code #: CAS

Code #: Other

N. L. Category

MSDS yes no

Chemistry

Family

Composition

Properties

How Made

Type of Use Crops

Use/Action

Specific Use(s)

Action

Combinations

Status

OFPA

N. L. Restriction
EPA, FDA, etc

Directions

Safety Guidelines

Historical status
International status

RINGER CORPORATION

9959 Valley View Road, Minneapolis, MN 55344
(612) 941-4180

MATERIAL SAFETY DATA SHEET

Product Name: Safer® Home, Deck & Patio Moss & Algae Killer RTU
EPA Registration Number: 42697-10
MSDS Number: 5320

SECTION I: IDENTIFICATION

Product Description (Ingredients):
Contains 2.0% potassium salts of fatty acids in a water/alcohol matrix. The exact composition of this material is proprietary.

SECTION II: PHYSICAL & CHEMICAL CHARACTERISTICS

Bulk Density (H₂O=1): 0.99
Solubility in Water: Highly soluble.
Appearance and Odor: Amber liquid with alcohol odor.

SECTION III: FIRE & EXPLOSION HAZARD DATA

Flash Point (method used): > 200°F.
Extinguishing media: Product is 98% water.
Special Fire Fighting Procedures: None known.

SECTION IV: REACTIVITY DATA

Stability: Stable.
Incompatibility (materials to avoid): Concentrated mineral supplements (fertilizers).
Hazardous Decomposition Products: None known.
Hazardous Polymerization: Will not occur.

DOT INFORMATION: Not regulated.

SECTION V: HEALTH HAZARD DATA

OSHA PEL: 1000 ppm or 1900 mg/m³ (ethanol).
Routes of exposure: Mild skin and eye irritation.
Carcinogens: Chronic oral consumption of ethyl alcohol has been linked to birth defects and cancer in humans.
Emergency First Aid Procedures:
Eye Contact: Flush with water.
Skin Contact: If sensitive, flush with water.
Inhalation: Remove from area.
Ingestion: Give demulcent (milk).

SECTION VI: PROTECTIVE MEASURES

Ventilation: Good general ventilation is normally adequate.
Respiratory Protection: Use NIOSH-approved respiratory protection if conditions warrant.
Protective Gloves: Rubber gloves recommended.
Eye Protection: Protective goggles recommended.

SECTION VII: STORAGE AND DISPOSAL

Do not contaminate water, food or feed by storage or disposal. Do not reuse container.
Storage: Store in a cool, dry place.
Spills: Rinse with abundant water and mop up.
Disposal: Dispose in accordance with all applicable federal, state and local regulations.

This information is provided in good faith, but without express or implied warranty.

Revision date: January 12, 1995

Emergency Phone: 1-800-228-5635, ext. 170

RINGER

PATENTED

HERBICIDAL SOAP

Technical Bulletin

Safer

- Lawn Moss Killer
- Home, Deck & Patio Moss & Algae Kill

DESCRIPTION OF MOSS & ALGAE KILLER

- Safer[®] Moss & Algae Killer and Lawn Moss Killer are herbicidal soaps developed specifically to kill primitive plants called cryptogams (Mosses, Algae, Lichens and Liverworts).
- Effective product for use in integrated pest management systems.
- Active ingredient is potassium salts of fatty acids.
- Made from naturally occurring plant oils and animal fats.

HOW IT WORKS

- Short chain fatty acids work by penetrating cryptogam cells, causing plant death due to dehydration.
- It does not translocate in the plant.

BENEFITS OF MOSS & ALGAE KILLER

- Non corrosive.
- Non staining.
- Kills moss, algae and liverworts on contact.
- The killing action loosens moss which weathers away without scrubbing or pressure blasting.
- Only those plants or plant parts directly contacted by the solution will be affected.
- Will not move through soil to injure nearby plants.
- Breaks down in 48 hours.
- Inhibits recolonization.

PLANTS CONTROLLED

- Quickly kills algae, mosses, liverworts, lichens, cryptogams and eliminates grime.

APPLICATION RECOMMENDATIONS

- For best results, moisten area to be treated with fresh water before applying product.
- For large surface area such as roofs or lawns, use a hose end sprayer. To use a variable calibration sprayer, select dial setting that dilutes Moss & Algae Killer at a rate of 20 parts water to 1 part soap and for Lawn Moss Killer set dial at 30 - 1 ratio.
- For decks & patios, or to remove grime, apply with a scrub brush or push broom to get into cracks and crevices.

USES

- Lawn Moss Killer is ideal for spot control on moss in lawns.
- Moss & Algae Killer is ideal for control of moss and algae on roofs, decks, patios, fences, stucco, walkways, siding, growing containers and benches and other structural surfaces. Also on trees and lawns.

STORAGE AND DISPOSAL

- Store at room temperature or cooler.
- Protect from freezing.
- Store only in original container.
- Thoroughly rinse empty container and discard in trash.

PRECAUTIONARY STATEMENTS

Ready-to-use formula
CAUTION: Harmful if swallowed. Avoid contamination of feed and foodstuffs. May cause eye irritation; avoid eye contact. In case of eye contact, flush eyes with plenty of water.

RELATIVE TOXICITY RATINGS

- LD₅₀ is the industry standard for measuring acute toxicity of pesticide compounds. Higher LD₅₀'s are less acutely toxic.

Terminology

LD = Lethal Dose
 50 = to kill 50% of population
 mg = milligrams of pesticide
 kg = kilograms body weight

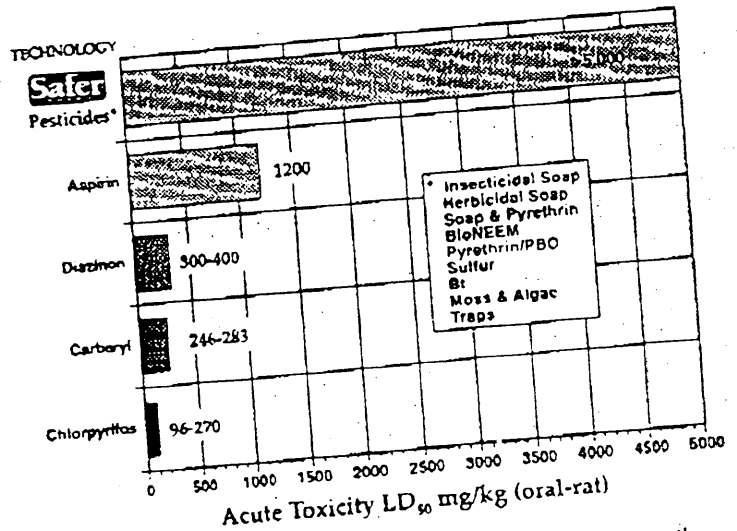
Example:

An LD₅₀ of 300 means that 300 milligrams of pesticide per kilogram of subject body weight will kill 50% of the exposed population (lab rats fed orally) immediately upon exposure.

Chart

In the chart you can see the listed Safer® products have LD₅₀'s greater than 5000 compared to other compounds at less than 1200.

Note: LD₅₀ is the most common measure of toxicity but only one of several criteria measuring toxicity of compounds.



SIGNAL WORD

- By law, one of four signal words must appear on every pesticide label to give the user some indication of the toxicity of the material.
- All pesticides are designed to kill/control pests and therefore must be used carefully according to individual product label directions.
- The four different rating levels are:
 - I. DANGER (LD₅₀ 0-50 mg/kg)
 - II. WARNING (LD₅₀ 50-500 mg/kg)
 - III. CAUTION (LD₅₀ 500-1000 mg/kg)
 - IV. CAUTION (LD₅₀ >5000 mg/kg)
- I. DANGER indicates the most toxic level and IV. CAUTION designates the lowest toxicity rating. The precautionary statements made at each level are mandatory and standard in their wording. Moss & Algae Killer ready-to-use falls into the IV. CAUTION category.

FIELD TESTING

- Extensive field tests in U.S. and Canada for efficacy.
- Significant reduction of moss and algae on treated plots in comparison with untreated plots, 21 days after application.

Herbicidal Soaps

03/16/92 - Soaps and Detergents for Insect Control

J. L. Capinera and O. N. Nesheim
Capinera (904/392-1901), Nesheim (904/392-4721)
VAX accounts - ENTNEM (Capinera) and ONN (Nesheim)
Dept. of Entomology/Nematology and Pesticide Coordinator's Office

There have been several questions concerning the recommendation of soaps, detergents, and vegetable oils for pest control. Some persons are concerned about their liability in making such recommendations. Federal and state pesticide laws do not permit persons who have a financial interest in such materials to make pesticidal claims in connection with their sale or distribution unless the material is registered as a pesticide. Examples of persons having a financial interest are employees of the manufacturer of such products, employees of wholesale or retail establishments where such materials are sold, and pesticide applicators who make pest control claims for trade name materials in connection with pest control services they are selling to a customer. Persons making pest control claims for a material in connection with its sale can be charged with the sale and distribution of an unregistered pesticide.

Persons who use products not registered with EPA for any use not specifically recommended on the product label would be responsible for any phytotoxicity or chemical residues that may result.

A person at his/her own discretion can use soaps, detergents, and vegetable oils for pest control purposes. It is not illegal to recommend (or suggest) the use of these materials. These materials have been used for many years by gardeners and others for pest control. Popular literature contains many references to their use and effectiveness. Evaluations of these materials for pest control has been published, also.

The effectiveness of soaps, detergents, and oils is less consistent than with chemical pesticides. Our research base also is considerably weaker than with many chemicals. Therefore, we are more comfortable with "discussing" soaps, etc. as options, than with actually "recommending" these materials. Although some growers have been quite pleased with the results of soap and oil use, some have been disappointed. Also, plant varieties differ in their susceptibility to burning induced by soaps and oils, and environmental conditions, as well as micronutrients, fertilizers, and other additives may affect tendency to burn. At higher rates of application, (2%) burning and stunting are more likely.

When discussing soaps, detergents, and vegetable oils for pest control

— purposes, avoid recommending by brand name. Point out that there are registered products available that contain these materials, such as the Safer and Mycogen Soap products.

Sample footer

