

1. Identification

Product identifier Tre-Hold Sprout Inhibitor A-112

Other means of identification

SDS number 217

Product registration number 5481-429

Recommended use Sprout inhibitor for apple, olive and pear trees.

Recommended restrictions No other uses are advised.
Keep out of the Reach of Children!

EPA Registration number EPA: 5481-429

Manufacturer/Importer/Supplier/Distributor information

Company Name AMVAC Chemical Corporation

Address 4695 MacArthur Court
Suite 1200
Newport Beach, CA 92660
United States

Telephone

AMVAC Chemical Corp 949-260-1200

AMVAC Chemical Corp 949-260-6270(FAX)

Product Use 888-462-6822

Website www.amvac.com

E-mail CustServ@amvac.com

Emergency phone number

Medical 888-681-4261

CHEMTREC® (USA+Canada) 800-424-9300

CHEMTREC® (Outside USA) +1-703-527-3887

2. Hazard(s) identification

Physical hazards Not classified.

Health hazards Serious eye damage/eye irritation Category 2B
Carcinogenicity Category 2
Aspiration hazard Category 1

Environmental hazards Hazardous to the aquatic environment, acute hazard Category 2
Hazardous to the aquatic environment, long-term hazard Category 2

OSHA defined hazards Not classified.

Label elements



Signal word Danger

Hazard statement Causes eye irritation.
Suspected of causing cancer.
May be fatal if swallowed and enters airways.
Toxic to aquatic life.
Toxic to aquatic life with long lasting effects.

Precautionary statement

Prevention	Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective gloves/protective clothing/eye protection/face protection. Avoid release to the environment. Wash thoroughly after handling.
Response	If swallowed: Immediately call a poison center/doctor. Do NOT induce vomiting. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention. If exposed or concerned: Get medical advice/attention. Collect spillage.
Storage	Store locked up.
Disposal	Dispose of contents/container in accordance with local/regional/national/international regulations.
Hazard(s) not otherwise classified (HNOC)	None known.
Supplemental information	This is a pesticide product registered by the United States Environmental Protection Agency and is subject to certain labeling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets (SDS), and for workplace labels of non-pesticide chemicals. The hazard information required on the pesticide label is reproduced in section 15. The pesticide label also includes other important information, including directions for use.

3. Composition/information on ingredients

Mixtures

Chemical name	Common name and synonyms	CAS number	%
Solvent Naphtha (Petroleum), Heavy Aromatic		64742-94-5	80
Naphthaleneacetic acid, Ethyl Ester		2122-70-5	15.1

Constituents

Chemical name	Common name and synonyms	CAS number	%
1-Methylnaphthalene		90-12-0	< 10
2-Methylnaphthalene		91-57-6	< 21
Naphthalene		91-20-3	< 12

Composition comments Occupational Exposure Limits for constituents are listed in Section 8.

4. First-aid measures

Inhalation	Move to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible. Call a poison center or doctor/physician for further treatment advice.
Skin contact	Remove contaminated clothing. Wash off immediately with plenty of water for at least 15 minutes. Call a physician or poison control center for treatment advice.
Eye contact	Immediately flush eyes with plenty of water for at least 15 minutes. Hold the eyelids apart during the flushing to ensure rinsing of the entire surface of the eyes and lids with water. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eyes. Call a physician or poison control center for treatment advice.
Ingestion	Call a physician or poison control center immediately. Do not induce vomiting without advice from poison control center. Do not give any liquid to the person. Never give anything by mouth to a victim who is unconscious or is having convulsions.
Most important symptoms/effects, acute and delayed	Aspiration may cause pulmonary edema and pneumonitis. Causes eye irritation. Exposed individuals may experience eye tearing, redness, and discomfort.
Indication of immediate medical attention and special treatment needed	Provide general supportive measures and treat symptomatically. Keep victim under observation. Symptoms may be delayed.
General information	If exposed or concerned: Get medical advice/attention. Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

5. Fire-fighting measures

Suitable extinguishing media Water fog. Foam. Dry chemical powder. Carbon dioxide (CO₂).

Unsuitable extinguishing media	Do not use water jet as an extinguisher, as this will spread the fire.
Specific hazards arising from the chemical	During fire, gases hazardous to health may be formed.
Special protective equipment and precautions for firefighters	Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
Fire fighting equipment/instructions	Move containers from fire area if you can do so without risk.
Specific methods	Use standard firefighting procedures and consider the hazards of other involved materials.
General fire hazards	No unusual fire or explosion hazards noted.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures	Ensure adequate ventilation. Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Wear appropriate protective equipment and clothing during clean-up. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. For personal protection, see section 8 of the SDS.
Methods and materials for containment and cleaning up	Prevent product from entering drains. Stop the flow of material, if this is without risk. Siphon the spilled liquid into a recovery drum for reuse or disposal, depending on the circumstances. Absorb spillage with non-combustible, absorbent material. Clean surface thoroughly to remove residual contamination. Never return spills to original containers for reuse. Put material in suitable, covered, labeled containers. For waste disposal, see section 13 of the SDS.
Environmental precautions	Avoid release to the environment. Inform appropriate managerial or supervisory personnel of all environmental releases. Prevent further leakage or spillage if safe to do so. Avoid discharge into drains, water courses or onto the ground.

7. Handling and storage

Precautions for safe handling	Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Provide adequate ventilation. Wear appropriate personal protective equipment. Avoid contact with eyes. Avoid prolonged exposure. Avoid release to the environment. Wash hands thoroughly after handling.
Conditions for safe storage, including any incompatibilities	Store in tightly closed container. Store away from incompatible materials (see Section 10 of the SDS).

8. Exposure controls/personal protection

Occupational exposure limits

The following constituents are the only constituents of the product which have a PEL, TLV or other recommended exposure limit. At this time, the other constituents have no known exposure limits.

US. OSHA Table Z-1 Permissible Exposure Limits (PEL) for Air Contaminants (29 CFR 1910.1000)

Constituents	Type	Value
Naphthalene (CAS 91-20-3)	PEL	50 mg/m ³ 10 ppm

US. ACGIH Threshold Limit Values (TLV)

Constituents	Type	Value
1-Methylnaphthalene (CAS 90-12-0)	TWA	0.5 ppm
2-Methylnaphthalene (CAS 91-57-6)	TWA	0.5 ppm
Naphthalene (CAS 91-20-3)	TWA	10 ppm

NIOSH. Immediately Dangerous to Life or Health (IDLH) Values, as amended

Constituents	Type	Value
Naphthalene (CAS 91-20-3)	IDLH	0.9 % 250 ppm

US. NIOSH: Pocket Guide to Chemical Hazards Recommended Exposure Limits (REL)

Components	Type	Value
Solvent Naphtha (Petroleum), Heavy Aromatic (CAS 64742-94-5)	TWA	100 mg/m ³

US. NIOSH: Pocket Guide to Chemical Hazards Recommended Exposure Limits (REL)

Constituents	Type	Value
Naphthalene (CAS 91-20-3)	STEL	75 mg/m ³
		15 ppm
	TWA	50 mg/m ³
		10 ppm

Biological limit values No biological exposure limits noted for the ingredient(s).

Exposure guidelines**US - California OELs: Skin designation**

Naphthalene (CAS 91-20-3) Can be absorbed through the skin.

US ACGIH Threshold Limit Values: Skin designation

1-Methylnaphthalene (CAS 90-12-0) Danger of cutaneous absorption

2-Methylnaphthalene (CAS 91-57-6) Danger of cutaneous absorption

Naphthalene (CAS 91-20-3) Danger of cutaneous absorption

Appropriate engineering controls

Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Provide eyewash station.

Individual protection measures, such as personal protective equipment

Eye/face protection Wear safety glasses with side shields (or goggles).

Skin protection

Hand protection Wear appropriate chemical resistant gloves.

Other Long-sleeved shirt and long pants or coveralls, socks and closed toe shoes are required.

Respiratory protection If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn.

Thermal hazards Not available.

General hygiene considerations

Observe any medical surveillance requirements. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

9. Physical and chemical properties

Appearance Clear colorless to light brown liquid

Physical state Liquid.

Form Clear solution.

Color Clear to light brown

Odor Aromatic solvent.

Odor threshold None established

pH 6.5 - 7.5 (5% emulsion)

Melting point/freezing point 15 °F (-9.44 °C) Approximately

Initial boiling point and boiling range 457 - 540 °F (236.1 - 282.2 °C)

Flash point 203 °F (95 °C)

Evaporation rate Not available.

Flammability (solid, gas) Not applicable.

Upper/lower flammability or explosive limits

Explosive limit - lower (%) >1.8 %

Explosive limit - upper (%) <11.8 %

Vapor pressure 5.00E-02 mm Hg @ 68 °F

Vapor density >1

Relative density 1 - 1.01

Relative density temperature 71.6 °F (22 °C)

Solubility(ies)

Solubility (water) Emulsifiable

Solubility (solvents)	This product is soluble in esters, ketones, and aromatic solvents
Partition coefficient (n-octanol/water)	Not available
Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
Viscosity	Not available.
Other information	The data presented in this section are typical values and should not be construed as a specification.
Explosive properties	Not explosive.
Flammability class	Combustible IIIB
Oxidizing properties	Not oxidizing.

10. Stability and reactivity

Reactivity	The product is stable and non-reactive under normal conditions of use, storage and transport.
Chemical stability	Material is stable under normal conditions.
Possibility of hazardous reactions	No dangerous reaction known under conditions of normal use.
Conditions to avoid	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. Avoid temperatures exceeding the flash point. Contact with incompatible materials.
Incompatible materials	Strong oxidizing agents.
Hazardous decomposition products	No hazardous decomposition products are known. Emits hazardous fumes and smoke of unknown composition when heated to decomposition or burned.

11. Toxicological information

Information on likely routes of exposure

Inhalation	Prolonged inhalation may be harmful.
Skin contact	Prolonged skin contact may cause temporary irritation.
Eye contact	Causes eye irritation.
Ingestion	Droplets of the product aspirated into the lungs through ingestion or vomiting may cause a serious chemical pneumonia.

Symptoms related to the physical, chemical and toxicological characteristics Aspiration may cause pulmonary edema and pneumonitis. Irritation of eyes. Exposed individuals may experience eye tearing, redness, and discomfort.

Information on toxicological effects

Acute toxicity May be harmful if swallowed.

Product	Species	Test Results
Tre-Hold Sprout Inhibitor A-112		
acute dermal		
LD50	Rabbit	> 2020 mg/kg
oral		
LD50	Rat	2300 mg/kg

Skin corrosion/irritation Prolonged skin contact may cause temporary irritation.

Serious eye damage/eye irritation Causes eye irritation.

Respiratory or skin sensitization

Respiratory sensitization	Not a respiratory sensitizer.
Skin sensitization	This product is not expected to cause skin sensitization.

Germ cell mutagenicity Not classified.

Carcinogenicity Suspected of causing cancer. Naphthalene has been listed as a possible carcinogen (Group 2B) by the IARC.

IARC Monographs. Overall Evaluation of Carcinogenicity

Naphthalene (CAS 91-20-3) 2B Possibly carcinogenic to humans.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)

Not listed.

US. National Toxicology Program (NTP) Report on Carcinogens

1-Methylnaphthalene (CAS 90-12-0)	Known To Be Human Carcinogen.
2-Methylnaphthalene (CAS 91-57-6)	Known To Be Human Carcinogen.
Naphthalene (CAS 91-20-3)	Known To Be Human Carcinogen. Reasonably Anticipated to be a Human Carcinogen.

Reproductive toxicity	This product is not expected to cause reproductive or developmental effects.
Specific target organ toxicity - single exposure	Not available.
Specific target organ toxicity - repeated exposure	Not classified.
Aspiration hazard	May be fatal if swallowed and enters airways.
Chronic effects	Prolonged inhalation may be harmful.

12. Ecological information

Ecotoxicity	Toxic to aquatic life with long lasting effects.
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Constituents	Species	Test Results
1-Methylnaphthalene (CAS 90-12-0)		
Aquatic		
<i>Acute</i>		
Fish	LC50	Fathead minnow (<i>Pimephales promelas</i>) 9 mg/l, 96 hours
2-Methylnaphthalene (CAS 91-57-6)		
Aquatic		
<i>Acute</i>		
Fish	LC50	Rainbow trout, donaldson trout (<i>Oncorhynchus mykiss</i>) 1.07 - 1.841 mg/l, 96 hours
Naphthalene (CAS 91-20-3)		
Aquatic		
<i>Acute</i>		
Crustacea	EC50	Water flea (<i>Daphnia magna</i>) 1.09 - 3.4 mg/l, 48 hours
Fish	LC50	Pink salmon (<i>Oncorhynchus gorbuscha</i>) 0.95 - 1.62 mg/l, 96 hours

Persistence and degradability	No data is available on the degradability of any ingredients in the mixture.
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Bioaccumulative potential

Partition coefficient n-octanol / water (log Kow)	
Solvent Naphtha (Petroleum), Heavy Aromatic	> 4

Mobility in soil	No data available.
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Other adverse effects	No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.
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13. Disposal considerations

Disposal instructions	Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose of contents/container in accordance with local/regional/national/international regulations.
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Local disposal regulations	Dispose in accordance with all applicable regulations.
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Hazardous waste code	The waste code should be assigned in discussion between the user, the producer and the waste disposal company.
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Waste from residues / unused products	Dispose of in accordance with all applicable regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).
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Contaminated packaging	Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.
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14. Transport information

DOT	Not regulated as dangerous goods.
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IATA	
UN number	UN3082

UN proper shipping name Environmentally hazardous substance, liquid, n.o.s. (Solvent Naphtha (Petroleum), Heavy Aromatic)

Transport hazard class(es)

Class 9

Subsidiary risk -

Packing group III

Environmental hazards Yes

ERG Code 9L

Special precautions for user Read safety instructions, SDS and emergency procedures before handling.

Other information

Passenger and cargo aircraft Allowed with restrictions.

Cargo aircraft only Allowed with restrictions.

Read safety instructions, SDS and emergency procedures before handling.

IMDG

UN number UN3082

UN proper shipping name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Solvent Naphtha (Petroleum), Heavy Aromatic), MARINE POLLUTANT

Transport hazard class(es)

Class 9

Subsidiary risk -

Packing group III

Environmental hazards

Marine pollutant Yes

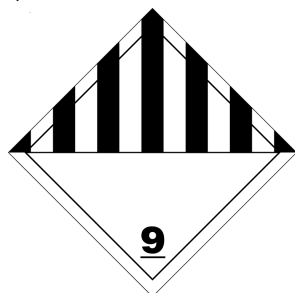
EmS F-A, S-F

Special precautions for user Read safety instructions, SDS and emergency procedures before handling.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not established.

the IBC Code

IATA; IMDG



Marine pollutant



General information

IMDG Regulated Marine Pollutant.

15. Regulatory information

US federal regulations

This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

This product is registered under EPA/FIFRA Regulations. It is a violation of Federal Law to use this product in any manner inconsistent with its labeling. Read and follow all label directions. This product is excluded from listing requirements under EPA/TSCA.

This is a pesticide product registered by the United States Environmental Protection Agency and is subject to certain labeling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets (SDS), and for workplace labels of non-pesticide chemicals. The hazard information required on the pesticide label is reproduced below. The pesticide label also includes other important information, including directions for use.

HAZARD TO HUMANS AND DOMESTIC ANIMALS.

CAUTION! Harmful if swallowed. Harmful if absorbed through skin. Causes moderate eye irritation. Avoid contact with skin, eyes or clothing. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum or using tobacco. Remove and wash contaminated clothing before reuse.

ENVIRONMENTAL HAZARDS

Do not apply directly to water, to areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment washwater or rinsate. Do not contaminate irrigation ditches or water used for irrigation or domestic purposes. Do not apply when weather conditions favor drift from areas treated. Do not use in a greenhouse.

PHYSICAL OR CHEMICAL HAZARDS

Do not store near extreme heat, open flame, or sources of ignition.

Toxic Substances Control Act (TSCA)

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

CERCLA Hazardous Substance List (40 CFR 302.4)

Naphthalene (CAS 91-20-3)	Listed.
Solvent Naphtha (Petroleum), Heavy Aromatic (CAS 64742-94-5)	Listed.

SARA 304 Emergency release notification

Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)

Not listed.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 Hazardous chemical

Yes

Classified hazard categories	Serious eye damage or eye irritation Carcinogenicity Aspiration hazard
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SARA 313 (TRI reporting)

Not regulated.

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

1-Methylnaphthalene (CAS 90-12-0)
2-Methylnaphthalene (CAS 91-57-6)
Naphthalene (CAS 91-20-3)

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

Safe Drinking Water Act (SDWA) Contains component(s) regulated under the Safe Drinking Water Act.

US state regulations

California Proposition 65



WARNING: This product can expose you to Naphthalene, which is known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov.

California Proposition 65 - CRT: Listed date/Carcinogenic substance

Naphthalene (CAS 91-20-3)

Listed: April 19, 2002

International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

16. Other information, including date of preparation or last revision

Issue date May-13-2015

Revision date Jun-28-2023

Version # 3.1

HMIS® ratings
Health: 2
Flammability: 1
Physical hazard: 0

NFPA ratings
Health: 2
Flammability: 1
Instability: 0

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Revision information This document has undergone significant changes and should be reviewed in its entirety.