# SAFETY DATA SHEET

Category 1

Category 1



## 1. Identification

**Product identifier VAPAM® HL Soil Fumigant** 

Other means of identification

141 SDS number

5481-468 **Product registration** 

number **Synonyms** 

Metam sodium \* Metam \* VAPAM

Recommended use Soil Fumigant.

Recommended restrictions This is a Restricted Use Pesticide and is for use by licensed applicators only.

No other uses are advised.

Keep out of the Reach of Children!

**EPA Registration number** EPA: 5481-468

Manufacturer/Importer/Supplier/Distributor information

Manufacturer

Company name **AMVAC Chemical Corporation** 

4695 MacArthur Court **Address** 

**Suite 1200** 

Newport Beach, CA 92660

**United States** 

**Telephone AMVAC Chemical Corp** 949-260-1200

> **AMVAC Chemical Corp** 949-260-6270(FAX) 888-462-6822

**Product Use** www.amvac.com

Website E-mail CustServ@amvac.com

**Emergency phone number** Medical 888-681-4261

**CHEMTREC®** 800-424-9300

(USA+Canada)

CHEMTREC® (Outside +1-703-527-3887

USA)

## 2. Hazard(s) identification

Physical hazards Corrosive to metals Category 1 **Health hazards** Acute toxicity, oral Category 4 Acute toxicity, inhalation Category 4 Skin corrosion/irritation Category 2 Serious eye damage/eye irritation Category 2B

**Environmental hazards** Hazardous to the aquatic environment, acute Category 1

Hazardous to the aquatic environment,

long-term hazard

Sensitization, skin

Not classified. **OSHA** defined hazards

Label elements



Signal word Warning

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**Hazard statement** May be corrosive to metals.

Harmful if swallowed. Harmful if inhaled. Causes skin irritation. Causes eye irritation.

May cause an allergic skin reaction.

Very toxic to aquatic life.

Very toxic to aquatic life with long lasting effects.

## **Precautionary statement**

**Prevention** Keep only in original container.

Use only outdoors or in a well-ventilated area.

Wear protective gloves. Avoid breathing mist/vapors. Avoid release to the environment.

Do not eat, drink or smoke when using this product.

Wash thoroughly after handling.

Contaminated work clothing must not be allowed out of the workplace.

Response If swallowed: Call a poison center/doctor if you feel unwell. Rinse mouth.

If on skin: Wash with plenty of water. If skin irritation or rash occurs: Get medical advice/attention.

Take off contaminated clothing and wash it before reuse.

If inhaled: Remove person to fresh air and keep comfortable for breathing. Call a poison

center/doctor if you feel unwell.

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.

Absorb spillage to prevent material damage.

**Storage** Store in corrosive resistant container with a resistant inner liner.

**Disposal** Dispose of contents/container in accordance with local/regional/national/international regulations.

Hazard(s) not otherwise classified (HNOC)

Supplemental information

None known.

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

#### **Substances**

Chemical name	Common name and synonyms	CAS number	%
Sodium Methyldithiocarbamate	Metam Sodium Metam	137-42-8	42

#### **Composition comments** All concentrations are in percent by weight.

#### 4. First-aid measures

**Inhalation** 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. Administer oxygen or artificial respiration if needed. Induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other

proper respiratory medical device.

**Skin contact** Remove contaminated clothing immediately and wash skin with soap and water. In case of

eczema or other skin disorders: Seek medical attention and take along these instructions. Wash

contaminated clothing before reuse.

**Eye contact** Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if

present and easy to do. Continue rinsing. Get medical attention if irritation develops and persists.

**Ingestion** Call a physician or poison control center immediately.

Rinse mouth.

Do not induce vomiting without advice from poison control center. If vomiting occurs, keep head

low so that stomach content doesn't get into the lungs.

Never give anything by mouth to a victim who is unconscious or is having convulsions.

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SDS US

Most important symptoms/effects, acute and delayed

Overexposure to Metam Sodium as sold may result in damage to the skin, skin irritation, excessive salivation, sweating, fatigue, weakness, nausea, headache, dizziness, eye, nose, throat and respiratory tract irritation. In addition, dilution to use levels results in the release of methyl isothiocyanate (MITC) and/or hydrogen sulfide. Overexposure to MITC may result in strong skin and eye irritation, running nose, dizziness, cramps, nausea, vomiting, and mild to severe disturbances of the nervous system. Overexposure to hydrogen sulfide may result in severe irritation to the eyes and mucous membranes. In addition, exposure may result in headache, dizziness, excitement, staggering gait, diarrhea, difficult or painful urination, difficult breathing, chronic pulmonary edema, coma and death.

Chronic exposure may also cause conjunctivitis, photophobia, digestive disturbances, weight loss, general bodily weakness, and blurred vision. In addition, laboratory studies have shown that exposure to the active ingredient, followed by ingestion of alcohol, may cause an adverse reaction, including low blood pressure, rapid heartbeat, and flushing of the skin. Consumption of alcohol during and after exposure to this product should be avoided.

Indication of immediate medical attention and special treatment needed

Provide general supportive measures and treat symptomatically. Keep victim warm. Keep victim under observation. Symptoms may be delayed. Contact your local or State Poison control Center for further information.

General information

Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance. Wash contaminated clothing before reuse.

# 5. Fire-fighting measures

Suitable extinguishing media Unsuitable extinguishing media Use fire-extinguishing media appropriate for surrounding materials.

Material reacts with water. Dilution with water may cause generation of flammable and toxic fumes of MITC and Hydrogen sulfide. See Chemical Stability information in Section 10.

Specific hazards arising from the chemical

Material reacts with water. This product can release toxic fumes of methyl isothiocyanate (MITC) and hydrogen sulfide, as well as nitrogen oxides, when heated to decomposition or diluted with water. Fire may produce irritating, corrosive and/or toxic gases.

Special protective equipment and precautions for firefighters

Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

Firefighting equipment/instructions

Evacuate the area promptly. 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.

# 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures Keep people away from and upwind of spill/leak. Wear appropriate protective equipment and clothing during clean-up. Avoid breathing mist or vapor. Avoid contact with eyes, skin, and clothing. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained.

Methods and materials for containment and cleaning up

Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Siphon the majority of the liquid into drums for use or disposal, depending on the circumstances. Clean the area as described for a small spill.

Small Spills: Absorb spillage with non-combustible, absorbent material. Scoop up used absorbent into drums or other appropriate container. Scrub the area with detergent and water. Rinse with water. Pick up wash liquid with additional absorbent and place in a disposable container.

Never return spills to original containers for reuse.

**Environmental precautions** 

Avoid release to the environment. Prevent further leakage or spillage if safe to do so. Avoid discharge into drains, water courses or onto the ground. Inform appropriate managerial or supervisory personnel of all environmental releases.

## 7. Handling and storage

Precautions for safe handling

Read label before use. Keep out of the reach of children. Keep away from food, drink and animal feedstuffs. Avoid breathing mist or vapor. Avoid contact with eyes, skin, and clothing. Do not taste or swallow. When using, do not eat, drink or smoke. Use only outdoors or in a well-ventilated area. Wear appropriate personal protective equipment. Wash thoroughly after handling. Avoid release to the environment. Wash contaminated clothing before reuse.

Conditions for safe storage, including any incompatibilities

Keep away from food, drink and animal feedstuffs. Store in a cool, dry place out of direct sunlight. Store in corrosive resistant container with a resistant inner liner. Store in original tightly closed container. Store in a well-ventilated place. Store away from incompatible materials (see Section 10 of the SDS).

# 8. Exposure controls/personal protection

#### Occupational exposure limits

US. OSHA Table Z-2 (29 CFR 1910.1000)

Decomposition Value **Type** Hydrogen sulfide (CAS Ceiling 20 ppm

7783-06-4)

**US. ACGIH Threshold Limit Values** 

Decomposition Type Value Hydrogen sulfide (CAS **STEL** 5 ppm 7783-06-4)

TWA

1 ppm

**US. NIOSH: Pocket Guide to Chemical Hazards** Decomposition Type

Hydrogen sulfide (CAS Ceiling 15 mg/m3

7783-06-4)

10 ppm

Value

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

Mechanical ventilation or local exhaust ventilation may be required. Eye wash facilities and Appropriate engineering emergency shower must be available when handling this product.

controls

Individual protection measures, such as personal protective equipment

Safety glasses with side shields or tight fitting chemical goggles should be used whenever Eye/face protection

hazardous chemicals are being handled. A full face respirator should be worn whenever there is a

chance of splashing or misting.

Skin protection

**Hand protection** Wear appropriate chemical resistant gloves.

Other Wear appropriate chemical resistant clothing (see label).

For exposures that may exceed the TLV, a respirator with either an organic vapor-removing Respiratory protection

cartridge with a prefilter approved for pesticides (MSHA/NIOSH approval number prefix TC-23C). or canister approved for pesticides (MSHA/NIOSH approval number prefix TC-14G) is required. A

full-face respirator or a SCBA may be required if misting or splashing are possible.

Thermal hazards Not applicable.

General hygiene considerations

Keep away from food and drink. 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. Contaminated work clothing

should not be allowed out of the workplace.

## 9. Physical and chemical properties

**Appearance** 

Physical state Liquid. Form Liquid.

Color Light yellow-green

Odor Essentially odorless to fairly strong odor of amine or sulfur.

Odor threshold Not available. 9.5 - 1132 °F (0 °C) Melting point/freezing point 233.6 °F (112 °C) Initial boiling point and boiling

range

> 200 °F (> 93.3 °C) Closed Cup Flash point

1 (compared to water) **Evaporation rate** 

Not applicable. Flammability (solid, gas) Upper/lower flammability or explosive limits

Flammability limit - lower

Not available.

Flammability limit - upper

Not available.

Explosive limit - lower (%) Not available. **Explosive limit - upper (%)** Not available.

Vapor pressure 24 mm Hg (77 °F (25 °C))

Vapor density Not available.

**Relative density** 1.21 at 20 °C/4 °C (68 °F/39 °F)

Solubility(ies)

Solubility (water) Miscible.

Auto-ignition temperature Not available.

Decomposition temperature Not available.

Viscosity Not available.

Other information

Bulk density10.07 lb/galMolecular formulaC2-H4-N-S2.NaMolecular weight129.18 g/mol

# 10. Stability and reactivity

**Reactivity** May be corrosive to metals.

Chemical stability Material is stable under normal conditions.

Metam Sodium decomposes, when diluted with water, to methyl isothiocyanate (MITC, a lachrymator and moderate poison) and/or to hydrogen sulfide (a highly poisonous gas). Use the

solution promptly after mixing. Do not allow the solution to stand.

Metam Sodium can also decompose to carbon disulfide and monomethylamine (both highly

flammable) if contacted with a strong acid.

Possibility of hazardous

reactions

Hazardous polymerization does not occur.

**Conditions to avoid**Contact with incompatible materials. Contact with water liberates flammable gas.

Incompatible materials This product is incompatible with additional water and strong aqueous acids. In addition, it is

corrosive to copper, brass, and zinc, and may soften and/or discolor iron.

**Hazardous decomposition** 

products

When treated with water or heated to decomposition, this product will give off toxic fumes of methyl isothiocyanate (MITC), hydrogen sulfide, and nitrogen oxides. If treated with strong acids, fumes of

carbon disulfide and monomethylamine will be given off.

# 11. Toxicological information

Information on likely routes of exposure

**Inhalation** Harmful if inhaled.

**Skin contact** Causes skin irritation. May cause an allergic skin reaction.

**Eye contact** Causes eye irritation. **Ingestion** Harmful if swallowed.

Symptoms related to the physical, chemical and toxicological characteristics

Overexposure to Metam Sodium as sold may result in damage to the skin, skin irritation, excessive salivation, sweating, fatigue, weakness, nausea, headache, dizziness, eye, nose, throat and respiratory tract irritation. In addition, dilution to use levels results in the release of methyl isothiocyanate (MITC) and/or hydrogen sulfide. Overexposure to MITC may result in strong skin and eye irritation, running nose, dizziness, cramps, nausea, vomiting, and mild to severe disturbances of the nervous system. Overexposure to hydrogen sulfide may result in severe irritation to the eyes and mucous membranes. In addition, exposure may result in headache, dizziness, excitement, staggering gait, diarrhea, difficult or painful urination, difficult breathing, chronic pulmonary edema, coma and death.

Chronic exposure may also cause conjunctivitis, photophobia, digestive disturbances, weight loss, general bodily weakness, and blurred vision. In addition, laboratory studies have shown that exposure to the active ingredient, followed by ingestion of alcohol, may cause an adverse reaction, including low blood pressure, rapid heart beat, and flushing of the skin. Consumption of alcohol during and after exposure to this product should be avoided.

Impaired pulmonary function and preexisting eye problems may be aggravated. Preexisting skin

diseases may also be aggravated by exposure to the decomposition products.

Information on toxicological effects

Acute toxicity Harmful if swallowed. Harmful if inhaled.

Material name: VAPAM® HL Soil Fumigant

SDS US

Product Species Test Results

VAPAM® HL Soil Fumigant

<u>Acute</u>

Dermal

LD50 Rabbit > 2020 mg/kg

Inhalation

Mist

LC50 Rat 2.28 mg/l, 4 h

Oral

LD50 Rat 812 mg/kg

Decomposition Species Test Results

Methyl isothiocyanate (MITC) (CAS 556-61-6)

<u>Acute</u>

Dermal

LD50 Rabbit 33 mg/kg

Inhalation

LC50 Rat 1.9 mg/l, 1 h

Oral

LD50 Rat 175 mg/kg

Skin corrosion/irritation Causes skin irritation.

**Irritation Corrosion - Skin** 

VAPAM® HL Soil Fumigant Result: Moderate Irritant

Species: Rabbit

Serious eye damage/eye Causes eye irritation.

irritation

Irritation Corrosion - Eye

VAPAM® HL Soil Fumigant Result: Mild Irritant

Species: Rabbit

Respiratory or skin sensitization

**Respiratory sensitization** Based on available data, the classification criteria are not met.

**Skin sensitization** May cause an allergic skin reaction.

Skin sensitization

VAPAM® HL Soil Fumigant Result: Sensitizer

Species: Guinea pig

Germ cell mutagenicity No evidence of mutagenicity "in vivo", but some evidence has been observed "in vitro", in

mutagenicity animal testing.

Carcinogenicity Limited evidence of a carcinogenic effect.

IARC Monographs. Overall Evaluation of Carcinogenicity

Not listed.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)

Not listed.

US. National Toxicology Program (NTP) Report on Carcinogens

Not listed.

Reproductive toxicity

This product has shown some developmental effects but has not shown any reproductive effects in

laboratory animals.

Specific target organ toxicity -

single exposure

Not classified.

Specific target organ toxicity -

repeated exposure

Not classified.

Aspiration hazard Not classified.

**Chronic effects** Prolonged inhalation may be harmful.

12. Ecological information

**Ecotoxicity** Very toxic to aquatic life with long lasting effects. This product is toxic to fish. 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 washwaters.

Decomposition Species Test Results

Hydrogen sulfide (CAS 7783-06-4)

Aquatic Acute

Crustacea EC50 Scud (Gammarus pseudolimnaeus) 0.062 mg/l, 2 days
Fish LC50 Fathead minnow (Pimephales promelas) 0.007 mg/l, 96 hours

Methyl isothiocyanate (MITC) (CAS 556-61-6)

**Aquatic** 

Acute

Crustacea LC50 Water flea (Daphnia magna) 0.18 - 0.56 mg/l, 48 hours

0.032 - 0.1 mg/l, 14 days

Persistence and degradability Product decomposes rapidly in wet environments.

Bioaccumulative potential Decomposes rapidly - will not bioaccumulate.

Partition coefficient n-octanol / water (log Kow)

Sodium Methyldithiocarbamate < 1

Mobility in soil This product decomposes when diluted with water and the decomposition products will leach from

the soil.

Other adverse effects None known.

13. Disposal considerations

Disposal instructions Collect and reclaim or dispose in sealed containers at licensed waste disposal site according to all

applicable regulations. 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 all applicable local/regional/national/international

regulations.

**Local disposal regulations** Dispose in accordance with all applicable regulations.

**Hazardous waste code** D002: Waste Corrosive material [pH <=2 or =>12.5, or corrosive to steel]

The waste code should be assigned in discussion between the user, the producer and the waste

disposal company.

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 methods/information). Avoid discharge into water courses or onto the ground.

according to all applicable regulations. Since emptied containers may retain product residue,

follow label warnings even after container is emptied.

14. Transport information

DOT

UN number UN3266

UN proper shipping name Transport hazard class(es) Corrosive liquid, basic, inorganic, n.o.s. (Metam Sodium 42%), MARINE POLLUTANT

Class 8
Subsidiary risk Label(s) 8
Packing group III
Environmental hazards

Marine pollutant Yes

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

**Special provisions** IB3, T7, TP1, TP28

Packaging exceptions 154
Packaging non bulk 203
Packaging bulk 241

**IATA** 

UN number UN3266

**UN proper shipping name** Corrosive liquid, basic, inorganic, n.o.s. (Metam Sodium 42%)

Transport hazard class(es)
Class 8
Subsidiary risk -

Subsidiary risk Packing group III
Environmental hazards No

ERG Code 8L

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

Other information

Passenger and cargo

Allowed with restrictions.

aircraft

Cargo aircraft only Allowed with restrictions.

Read safety instructions, SDS and emergency procedures before handling.

## **IMDG**

UN number UN3266

UN proper shipping name CORROSIVE LIQUID, BASIC, INORGANIC, N.O.S. (Metam Sodium 42%), MARINE

**POLLUTANT** 

Transport hazard class(es)

Class 8
Subsidiary risk Packing group III
Environmental hazards

Marine pollutant Yes EmS F-A, S-B

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

Not established.

the IBC Code

## DOT



## IATA; IMDG



## Marine pollutant



**General information** 

DOT Regulated Marine Pollutant. 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 as a RESTRICTED USE PESTICIDE. 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 chemical 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.

**DANGER -- POISON** 

KEEP OUT OF REACH OF CHILDREN!

HAZARD TO HUMANS AND DOMESTIC ANIMALS.

#### **DANGER**

Fatal if absorbed through skin. Corrosive. Causes skin burns and irreversible eye damage. Do not get in eyes, on skin, or on clothing. May be fatal if inhaled or swallowed. Do not breathe vapors or spray mist. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals.

#### **ENVIRONMENTAL HAZARDS**

This pesticide is toxic to mammals, birds, fish, and aquatic invertebrates. Do not apply directly to water, or 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.

Metam sodium has certain properties and characteristics in common with chemicals that have been detected in groundwater (highly soluble in water and has low adsorption to soil). For untarped applications, leaching and runoff may occur if there is heavy rainfall after soil fumigation.

#### **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)

Not 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)

## 

Chemical name	CAS number	Reportable quantity (pounds)	Threshold planning quantity (pounds)	Threshold planning quantity, lower value (pounds)	Threshold planning quantity, upper value (pounds)
Hydrogen sulfide	7783-06-4	100	500		
Methyl isothiocyanate (MITC)	556-61-6	500	500		
SARA 311/312 Hazardo chemical	ou <b>s</b> Yes				
Classified hazard	Corrosive t	o metal			

Acute toxicity (any route of exposure) categories Skin corrosion or irritation

> Serious eye damage or eye irritation Respiratory or skin sensitization

## SARA 313 (TRI reporting)

Chemical name	CAS number	% by wt.	
Sodium Methyldithiocarbamate	137-42-8	42	

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#### Other federal regulations

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

Not regulated.

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

Not regulated.

Safe Drinking Water Act

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

(SDWA)

#### **US state regulations**

## California Proposition 65



WARNING: This product can expose you to Sodium Methyldithiocarbamate, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

Sodium Methyldithiocarbamate (CAS 137-42-8) Listed: November 6, 1998

#### California Proposition 65 - CRT: Listed date/Developmental toxin

California Proposition 65 - CRT: Listed date/Carcinogenic substance

Sodium Methyldithiocarbamate (CAS 137-42-8) Listed: May 15, 1998

#### **International Inventories**

Country(s) or region On inventory (yes/no)\* Inventory name Canada Domestic Substances List (DSL) Canada Non-Domestic Substances List (NDSL) No United States & Puerto Rico Toxic Substances Control Act (TSCA) Inventory Nο

\*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

Apr-07-2015 Issue date Nov-04-2022 **Revision date** 

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> Health: 2 Flammability: 1 Physical hazard: 1

NFPA ratings Health: 2

> Flammability: 1 Instability: 1

Disclaimer

**HMIS®** ratings

This information is provided for the limited guidance to the user. While AMVAC believes that the information is, as of the date hereof, reliable, it is the user's responsibility to determine the suitability of the information for its purposes. The user is advised not to construe the information as absolutely complete since additional information may be necessary or desirable when particular, exceptional, or variable conditions or circumstances exist (like combinations with other materials), or because of applicable regulations. No express or implied warranty of merchantability or fitness for a particular purpose or otherwise is made hereunder with respect to the information or the product to which the information relates.

AMVAC Chemical Corporation cannot anticipate all conditions under which this information and its product, or the products of other manufacturers in combination with its product, may be used. It is the user's responsibility to ensure safe conditions for handling, storage and disposal of the product, and to assume liability for loss, injury, damage or expense due to improper use.

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NFPA is a trademark of the National Fire Protection Association, Inc.

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

Material name: VAPAM® HL Soil Fumigant

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