



**VOLUNTARY PURCHASING GROUPS, INC.**

## **Safety Data Sheet Hi-Yield 55% Malathion**

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### **SECTION 1: Identification**

#### **GHS Product identifier**

Product name	Hi-Yield 55% Malathion
Product number	31083; 32027; 32028; 32029
Brand	Hi-Yield

#### **Other means of identification**

EPA Reg. No. 7401-10-34911

#### **Recommended use of the chemical and restrictions on use**

Insecticide.

#### **Supplier's details**

Name	Voluntary Purchasing Groups, Inc.
Address	230 FM 87 Bonham TX 75418 USA
Telephone	855-270-4776

#### **Emergency phone number**

In the event of a medical or chemical emergency contact ChemTel, Inc.  
North American 1-800-255-3924 or worldwide Intl. + 01-813-248-0585

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### **SECTION 2: Hazard identification**

#### **General hazard statement**

- Harmful if swallowed or in contact with skin
- Toxic if inhaled
- May cause an allergic skin reaction
- May cause genetic defects
- May cause cancer
- Very toxic to aquatic life with long lasting effects
- May be fatal if swallowed and enters airways
- Flammable liquid and vapor

#### **Classification of the substance or mixture**

- Acute toxicity, oral, Cat. 4
- Acute toxicity, dermal, Cat. 4
- Acute toxicity, inhalation, Cat. 3
- Skin sensitizer, Cat. 1
- Germ cell mutagenicity, Cat. 1B

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- Carcinogenicity, Cat. 1B
- Aspiration hazard, Cat. 1
- Acute hazards to the aquatic environment, Cat. 1
- Long-term hazards to the aquatic environment, Cat. 1
- Flammable liquids, Cat. 3

### GHS label elements, including precautionary statements

#### Pictograms



#### Signal word

**Danger**

#### Hazard statement(s)

H302 Harmful if swallowed  
H312 Harmful in contact with skin  
H331 Toxic if inhaled  
H317 May cause an allergic skin reaction  
H340 May cause genetic defects [route]  
H350 May cause cancer [route]  
H304 May be fatal if swallowed and enters airways  
H400 Very toxic to aquatic life  
H410 Very toxic to aquatic life with long lasting effects  
H226 Flammable liquid and vapor

#### Precautionary statement(s)

P264 Wash ... thoroughly after handling.  
P270 Do not eat, drink or smoke when using this product.  
P301+P312 IF SWALLOWED: Call a POISON CENTER /doctor/...if you feel unwell,  
P330 Rinse mouth.  
P501 Dispose of contents/container to ...  
P280 Wear protective gloves/protective clothing/eye protection/face protection.  
  
P302+P352 IF ON SKIN: Wash with plenty of water/...  
P312 Call a POISON CENTER/doctor/.../ if you feel unwell.  
P321 Specific treatment (see ... on this label).  
P362+P364 Take off contaminated clothing and wash it before reuse.  
P261 Avoid breathing dust/fume/gas/mist/vapors/spray.  
P271 Use only outdoors or in a well-ventilated area.  
P304+P340 IF INHALED: Remove victim to fresh air and keep comfortable for breathing.  
  
P311 Call a POISON CENTER/doctor/...  
P403+P233 Store in a well-ventilated place. Keep container tightly closed.  
P405 Store locked up.  
P272 Contaminated work clothing should not be allowed out of the workplace.  
P333+P313 If skin irritation or rash occurs: Get medical advice/attention.  
P201 Obtain special instructions before use.  
P202 Do not handle until all safety precautions have been read and understood.  
  
P308+P313 IF exposed or concerned: Get medical advice/attention.  
P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/doctor/...  
P331 Do NOT induce vomiting.  
P273 Avoid release to the environment.  
P391 Collect spillage.  
P210 Keep away from heat/sparks/open flames/hot surfaces. No smoking.

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P233	Keep container tightly closed.
P240	Ground/bond container and receiving equipment.
P241	Use explosion-proof electrical/ventilating/lighting/.../ equipment.
P242	Use only non-sparking tools.
P243	Take precautionary measures against static discharge.
P303+P361+P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
P370+P378	In case of fire: Use ... to extinguish.
P403+P235	Store in a well-ventilated place. Keep cool.

### Other hazards which do not result in classification

Have the product label with you when calling a poison control center or doctor or going in for treatment. You may also contact 1-877-800-5556 for emergency medical treatment advice.

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## SECTION 3: Composition/information on ingredients

### Substances

#### Hazardous components

Component	Concentration
Malathion (CAS no.: 121-75-5; EC no.: 204-497-7; Index no.: 015-041-00-X)	55 %
Naphthalene (CAS no.: 91-20-3; EC no.: 202-049-5; Index no.: 601-052-00-2)	43 %, Trade secret

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## SECTION 4: First-aid measures

### Description of necessary first-aid measures

General advice	IF exposed or concerned: Get medical advice/attention. Immediate medical attention is required. Show this safety data sheet to the doctor in attendance.
If inhaled	Aspiration into lungs can produce severe lung damage. If breathing has stopped, give artificial respiration. Get medical attention immediately. Remove to fresh air. Avoid direct contact with skin. Use barrier to give mouth-to-mouth resuscitation. If breathing is difficult, (trained personnel should) give oxygen. Get immediate medical advice/attention. Delayed pulmonary edema may occur.
In case of skin contact	Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. May cause an allergic skin reaction. If symptoms persist, call a physician.
In case of eye contact	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Keep eye wide open while rinsing. Do not rub affected area.
If swallowed	ASPIRATION HAZARD IF SWALLOWED - CAN ENTER LUNGS AND CAUSE DAMAGE. Do NOT induce vomiting. If vomiting occurs spontaneously, keep head below hip to prevent aspiration. Clean mouth with water and drink afterwards plenty of water. Never give anything by mouth to an unconscious person. Get immediate medical advice/attention.

Personal protective equipment for first-aid responders

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Remove all sources of ignition. See section 8 for more information. Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination. Avoid direct contact with skin. Use barrier to give mouth-to-mouth resuscitation. Use personal protective equipment as required.

### Most important symptoms/effects, acute and delayed

Itching Rashes Hives Difficulty in breathing Coughing and/ or wheezing Dizziness

### Indication of immediate medical attention and special treatment needed, if necessary

May cause sensitization in susceptible persons. Treat symptomatically. Because of the danger of aspiration, emesis or gastric lavage should not be employed unless the risk is justified by the presence of additional toxic substances.

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## SECTION 5: Fire-fighting measures

### Suitable extinguishing media

Dry chemical. Carbon dioxide (CO<sub>2</sub>). Water spray. Alcohol resistant foam. CAUTION: Use of water spray when fighting fire may be inefficient.

### Specific hazards arising from the chemical

Risk of ignition. Keep product and empty container away from heat and sources of ignition. In the event of fire, cool tanks with water spray. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations. Product is or contains a sensitizer. May cause sensitization by skin contact.

### Special protective actions for fire-fighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

### Further information

Sensitivity to mechanical impact: None.

Sensitivity to static discharge: Yes.

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## SECTION 6: Accidental release measures

### Personal precautions, protective equipment and emergency procedures

See section 8 for more information. ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Pay attention to flashback. Take precautionary measures against static discharges. All equipment used when handling the product must be grounded. Do not touch or walk through spilled material. Avoid contact with skin, eyes, or clothing. Evacuate personnel to safe areas. Keep people away from and up-wind of spill/leak. Ensure adequate ventilation. Use personal protective equipment as required.

### Environmental precautions

Prevent further leakage or spillage if safe to do so. Prevent product from entering drains. Do not flush into surface water or sanitary sewer system. See Section 12 for additional ecological information. Avoid release to the environment. Collect spillage. Dispose of contents/container to an approved waste disposal plant.

### Methods and materials for containment and cleaning up

Stop leak if you can do it without risk. Do not touch or walk through spilled material. A vapor suppressing foam may be used to reduce vapors. Dike far ahead of spill to collect runoff water. Keep out of drains, sewers, ditches and waterways. Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal. Take precautionary measures against static discharges. Dam up. Soak up with inert absorbent material. Pick up and transfer to properly labeled containers.

### Reference to other sections

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See Section 12 for additional ecological information.

For further specification, refer to section 8 of the SDS.

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### SECTION 7: Handling and storage

#### Precautions for safe handling

Use personal protection equipment. Avoid breathing vapors or mists. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Use grounding and bonding connection when transferring this material to prevent static discharge, fire or explosion. Use with local exhaust ventilation. Use spark-proof tools and explosion-proof equipment. Keep in an area equipped with sprinklers. Use according to package label instructions. In case of insufficient ventilation, wear suitable respiratory equipment. Take off contaminated clothing and wash before reuse. Do not eat, drink or smoke when using this product. Remove contaminated clothing and shoes. Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes or clothing.

#### Conditions for safe storage, including any incompatibilities

Keep away from heat, sparks, flame and other sources of ignition (i.e., pilot lights, electric motors and static electricity). Keep in properly labeled containers. Do not store near combustible materials. Keep in an area equipped with sprinklers. Store in accordance with the particular national regulations. Store in accordance with local regulations. Keep containers tightly closed in a dry, cool and well-ventilated place. Store locked up. Keep out of the reach of children. Store away from other materials.

#### Specific end use(s)

No data available.

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### SECTION 8: Exposure controls/personal protection

#### Control parameters

##### 1. Malathion (CAS: 121-75-5 EC: 204-497-7)

TWA (Inhalation): 1 mg/m<sup>3</sup> (ACGIH)

TWA (Dermal): 15 mg/m<sup>3</sup> (US/OSHA)

IDLH: 250 mg/m<sup>3</sup> (NIOSH)

TWA: 10 mg/m<sup>3</sup> (NIOSH)

##### 2. Naphthalene (CAS: 91-20-3 EC: 202-049-5)

TWA: 50 mg/m<sup>3</sup> (US/OSHA)

TWA: 52 mg/m<sup>3</sup> (ACGIH)

#### Appropriate engineering controls

Showers

Eyewash stations

Ventilation systems.

#### Individual protection measures, such as personal protective equipment (PPE)

##### Eye/face protection

Chemical goggles or safety glasses

##### Skin protection

Chemical resistant apron. Antistatic boots. Long sleeved clothing. Wear suitable protective clothing.

##### Body protection

Contaminated work clothing should not be allowed out of the workplace. Regular cleaning of equipment, work area and clothing is recommended. Avoid contact with skin, eyes or clothing. Wear suitable gloves and eye/face

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protection. Do not eat, drink or smoke when using this product. Wash hands before breaks and immediately after handling the product.

### Respiratory protection

If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

### Thermal hazards

No data available.

### Environmental exposure controls

No data available.

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## SECTION 9: Physical and chemical properties

Appearance (physical state, color, etc.)	Liquid
Odor	Mercaptan
Odor threshold	No data available.
pH	4.4
Melting point/freezing point	No data available.
Initial boiling point and boiling range	>300 F/>148.9 C
Flash point	120 F
Evaporation rate	No data available.
Flammability (solid, gas)	No data available.
Upper/lower flammability or explosive limits	No data available.
Vapor pressure	28.44 mm/Hg @ 25 C
Vapor density	No data available.
Relative density	8.99 lbs./gal
Solubility(ies)	Emulsifies
Partition coefficient: n-octanol/water	No data available.
Auto-ignition temperature	No data available.
Decomposition temperature	No data available.
Viscosity	No data available.
<b>Additional properties</b>	
Physical state	Liquid
Color	
Explosive properties	No data available.
Oxidizing properties	No data available.

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## SECTION 10: Stability and reactivity

### Reactivity

No data available.

### Chemical stability

Stable under normal conditions.

### Possibility of hazardous reactions

None under normal processing.

### Conditions to avoid

Extremely high or low temperatures. Open flame.

### Incompatible materials

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Chemical incompatibility of this product is likely to occur when the product is mixed or comes into contact with common oxidizing or reducing agents.

### Hazardous decomposition products

Oxides of sulfur, oxides of nitrogen and phosphorus-containing compounds. Incomplete combustion may lead to formation of carbon monoxide and/or other asphyxiants.

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## SECTION 11: Toxicological information

### Information on toxicological effects

#### Acute toxicity

Malathion

Oral LD50 = 1390 mg/kg ( Rat )

Dermal LD50 = 4100 mg/kg ( Rabbit )

Inhalation LC50 = 43790 µg/m<sup>3</sup> ( Rat ) 4h

IARC Group 2A

Other Ingredients (contains Naphthalene)

Oral LD50 = 8400 mg/kg ( Rat )

Dermal LD50 > 2000 mg/kg ( Rabbit )

Inhalation LC50 = 3400 ppm ( Rat ) 4 h

Acute Oral LD50 (rat): 550 mg/kg (Technical)

Acute Dermal LD50 (rabbit): > 2000 mg/kg (Technical)

Eye Irritation (rabbit): Slight irritation (Technical) Skin Irritation (rabbit): Slight irritation (Technical) Inhalation LC50 (rat): >5.2 mg/L (4 hr) (Technical).

Skin Sensitization (Guinea Pig): Not a sensitizer (Technical).

Carcinogenic Potential: Naphthalene has been determined to be a possible human carcinogen (Group 2B) by IARC; not classifiable as a human carcinogen by ACGIH; and a possible human carcinogen with further research needed by US EPA.

#### Skin corrosion/irritation

May cause sensitization by skin contact. Specific test data for the substance or mixture is not available. Repeated or prolonged skin contact may cause allergic reactions with susceptible persons. Repeated exposure may cause skin dryness or cracking. May be absorbed through the skin in harmful amounts. Harmful in contact with skin. (based on components).

#### Serious eye damage/irritation

Specific test data for the substance or mixture is not available. May cause irritation.

#### Respiratory or skin sensitization

Specific test data for the substance or mixture is not available. Aspiration in to lungs can produce severe lung damage. May cause pulmonary edema. Pulmonary edema can be fatal. May cause irritation of respiratory tract.

#### Germ cell mutagenicity

Not classified

#### Carcinogenicity

Classification based on data available for ingredients. Contains a known or suspected mutagen.

#### Reproductive toxicity

No information available.

#### Summary of evaluation of the CMR properties

Not classified

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### Specific target organ toxicity (STOT) - single exposure

No information available

### Specific target organ toxicity (STOT) - repeated exposure

No information available

### Aspiration hazard

May be fatal if swallowed and enters airways.

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## SECTION 12: Ecological information

### Toxicity

Very toxic to aquatic life with long lasting effects.

### Persistence and degradability

No data available.

### Bioaccumulative potential

No data available.

### Mobility in soil

No data available.

### Results of PBT and vPvB assessment

No data available.

### Other adverse effects

This pesticide is toxic to aquatic organisms, including fish and invertebrates. This product may contaminate water through drift of spray in wind. This product has a high potential for runoff after application. Use care when applying in or to an area which is adjacent to any body of water, and do not apply when weather conditions favor drift from target area. Poorly draining soils and soils with shallow water tables are more prone to produce runoff that contains this product. A level, well maintained vegetative buffer strip between areas to which this product is applied and surface water features such as ponds, streams, and springs will reduce the potential for contamination of water from rainfall-runoff. Runoff of this product will be reduced by avoiding applications when rainfall is forecasted to occur within 48 hours. 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. To protect the environment, do not allow pesticide to enter or run off into storm drains, drainage ditches, gutters or surface waters. This pesticide is highly toxic to bees exposed to direct treatment on blooming crops or weeds. Do not apply this product or allow it to drift to blooming crops or weeds while bees are actively visiting the treatment area. Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans, or other waters unless in accordance with the requirements of a National Pollutant Discharge Elimination System (NPDES) permit and the permitting authority has been notified in writing prior to discharge. Do not discharge effluent containing this product to sewer systems without previously notifying the local sewage treatment plant authority. For guidance contact your State Water Board or Regional Office of the EPA.

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## SECTION 13: Disposal considerations

### Disposal methods

#### Product disposal

Dispose in a safe manner in accordance with local/national regulations. Dispose of contents/container to in accordance with local/regional/national regulations.

#### Packaging disposal

Empty containers pose a potential fire and explosion hazard. Do not cut, puncture or weld containers.

#### Waste treatment

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Should not be released into the environment. Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation. US EPA Waste Number D001.

#### Other disposal recommendations

Handle empty containers with care because residual vapors are flammable. Avoid release to the environment.

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## SECTION 14: Transport information

#### DOT (US)

In accordance with DOT

UN/ID no. UN1993

Proper shipping name FLAMMABLE LIQUID, N.O.S.

Hazard class 3

Packing group III

Reportable Quantity (RQ) Malathion: RQ (gallons)= 22 gallons

Special Provisions B1, B52, IB3, T4, TP1, TP29

Marine pollutant This product contains a chemical which is listed as a marine pollutant according to DOT. Description UN1993, FLAMMABLE LIQUIDS, N.O.S., 3, III Limited quantity

#### IMDG

Limited quantity applies when the inner packaging weight is less than 5kg and the gross package weight is less than 30kg.

UN number UN1993

UN proper shipping name FLAMMABLE LIQUID, N.O.S.

Transport hazard class(es) 3

Packing group III

EmS-No. F-E, S-E

Special Provisions 223, 274, 955

Description UN1993, FLAMMABLE LIQUID, N.O.S. (1,2,4 TRIMETHYLBENZENE, CUMENE), 3, III, (41°C C.C.), MARINE POLLUTANT

#### IATA

Limited quantity applies when the inner packaging weight is less than 5kg and the gross package weight is less than 30kg.

UN number UN1993

UN proper shipping name FLAMMABLE LIQUID, N.O.S.

Transport hazard class(es) 3

Packing group III

Special Provisions A3

Description UN1993, FLAMMABLE LIQUID, N.O.S. (1,2,4 Trimethylbenzene, Cumene), 3, III

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## SECTION 15: Regulatory information

#### Safety, health and environmental regulations specific for the product in question

##### Massachusetts Right To Know Components

Chemical name: Malathion

CAS number: 121-75-5

##### New Jersey Right To Know Components

Common name: Malathion

CAS number: 121-75-5

##### Pennsylvania Right To Know Components

Chemical name: Butanedioic acid, [(dimethoxyphosphinothioyl)thio]-, diethyl ester

CAS number: 121-75-5

##### Massachusetts Toxic Use Reduction Act (TURA) list

Chemical name: Naphthalene

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CAS number: 91-20-3

TRI listing: X-reportable; CERCLA listing: X-reportable; TURA-only listing: no; de minimis concentration threshold: 0.1%. Qualifiers/definitions: This chemical is an OSHA Carcinogen, the 0.1% de minimis threshold applies.

### New Jersey Right To Know Components

Common name: Naphthalene

CAS number: 91-20-3

Listing note: CA-carcinogen; F2-flammable 2nd deg.

### Pennsylvania Right To Know Components

Chemical name: Naphthalene

CAS number: 91-20-3

Listing note: E-environmental hazard.

### California Proposition 65 Chemicals List

WARNING: This product can expose you to chemicals including Naphthalene, which is known to the State of California to cause cancer. For more information go to [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov).

### US EPA TSCA public inventory

Chemical name: Naphthalene

CAS number: 91-20-3

### Massachusetts Right To Know Components (105 CMR 670)

Chemical name: Naphthalene

CAS number: 91-20-3

Asterisk: no; Refs: 2,4,5,6 F7 F8 F9

### Water hazard class (WGK, Germany)

Chemical name: Naphthalene, cas number: 91-20-3

WGK hazard class: WGK 3 - Extremely hazardous to water

### Maine Chemicals of Concern (COC, 38 MRSA §1693(2))

Chemical name: Naphthalene

CAS number: 91-20-3

### Minnesota Chemicals of High Concern (Minn. Stat. 116.9401)

Chemical name: Naphthalene

CAS number: 91-20-3

Hlth: cancer, respiratory system; PBT/vPvB

### California Prop. 65 components

Chemical name: Naphthalene

CAS number: 91-20-3

04/19/2002 - Cancer

### SARA 313 Components

Product name: Hi-Yield 55% Malathion

### SARA 311/312 Hazards

Product name: Hi-Yield 55% Malathion

### CWA (Clean Water Act)

Product name: Hi-Yield 55% Malathion

### Comprehensive Environmental Response Compensation and Liability Act (CERCLA)(401 CFR 302)

Product name: Hi-Yield 55% Malathion

### HMIS Rating

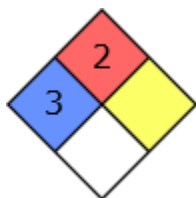
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HEALTH	3
FLAMMABILITY	2
PHYSICAL HAZARD	0

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PERSONAL PROTECTION

### NFPA Rating



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## SECTION 16: Other information

### Further information/disclaimer

Voluntary Purchasing Groups, Inc. believes the information presented herein is accurate and correct as of the document date. The presented information is based upon available data from reliable sources. Voluntary Purchasing Groups, Inc. makes no warranty, express or implied, regarding the accuracy of the data or the results obtained from the use of this product. Nothing herein may be construed as recommending any practice or any product in violation of any law or regulations. The user is solely responsible for determining the suitability of any material or product for a specific purpose and for adopting any appropriate safety precautions. We disclaim all liability for injury or damage stemming from any improper use of the material or product described herein.