

# SAFETY DATA SHEET

## 1. Identification

**Product identifier**                      **Nemacur 10G**

**Other means of identification**  
**SDS number**                              449

**Recommended use**                      Organophosphate nematicide

**Recommended restrictions**            Keep out of the Reach of Children!

**EPA Registration number**              EPA: Not registered in the US

**Manufacturer/Importer/Supplier/Distributor information**  
**Manufacturer**

**Company name**                          AMVAC Chemical Corporation  
**Address**                                      4100 E Washington Blvd  
Los Angeles, CA 90023 USA

**Telephone**                                AMVAC Chemical Corp                      323-264-3910  
AMVAC Chemical Corp                      323-268-1028 (FAX)

**Website**                                    www.Amvac-Chemical.com

**E-mail**                                        CustServ@Amvac-Chemical.com

**Emergency phone number**              Medical    888-681-4261  
CHEMTREC® (USA+Canada)              800-424-9300  
Product Use                                    888-462-6822  
CHEMTREC® (Outside USA)              +1-703-527-3887

## 2. Hazard(s) identification

**Physical hazards**                          Not classified.

**Health hazards**                            Acute toxicity, oral                              Category 2

**Environmental hazards**                  Not classified.

**OSHA defined hazards**                  Not classified.

### Label elements



**Signal word**                                Danger

**Hazard statement**                        Fatal if swallowed.

**Precautionary statement**

**Prevention**                                Wash thoroughly after handling. Do not eat, drink or smoke when using this product.

**Response**                                  If swallowed: Immediately call a poison center/doctor. Rinse mouth.

**Storage**                                      Store locked up.

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

**Hazard(s) not otherwise classified (HNOC)**    Very toxic to aquatic life.  
Very toxic to aquatic life with long lasting effects.

**Supplemental information**              None.

## 3. Composition/information on ingredients

### Mixtures

Chemical name	Common name and synonyms	CAS number	%
Fenamiphos		22224-92-6	10.5
Propylene glycol		57-55-6	4.5
Other components below reportable levels			85

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**Chemical name**

Nuisance Dust

SEQ250

**4. First-aid measures****Inhalation**

Remove victim to fresh air and keep at rest in a position comfortable for breathing. Oxygen or artificial respiration if needed. Do not use mouth-to-mouth method if victim inhaled the substance. Induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Call a physician or poison control center immediately.

**Skin contact**

Call a physician or poison control center immediately. Wash off with soap and water. Remove and isolate contaminated clothing and shoes. Wash contaminated clothing before reuse.

**Eye contact**

Do not rub eyes. 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.

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

This is a cholinesterase inhibiting organophosphorous pesticide. May cause weakness, headache, tightness in chest, blurred vision, non-reactive pinpoint pupils, salivation, sweating, nausea, vomiting, diarrhea and abdominal cramps.

**Indication of immediate medical attention and special treatment needed**

In the case of cholinergic symptomatology the specific antagonist is atropine sulfate. If a large amount of product has been ingested, and if there was no vomiting, gastric emptying can be done within 2 hours after ingestion. precautions should be taken to prevent pulmonary aspiration. Activated carbon can be used. Administer atropine sulfate at a dose of 1 to 2 mg every 15 or 20 minutes until the reversal of the cholinergic symptoms, at which time the maintenance dose should be adapted to maintain a condition free of symptoms of intoxication and with no atropine signals. Atropine should not be administered in the absence of cholinergic symptoms, neither should it be administered by a lay person. Measures such as the correction of electrolyte disorders and of the acid-base balance should be adopted. Maintain the patient under cardiac monitoring and with respiratory support if necessary.

**General information**

Avoid oral, dermal and eye contact and inhaling the product during the first aid process. Move out of dangerous area to fresh air. Wash the contaminated parts of the body thoroughly with soap and water. If the injured person is unconscious and not breathing, apply oxygen or artificial respiration. Immediate medical attention is required. Show this safety data sheet to the doctor in attendance.

**5. Fire-fighting measures****Suitable extinguishing media**

Foam. Dry chemical powder. Carbon dioxide (CO<sub>2</sub>).

**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**

Evacuate area and fight fire from a safe distance. Dike and collect extinguishing water. Keep upwind. Use water spray to cool unopened containers.

**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**

Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Wear appropriate protective equipment and clothing during clean-up. Do not breathe dust. 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. For personal protection, see section 8 of the SDS.

**Methods and materials for containment and cleaning up**

Prevent entry into waterways, sewer, basements or confined areas. Stop the flow of material, if this is without risk. Shovel the material into waste container. Following product recovery, flush area with water. Sweep up or vacuum up spillage and collect in suitable container for disposal. Clean surface thoroughly to remove residual contamination.

Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS.

**Environmental precautions** Avoid discharge into drains, sewers, water courses or low areas. Prevent further leakage or spillage if safe to do so. Contact local authorities in case of spillage to drain/aquatic environment.

## 7. Handling and storage

**Precautions for safe handling** Do not taste or swallow. Avoid contact with eyes, skin, and clothing. Avoid prolonged exposure. When using, do not eat, drink or smoke. Use only outdoors or in a well-ventilated area. Wear appropriate personal protective equipment. Wash hands thoroughly after handling. Wash contaminated clothing before reuse. Observe good industrial hygiene practices.

**Conditions for safe storage, including any incompatibilities** Store locked up. 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-3 (29 CFR 1910.1000)

Additional components	Type	Value	Form
Nuisance Dust	TWA	5 mg/m <sup>3</sup> 15 mg/m <sup>3</sup>	Respirable fraction. Total dust.

#### US. ACGIH Threshold Limit Values

Components	Type	Value	Form
Fenamiphos (CAS 22224-92-6)	TWA	0.05 mg/m <sup>3</sup>	Inhalable fraction and vapor.

#### US. NIOSH: Pocket Guide to Chemical Hazards

Components	Type	Value
Fenamiphos (CAS 22224-92-6)	TWA	0.1 ppm

#### US. Workplace Environmental Exposure Level (WEEL) Guides

Components	Type	Value	Form
Propylene glycol (CAS 57-55-6)	TWA	10 mg/m <sup>3</sup>	Aerosol.

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

### Exposure guidelines

#### US ACGIH Threshold Limit Values: Skin designation

Fenamiphos (CAS 22224-92-6) Can be absorbed through the skin.

#### US NIOSH Pocket Guide to Chemical Hazards: Skin designation

Fenamiphos (CAS 22224-92-6) Can be absorbed through the skin.

**Appropriate engineering controls** Ensure adequate ventilation, especially in confined areas.

### 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. Suitable gloves can be recommended by the glove supplier.

**Other** Wear appropriate chemical resistant clothing.

**Respiratory protection** When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.

**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.

## 9. Physical and chemical properties

### Appearance

**Physical state** Solid.  
**Form** Dry flowable granules.  
**Color** Beige

**Odor** Weak, characteristic odor

<b>Odor threshold</b>	Not available.
<b>pH</b>	7 - 10 (10% slurry)
<b>Melting point/freezing point</b>	120.56 °F (49.2 °C) estimated
<b>Initial boiling point and boiling range</b>	Not available.
<b>Flash point</b>	Not available.
<b>Evaporation rate</b>	Not available.
<b>Flammability (solid, gas)</b>	Not available.
<b>Upper/lower flammability or explosive limits</b>	
<b>Flammability limit - lower (%)</b>	Not available.
<b>Flammability limit - upper (%)</b>	Not available.
<b>Explosive limit - lower (%)</b>	Not available.
<b>Explosive limit - upper (%)</b>	Not available.
<b>Vapor pressure</b>	1.00E-06 hPa estimated
<b>Vapor density</b>	Not available.
<b>Relative density</b>	Not available.
<b>Solubility(ies)</b>	
<b>Solubility (water)</b>	Practically insoluble
<b>Auto-ignition temperature</b>	Not available.
<b>Decomposition temperature</b>	302 °F (150 °C) (a.i.)
<b>Viscosity</b>	Not available.
<b>Other information</b>	
<b>Density</b>	44.00 - 46.00 lb/ft <sup>3</sup>
<b>Explosive properties</b>	Not explosive.
<b>Oxidizing properties</b>	Not oxidizing.

## 10. Stability and reactivity

<b>Reactivity</b>	The product is stable and non-reactive under normal conditions of use, storage and transport.
<b>Chemical stability</b>	Material is stable under normal conditions.
<b>Possibility of hazardous reactions</b>	Hazardous polymerization does not occur.
<b>Conditions to avoid</b>	Contact with incompatible materials.
<b>Incompatible materials</b>	Alkaline compounds. Strong oxidizing agents.
<b>Hazardous decomposition products</b>	Emits hazardous fumes and smoke of sulfur oxides, oxides of phosphorus and other unknown composition when heated to decomposition or burned.

## 11. Toxicological information

### Information on likely routes of exposure

<b>Inhalation</b>	Not expected to be inhaled in the granule form.
<b>Skin contact</b>	No adverse effects due to skin contact are expected.
<b>Eye contact</b>	Not an eye irritant
<b>Ingestion</b>	Fatal if swallowed.
<b>Symptoms related to the physical, chemical and toxicological characteristics</b>	Acute cholinesterase depression may be evidenced by headache, nausea, vomiting, diarrhea, abdominal cramps, excessive sweating, salivation and tearing, constricted pupils, blurred vision, tightness in chest, weakness, muscle twitching and confusion; in extreme cases, unconsciousness, convulsions, severe respiratory depression and death may occur.

### Information on toxicological effects

<b>Acute toxicity</b>	Fatal if swallowed.
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Product	Species	Test Results
Nemacur 10G		
<b>Acute</b>		
<b>Dermal</b>		
LD50	Rat	> 5000 mg/kg
<b>Inhalation</b>		
LC50	Rat	> 0.1 mg/l/4h, 4 hr (aerosol of a.i. only)
<b>Oral</b>		
LD50	Rat	30 mg/kg

\* Estimates for product may be based on additional component data not shown.

**Skin corrosion/irritation** Non irritating to skin.

**Serious eye damage/eye irritation** Non-irritating

**Respiratory or skin sensitization**

**Respiratory sensitization** Not a respiratory sensitizer.

**Skin sensitization** Not sensitizing.

**Germ cell mutagenicity** No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.

**Carcinogenicity** This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.

**IARC Monographs. Overall Evaluation of Carcinogenicity**

Not listed.

**OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)**

Not regulated.

**US. National Toxicology Program (NTP) Report on Carcinogens**

Not listed.

**Reproductive toxicity** This product 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 an aspiration hazard.

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

**12. Ecological information**

**Ecotoxicity** Very toxic to aquatic life. Very toxic to aquatic life with long lasting effects.

Product	Species	Test Results
Nemacur 10G		
<b>Aquatic</b>		
<i>Acute</i>		
Crustacea	EC50	Daphnia magna
		0.0019 mg/l, 48 hr (a.i.)
Fish	LC50	Bluegill (Lepomis macrochirus)
		0.0093 mg/l, 96 hr (a.i.)

\* Estimates for product may be based on additional component data not shown.

**Persistence and degradability** No data is available on the degradability of this product.

**Bioaccumulative potential**

**Partition coefficient n-octanol / water (log Kow)**

Fenamiphos 3.23

**Mobility in soil** No data available.

**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.

### 13. Disposal considerations

<b>Disposal instructions</b>	Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Dispose of contents/container in accordance with local/regional/national/international regulations.
<b>Local disposal regulations</b>	Dispose in accordance with all applicable regulations.
<b>Hazardous waste code</b>	The waste code should be assigned in discussion between the user, the producer and the waste disposal company.
<b>Waste from residues / unused products</b>	Dispose of in accordance with local 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).
<b>Contaminated packaging</b>	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.

### 14. Transport information

#### DOT

<b>UN number</b>	UN2783
<b>UN proper shipping name</b>	Organophosphorus pesticides, solid, toxic (Fenamiphos), MARINE POLLUTANT
<b>Transport hazard class(es)</b>	
<b>Class</b>	6.1(PGI, II)
<b>Subsidiary risk</b>	-
<b>Label(s)</b>	6.1
<b>Packing group</b>	II
<b>Environmental hazards</b>	
<b>Marine pollutant</b>	Yes
<b>Special precautions for user</b>	Read safety instructions, SDS and emergency procedures before handling.
<b>Special provisions</b>	IB8, IP2, IP4, N77, T3, TP33
<b>Packaging exceptions</b>	153
<b>Packaging non bulk</b>	212
<b>Packaging bulk</b>	242

#### IATA

<b>UN number</b>	UN2783
<b>UN proper shipping name</b>	Organophosphorus pesticides, solid, toxic (Fenamiphos)
<b>Transport hazard class(es)</b>	
<b>Class</b>	6.1(PGI, II)
<b>Subsidiary risk</b>	-
<b>Label(s)</b>	6.1
<b>Packing group</b>	II
<b>Environmental hazards</b>	Yes
<b>Special precautions for user</b>	Read safety instructions, SDS and emergency procedures before handling.
<b>Other information</b>	
<b>Passenger and cargo aircraft</b>	Allowed with restrictions.
<b>Cargo aircraft only</b>	Allowed with restrictions.

#### IMDG

<b>UN number</b>	UN2783
<b>UN proper shipping name</b>	Organophosphorus pesticides, solid, toxic (Fenamiphos), MARINE POLLUTANT
<b>Transport hazard class(es)</b>	
<b>Class</b>	6.1(PGI, II)
<b>Subsidiary risk</b>	-
<b>Label(s)</b>	6.1
<b>Packing group</b>	II
<b>Environmental hazards</b>	
<b>Marine pollutant</b>	Yes
<b>EmS</b>	Not available.
<b>Special precautions for user</b>	Read safety instructions, SDS and emergency procedures before handling.
<b>Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code</b>	Not applicable.

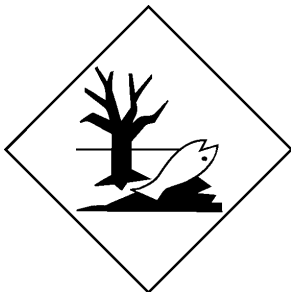
DOT



IATA; IMDG



Marine pollutant



**General information**

DOT Regulated Marine Pollutant. IMDG Regulated Marine Pollutant.

The classification of this product is based on the fact that the dust criteria found in 49CFR§173.132(b)(3) will not be met and therefore the LC50 is not applicable.

## 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 currently not registered under EPA/FIFRA Regulations. However, because it is a 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.

#### 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

Fenamiphos (CAS 22224-92-6) 10 LBS

#### OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not regulated.

### Superfund Amendments and Reauthorization Act of 1986 (SARA)

#### Hazard categories

Immediate Hazard - Yes  
Delayed Hazard - No  
Fire Hazard - No  
Pressure Hazard - No  
Reactivity Hazard - No

**SARA 302 Extremely hazardous substance**

Chemical name	CAS number	Reportable quantity	Threshold planning quantity	Threshold planning quantity, lower value	Threshold planning quantity, upper value
Fenamiphos	22224-92-6	10		10 lbs	10000 lbs

**SARA 311/312 Hazardous chemical** No

**SARA 313 (TRI reporting)**  
Not regulated.

**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 (SDWA)** Not regulated.

**US state regulations****US. California Controlled Substances. CA Department of Justice (California Health and Safety Code Section 11100)**

Not listed.

**US. Massachusetts RTK - Substance List**

Not regulated.

**US. New Jersey Worker and Community Right-to-Know Act**

Not listed.

**US. Pennsylvania Worker and Community Right-to-Know Law**

Not listed.

**US. Rhode Island RTK**

Not regulated.

**US. California Proposition 65**

California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins.

**International Inventories**

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

\*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** 06-30-2016

**References** ACGIH®: American Conference of Governmental Industrial Hygienists  
 CERCLA: Comprehensive Environmental Response, Compensation, and Liability Act  
 EPA: Environmental Protection Agency  
 FIFRA: Federal Insecticide, Fungicide, and Rodenticide Act  
 IARC: International Agency for Research on Cancer  
 NTP: National Toxicology Program  
 OSHA: Occupational Safety and Health Agency  
 SARA: Superfund Amendments and Reauthorization Act  
 TSCA: Toxic Substances Control Act  
 DOT: Department of Transportation  
 IMDG: International Maritime Dangerous Goods  
 IATA: International Air Transport Association

**Version #** 01

**Further information** Not available.

**HMIS® ratings** Health: 3  
 Flammability: 0  
 Physical hazard: 0

**NFPA ratings** Health: 4  
 Flammability: 0  
 Instability: 0



## Disclaimer

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