

Safety Data Sheet

Issue Date: 17-Jan-2018

Revision Date: 04-Feb-2019

Version 3

1. IDENTIFICATION

Product Identifier

Product Name Navigator SC Termiticide/Insecticide

Other means of identification

SDS # GCI-011

Registration Number(s) EPA Reg. No. 93182-23
UN/ID No UN3082

Recommended use of the chemical and restrictions on use

Recommended Use Liquid (soluble) concentrate. It is diluted with water prior to use. Refer to product label for further details.

Details of the supplier of the safety data sheet

Manufacturer Address

GHARDA CHEMICALS INTERNATIONAL INC.
760 Newtown-Yardley Road
Suite 110
Newtown, PA USA 18940
Website: www.ghardausa.com
For further information contact: 1 (215) 968-9474

Emergency Telephone Number

Emergency Telephone (24 hr) MEDICAL EMERGENCY (24 hr): PROPHARMA (866)-359-5660
TRANSPORTATION OR SPILL (24 hr): CHEMTREC (800) 424-9300

2. HAZARDS IDENTIFICATION

Emergency Overview This chemical is a product registered by the Environmental Protection Agency and is subject to certain labeling requirements under federal law. These requirements differ from the classification criteria and hazard information required for safety data sheets, and for workplace labels of non-EPA registered chemicals. Please see Section 15 for additional EPA information.

Appearance Cream to faint brown suspension

Physical state Liquid

Odor Odorless

Classification

Acute toxicity - Oral	Category 4
Specific target organ toxicity (repeated exposure)	Category 1

Signal Word

Danger

Hazard statements

Harmful if swallowed
Causes damage to organs through prolonged or repeated exposure

**Precautionary Statements - Prevention**

Wash face, hands and any exposed skin thoroughly after handling
 Do not eat, drink or smoke when using this product
 Do not breathe dust/fume/gas/mist/vapors/spray

Precautionary Statements - Response

Get medical advice/attention if you feel unwell
 IF SWALLOWED: Call a POISON CENTER or doctor if you feel unwell
 Rinse mouth

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

Other hazards

Very toxic to aquatic life with long lasting effects

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No.	Weight-%
Fipronil	120068-37-3	9.1

If Chemical Name/CAS No is "proprietary" and/or Weight-% is listed as a range, the specific chemical identity and/or percentage of composition has been withheld as a trade secret.

4. FIRST AID MEASURES

First Aid Measures

General Advice	Provide this SDS to medical personnel for treatment.
Eye Contact	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Call a poison control center or doctor for treatment advice.
Skin Contact	Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.
Inhalation	Move person 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 control center or doctor for further treatment advice.
Ingestion	Call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person.

Most important symptoms and effects

Symptoms	Harmful if swallowed. Causes damage to organs through prolonged or repeated exposure.
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Indication of any immediate medical attention and special treatment needed

Notes to Physician Treat symptomatically.

5. FIRE-FIGHTING MEASURES**Suitable Extinguishing Media**

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Small Fire Dry chemical. Carbon dioxide (CO₂). Water spray.

Large Fire Water spray or fog. Regular foam.

Unsuitable Extinguishing Media Not determined.

Specific Hazards Arising from the Chemical

Move containers from fire area if you can do so without risk.

For fires involving tanks: Cool containers with flooding quantities of water until well after fire is out. Withdraw immediately in case of rising sound from venting safety devices or discoloration of tank. Always stay away from tanks engulfed in fire.

Protective equipment and precautions for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear. As an immediate precautionary measure, isolate spill or leak area for at least 50 meters (150 feet) in all directions. If tank, rail car or tank truck is involved in a fire, ISOLATE for 800 meters (1/2 mile) in all directions; also, consider initial evacuation for 800 meters (1/2 mile) in all directions. LARGE SPILL: Consider initial downwind evacuation for at least 300 meters (1000 feet).

6. ACCIDENTAL RELEASE MEASURES**Personal precautions, protective equipment and emergency procedures**

Personal Precautions Use personal protective equipment as required. Do not touch or walk through spilled material. Keep unnecessary personnel away. Stay upwind. Refer to protective measures listed in sections 7 and 8.

Environmental precautions

Environmental precautions Prevent entry into waterways, sewers, basements or confined areas. See Section 12 for additional Ecological Information.

Methods and material for containment and cleaning up

Methods for Containment Prevent further leakage or spillage if safe to do so.

Methods for Clean-Up CALL EMERGENCY RESPONSE Telephone Number on shipping paper first, If shipping paper not available or no answer, refer to appropriate telephone number listed on the inside back cover. As an immediate precautionary measures, isolate spill or leak area in all directions for at least 50 meters (150 feet) for liquids and at least 25 meters (75 feet) for solids. Cover with plastic sheet to prevent spreading. Absorb or cover with dry earth, sand or other non-combustible material and transfer to containers.

7. HANDLING AND STORAGE**Precautions for safe handling**

Advice on Safe Handling Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin and eyes. Ensure adequate ventilation, especially in confined areas.

Conditions for safe storage, including any incompatibilities

Storage Conditions	Keep container tightly closed and store in a cool, dry and well-ventilated place. Keep away from foodstuffs, beverages, and feed. Keep away from heat. Protect from direct sunlight. Store between 0°C and 30 °C.
Incompatible Materials	Strong acids. Strong bases. Strong oxidizing agents.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies

Appropriate engineering controls

Engineering Controls Ensure adequate ventilation, especially in confined areas.

Individual protection measures, such as personal protective equipment

Eye/Face Protection	Tightly sealed goggles.
Skin and Body Protection	Wear protective gloves. The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. Suitable protective clothing. Wear two layers of clothing wherever possible. Polyester/cotton or cotton overalls should be worn under chemical protection suit and should be professionally laundered frequently.
Respiratory Protection	Respiratory single serving mask DIN EN 149 with filter FFP2.
General Hygiene Considerations	Handle in accordance with good industrial hygiene and safety practice.

9. PHYSICAL AND CHEMICAL PROPERTIES**Information on basic physical and chemical properties**

Physical state	Liquid	Odor	Odorless
Appearance	Cream to faint brown suspension	Odor Threshold	Not determined
Color	Cream to faint brown		
Property	Values	Remarks • Method	
pH	Slightly acidic		
Melting Point/Freezing Point	Not determined		
Boiling Point/Boiling Range	100 °C / 212 °F		
Flash Point	> 80 °C / 176 °F		
Evaporation Rate	Not determined		
Flammability (Solid, Gas)	Not flammable		
Flammability Limits in Air			
Upper Flammability Limits	Not determined		
Lower Flammability Limit	Not determined		
Vapor Pressure	Not determined		
Vapor Density	Not determined		
Relative Density	1.00 to 1.050 g/cm ³ at 22°C		
Water Solubility	1.9 mg/L in distilled water		
Solubility in other solvents	Acetone 545, dichloromethane 22, Hexane 0.028, toluene 3 (all in g/l, 25 °C).		
Partition Coefficient	Not determined		
Auto-ignition Temperature	Not determined		
Decomposition Temperature	Not determined		
Kinematic Viscosity	Approx. 3000-6000 cp at 1.5 rpm		

Dynamic Viscosity	Brookfield spindle no.2, at 30 °C
Explosive Properties	Not determined
Oxidizing Properties	Not determined

Other Information

Molecular weight	437.2
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10. STABILITY AND REACTIVITY

Reactivity

Not reactive under normal conditions.

Chemical Stability

Stable under recommended storage conditions.

Possibility of Hazardous Reactions

None under normal processing.

Conditions to Avoid

Keep out of reach of children.

Incompatible Materials

Strong acids. Strong bases. Strong oxidizing agents.

Hazardous Decomposition Products

May emit toxic fumes under fire conditions.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure**Product Information**

Eye Contact	Avoid contact with eyes.
Skin Contact	May be harmful in contact with skin.
Inhalation	Do not inhale.
Ingestion	Harmful if swallowed.

Component Information

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Inert Ingredients	> 90 mL/kg (Rat)	-	-
Fipronil 120068-37-3	= 97 mg/kg (Rat)	> 2000 mg/kg (Rat)	-

Information on physical, chemical and toxicological effects

Symptoms	Please see section 4 of this SDS for symptoms.
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Delayed and immediate effects as well as chronic effects from short and long-term exposure

Carcinogenicity	Based on the information provided, this product does not contain any carcinogens or potential carcinogens as listed by OSHA, IARC or NTP.
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STOT - repeated exposure Causes damage to organs through prolonged or repeated exposure.

Numerical measures of toxicity

The following values are calculated based on chapter 3.1 of the GHS document .

ATEmix (oral) 1,066.00 mg/kg
ATEmix (dermal) 3,297.00 mg/kg
ATEmix (inhalation-dust/mist) 5.51 mg/L

12. ECOLOGICAL INFORMATION

Ecotoxicity

Very toxic to aquatic life with long lasting effects.

Component Information

Daphnia LC 50/48h: >380 mcg/L
 Bluegill sunfish LC50/96 h: 170 mcg/L
 Rainbow trout LC50/ 96h: 500 mcg/L
 Birds LD50: Pigeon >2000 mg/kg
 Algae EC 50 Scenedesmus subspicatus (96 hours): 0.14 mg/l
 Bee LD50: Highly toxic to honey bees
 Earthworm LD50 (14 day): Non toxic

Persistence/Degradability

Not easily biodegradable.

Bioaccumulation

Not determined.

Mobility

Not determined

Other Adverse Effects

PBT Assessment: If released to air, a vapor pressure of 2.78×10^{-9} mm Hg at 25 deg C indicates fipronil will exist solely in the particulate phase in the atmosphere. Particulate-phase fipronil will be removed from the atmosphere by wet or dry deposition. Fipronil contains chromophores that absorb at wavelengths >290 nm and, therefore, may be susceptible to direct photolysis by sunlight. If released to soil, fipronil is expected to have low to no mobility based upon Koc values of 825 to 6863. Photolytic half-lives in soil for fipronil were reported as 147 to 217 hours. Fipronil is expected to biodegrade in soil and water based upon studies showing estimated degradation half-lives of 25.1 to 91.2 days in three sediments under aerobic conditions and 4.6 to 18.5 days for the same sediments under anaerobic conditions. If released into water, fipronil is expected to adsorb to suspended solids and sediment based upon the Koc values. A whole body BCF of 321 in bluegill suggests bioconcentration in aquatic organisms is high. Fipronil is stable to hydrolysis at pH 5.5 and pH 7, but has a hydrolysis half-life of 28 days at pH 9. An aqueous photolytic half-life for fipronil was reported as 4.1 hours

13. DISPOSAL CONSIDERATIONS

Waste Treatment Methods

Disposal of Wastes

Must not be disposed together with household garbage. Do not allow product to reach sewage system. Disposal should be in accordance with applicable regional, national and local laws and regulations.

Contaminated Packaging

Do not reuse empty containers.

California Hazardous Waste Status

Chemical Name	California Hazardous Waste Status
Fipronil 120068-37-3	Toxic

14. TRANSPORT INFORMATION

Note Please see current shipping paper for most up to date shipping information, including exemptions and special circumstances.

DOT Not regulated

IATA

UN/ID No UN3082
Proper Shipping Name Environmentally hazardous substance, liquid, n.o.s. (Fipronil)
Hazard Class 9
Packing Group III
Marine Pollutant Yes

IMDG

UN/ID No UN3082
Proper Shipping Name Environmentally hazardous substance, liquid, n.o.s. (Fipronil)
Hazard Class 9
Packing Group III
Marine Pollutant Yes

15. REGULATORY INFORMATION

International Inventories

Chemical Name	TSCA	DSL/NDSL	EINECS/E LINCS	ENCS	IECSC	KECL	PICCS	AICS
Inert Ingredients	X	X	X		X	Present	X	X
Fipronil	X		X	Present		Present		

Legend:

- TSCA - United States Toxic Substances Control Act Section 8(b) Inventory*
- DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List*
- EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances*
- ENCS - Japan Existing and New Chemical Substances*
- IECSC - China Inventory of Existing Chemical Substances*
- KECL - Korean Existing and Evaluated Chemical Substances*
- PICCS - Philippines Inventory of Chemicals and Chemical Substances*
- AICS - Australian Inventory of Chemical Substances*

US Federal Regulations

CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355).

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

CWA (Clean Water Act)

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

US State Regulations

California Proposition 65

This product does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know Regulations

This product does not contain any substances regulated under applicable state right-to-know regulations

EPA Pesticide Registration Number EPA Reg. No. 93182-23

EPA Statement

This chemical is a pesticide product registered by the 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, and for workplace labels of non-pesticide chemicals. Following is the hazard information as required on the pesticide label:

EPA Pesticide Label

SIGNAL WORD: CAUTION

Harmful if swallowed. Causes moderate eye irritation. Avoid contact with eyes or clothing. Wear goggles, face shield, or safety glasses. Wash hands thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or using the toilet.

Difference between SDS and EPA pesticide label

	EPA	OSHA
Signal Word	Caution	Danger
Acute toxicity - Oral	Harmful if swallowed	Harmful if swallowed
Serious eye damage/eye irritation	Causes moderate eye irritation	NA
Specific target organ toxicity (repeated exposure)	NA	Causes damage to organs through prolonged or repeated exposure

16. OTHER INFORMATION

<u>NFPA</u>	Health Hazards	Flammability	Instability	Special Hazards
	1	0	0	Not determined
<u>HMIS</u>	Health Hazards	Flammability	Physical hazards	Personal Protection
	Not determined	Not determined	Not determined	Not determined

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Revision Note: Section 14

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet