Exsolant XHL

Safety Data Sheet

According to 29 CFR § 1910.1200, Hazard Communication Standard (HCS)
Issue date: 4/10/2024 Revision date: 10/6/2025 Supersedes: 4/10/2024 Version: 1.1

SECTION 1 Identification

1.1. Product identifier

Product form	:	Mixture
Trade name	:	Exsolant XHL
Product code	:	EPA Reg. No. 71368-146

1.2. Other means of identification

No additional information available

1.3. Recommended use of the chemical and restrictions on use

Recommended use	:	Insecticide
Restrictions on use	:	All other uses not recommended above

1.4. Supplier's details

Nufarm Americas, Inc.
11901 South Austin Avenue
Alsip, IL 60803
United States
T 1-800-345-3330
www.nufarm.com

1.5. Emergency phone number

Emergency number	:	For Hazardous Materials or Dangerous Goods Incident Spill, Leak, Fire, Exposure, or Accident Call CHEMTREC Day or Night: 1-800-424-9300 (Toll Free, USA) / 703-527-3887 (Virginia, USA) CCN 16105 Back-up Emergency Number: +1 703-741-5970 (Washington, DC)

SECTION 2 Hazard Identification

2.1. Classification of the substance or mixture

GHS US classification

Not classified

2.2. Label elements

GHS US labeling

No labeling applicable

2.3. Hazards associated with known or reasonably anticipated uses

No additional information available

2.4. Hazards not otherwise classified

No additional information available

2.5. Unknown acute toxicity

No additional information available

SECTION 3 Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	GHS US classification
Spinosad Technical	CAS-No.: 168316-95-8	42.68 – 45.32	Aquatic Acute 1, H400
Propylene glycol	CAS-No.: 57-55-6	3.8 – 4.2	Not classified
Naphthalenesulfonic acid, formaldehyde ammonium salt copolymer	CAS-No.: 9069-80-1	1.11 – 2.22	Eye Irrit. 2A, H319

Full text of hazard classes and H-statements : see section 16

SECTION 4 First aid measures

4.1. Description of necessary first-aid measures

First-aid measures general : IF exposed or concerned: Get medical advice/attention. First aider: Pay attention to self-protection. Never give anything by mouth to an unconscious person. Give artificial respiration if necessary. Induce artificial respiration with mask fitted with one-way valve or other suitable device but, not mouth-to-mouth.

First-aid measures after inhalation : If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a poison center/doctor/physician if you feel unwell.

First-aid measures after skin contact : Remove affected clothing and wash all exposed skin areas with mild soap and water, followed by warm water rinse. If skin irritation occurs: Get medical advice/attention.

First-aid measures after eye contact : 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.

First-aid measures after ingestion : Rinse mouth out with water. Do NOT induce vomiting. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Call a poison center/doctor/physician if you feel unwell.

4.2. Most important symptoms/effects, acute and delayed

Symptoms/effects after skin contact : Repeated or prolonged contact may cause skin irritation.

Symptoms/effects after eye contact : Not expected to present a significant eye contact hazard under anticipated conditions of normal use.

Symptoms/effects after ingestion : Not expected to present a significant ingestion hazard under anticipated conditions of normal use. May cause irritation to the digestive tract.

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

Other medical advice or treatment : Treat symptomatically.

SECTION 5: Fire-fighting measures

5.1. Suitable (and unsuitable) extinguishing media

Suitable extinguishing media : Water spray. Dry chemical, CO2, dry sand, or alcohol-resistant foam.

Unsuitable extinguishing media : Do not use a heavy water stream.

5.2. Specific hazards arising from the chemical

Fire hazard : No fire hazard.

Hazardous decomposition products in case of fire : Toxic fumes may be released. Carbon dioxide. Carbon monoxide. Nitrogen oxides. Sulfur oxides.

5.3. Special protective equipment and precautions for fire-fighters

Firefighting instructions : Fight fire from safe distance and protected location. Do not enter fire area without proper protective equipment, including respiratory protection. Use water spray or fog for cooling exposed containers. Prevent fire-fighting water from entering environment.

Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

SECTION 6 Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

Protective equipment : Wear recommended personal protective equipment.

Emergency procedures : Evacuate the danger area. If outdoors, move to an area upwind of the danger area. If possible without taking personal risks, Remove ignition sources, ventilate area. Avoid breathing mist, spray, vapors, gas. Avoid contact with skin and eyes. Prevent other non-emergency personnel from entering the danger area.

For emergency responders

Protective equipment : Wear the recommended personal protective equipment.

Emergency procedures : Evacuate personnel to a safe area. Ventilate spillage area. Stop leak if safe to do so.

Environmental precautions : Follow product instructions and best practices for use to avoid misapplications of the product. Do not negligently allow product to enter off-target drains, sewers, or ground water.

6.2. Methods and materials for containment and cleaning up

For containment : Contain with non-combustible inert absorbent.

Methods for cleaning up : Take up in non-combustible inert absorbent and place into container for disposal. Decontaminate surfaces and equipment with water and detergent. Notify authorities if product enters sewers or public waters. Dispose of collected material as soon as possible in accordance with applicable local/regional/national/international regulations.

For further information refer to section 8: "Exposure controls/personal protection",For further information refer to section 13

SECTION 7 Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Use only outdoors or in a well-ventilated area. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear personal protective equipment. Avoid breathing mist, spray, vapors, gas. Avoid contact with skin, eyes and clothing. Take precautionary measures against static discharge.

Hygiene measures : Do not eat, drink or smoke when using this product. Contaminated work clothing should not be allowed out of the workplace. Always wash hands after handling the product.

7.2. Conditions for safe storage, including incompatibilities

Storage conditions : Store in a cool, dry and well-ventilated area away from incompatible substances. Keep container closed when not in use. Do not freeze. Do not store for prolonged periods in direct sunlight.

SECTION 8 Exposure controls/personal protection

8.1. Control parameters

Propylene glycol (57-55-6)	
USA - AIHA - Occupational Exposure Limits	
WEEL TWA	10 mg/m³ aerosol

8.2. Appropriate engineering controls

Appropriate engineering controls : Ensure good ventilation of the work station. Use general ventilation, local exhaust ventilation, or process enclosure to keep the airborne concentrations below the permissible exposure limits.

8.3. Individual protection measures, such as personal protective equipment

Personal protective equipment:

Personal protective equipment should be chosen according to national standards and in discussion with the supplier of the protective equipment. Wear recommended personal protective equipment.

Hand protection:
Wear protective gloves

Eye protection:
Safety glasses

Skin and body protection:
Wear suitable protective clothing. Body protection should be chosen depending on activity and possible exposure

Respiratory protection:
In case of inadequate ventilation wear respiratory protection.

Personal protective equipment symbol(s):

SECTION 9 Physical and chemical properties

9.1. Basic physical and chemical properties

Physical state	:	Liquid
Appearance	:	Homogenous suspension.
Color	:	Off-white
Odor	:	Odorless
Odor threshold	:	No data available
pH	:	7.99 (20.8 °C/ 69.4 °F)
Melting point	:	Not applicable
Freezing point	:	No data available
Boiling point	:	No data available
Flash point	:	No data available
Flammability (solid, gas)	:	No data available
Vapor pressure	:	No data available
Relative vapor density at 20°C	:	No data available
Relative density	:	1.049
Density	:	1.047 g/cm³ 68 °F/ 20°C
Solubility	:	Water: 7.75 mg/l
Partition coefficient n-octanol/water (Log Pow)	:	No data available
Auto-ignition temperature	:	No data available
Decomposition temperature	:	No data available

Viscosity, kinematic	:	662.2 mPa.s at 20.0ºC (68 °F) and 230.7 mPa.s at 40.0 ºC (104 °F)
Viscosity, dynamic	:	1700 – 2200 cP 68 °F/ 20 °C
Explosion limits	:	No data available
Particle characteristics	:	No data available

9.2. Data relevant with regard to physical hazard classes (supplemental)

No additional information available

SECTION 10 Stability and reactivity

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability

Stable under normal conditions of use.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7). Incompatible materials.

10.5. Incompatible materials

Oxidizing agents. Strong acids. Strong bases.

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced. Thermal decomposition generates: Carbon dioxide. Carbon monoxide. Nitrogen oxides. Sulfur oxides.

SECTION 11 Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral)	:	Not classified
Acute toxicity (dermal)	:	Not classified
Acute toxicity (inhalation)	:	Not classified

Exsolant XHL	
LD50 oral rat	> 5000 mg/kg body weight
LD50 dermal rabbit	> 2000 mg/kg body weight
LC50 Inhalation - Rat	> 2.69 mg/l/4h

Propylene glycol	
LD50 oral	8000 mg/kg
LD50 dermal	20800 mg/kg

Skin corrosion/irritation	:	Not classified. Not irritating to rabbits on cutaneous application pH: 7.99 (20.8 °C/ 69.4 °F)
Serious eye damage/irritation	:	Not classified. Not irritating to rabbits on ocular application pH: 7.99 (20.8 °C/ 69.4 °F)

Respiratory or skin sensitization : Skin sensitization: Not classified.

Propylene glycol	
Patch test, human	Not sensitive
Additional information	No sensitizing reaction was observed for guinea pigs

Germ cell mutagenicity : Not classified

Propylene glycol	
Dominant lethal test, rat	Negative

Carcinogenicity : Not classified.

Propylene glycol	
Carcinogenicity: Lifetime study, Dermal, mouse	2-21 mg/day (No increased incidence in tumors)

Reproductive toxicity : Not classified
STOT-single exposure : Not classified
STOT-repeated exposure : Not classified

Propylene glycol	
NOAEL (subchronic,oral,animal/male,90 days)	443 mg/kg body weight

Aspiration hazard : Not classified

Exsolant XHL	
Viscosity, kinematic	662.2 mPa.s at 20.0ºC (68 °F) and 230.7 mPa.s at 40.0 ºC (104 °F)

Symptoms/effects after skin contact : Repeated or prolonged contact may cause skin irritation.
Symptoms/effects after eye contact : Not expected to present a significant eye contact hazard under anticipated conditions of normal use.
Symptoms/effects after ingestion : Not expected to present a significant ingestion hazard under anticipated conditions of normal use. May cause irritation to the digestive tract.

SECTION 12 Ecological information

12.1. Ecotoxicity

Ecology - general : Very toxic to aquatic life with long lasting effects.
Hazardous to the aquatic environment, short–term (acute) : Not classified
Hazardous to the aquatic environment, long–term (chronic) : Not classified

Spinosad Technical	
LC50 - Fish [1]	30 mg/l
EC50 - Other aquatic organisms [1]	1.4779 mg/l
EC50 - Other aquatic organisms [2]	14 mg/l
ErC50 algae	0.107 mg/l
NOEC chronic fish	5.2 mg/l

Propylene glycol	
EC50 - Crustacea [1]	1000 mg/l

Propylene glycol	
ErC50 algae	1000 mg/l
NOEC chronic crustacea	1000 mg/l
NOEC chronic algae	1000 mg/l

12.2. Persistence and degradability

Exsolant XHL	
Persistence and degradability	Not readily biodegradable.

Spinosad Technical	
Persistence and degradability	Rapidly degradable

Propylene glycol	
Persistence and degradability	Rapidly degradable

Naphthalenesulfonic acid, formaldehyde ammonium salt copolymer	
Persistence and degradability	Not rapidly degradable

12.3. Bioaccumulative potential

Exsolant XHL	
Bioaccumulative potential	Not established.

12.4. Mobility in soil

No additional information available

12.5. Other adverse effects

Ozone : Not classified
Fluorinated greenhouse gases : No

SECTION 13 Disposal considerations

Regional waste regulation : Disposal must be done according to official regulations.
Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.
Sewage disposal recommendations : Disposal must be done according to official regulations.
Product/Packaging disposal recommendations : Disposal must be done according to official regulations. Dispose of this material and its container at hazardous or special waste collection point. Refer to all applicable national, international and local regulations or provisions.
Additional information : Do not re-use empty containers.

SECTION 14 Transport information

In accordance with DOT / IMDG / IATA

DOT	IMDG	IATA
14.1. UN number		
UN3082	3082	3082

DOT	IMDG	IATA
14.2. Proper Shipping Name		
Environmentally hazardous substances, liquid, n.o.s. (Spinosad)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Spinosad)	Environmentally hazardous substance, liquid, n.o.s. (Spinosad)
14.3. Transport hazard class(es)		
9	9	9
14.4. Packing group		
III	III	III
14.5. Environmental hazards		
	Dangerous for the environment: Yes Marine pollutant: Yes	
DOT Note: Material is not hazardous when shipped less than 119 gallons.		

14.6. Transport in bulk

Not applicable

14.7. Special precautions for user

DOT

UN-No. (DOT)	:	UN3082
DOT Packaging Exceptions (49 CFR 173.xxx)	:	155
DOT Packaging Non Bulk (49 CFR 173.xxx)	:	203
DOT Packaging Bulk (49 CFR 173.xxx)	:	241
DOT Quantity Limitations Passenger aircraft/rail (49 CFR 173.27)	:	No Limit
DOT Quantity Limitations Cargo aircraft only (49 CFR 175.75)	:	No Limit
DOT Vessel Stowage Location	:	A - The material may be stowed ‘‘on deck’’ or ‘‘under deck’’ on a cargo vessel and on a passenger vessel.

IMDG

Special provision (IMDG)	:	274, 335, 969
Limited quantities (IMDG)	:	5 L
Excepted quantities (IMDG)	:	E1
Packing instructions (IMDG)	:	LP01, P001
Packing provisions (IMDG)	:	PP1
IBC packing instructions (IMDG)	:	IBC03
Tank instructions (IMDG)	:	T4
Tank special provisions (IMDG)	:	TP1, TP29
EmS-No. (Fire)	:	F-A - FIRE SCHEDULE Alfa - GENERAL FIRE SCHEDULE
EmS-No. (Spillage)	:	S-F - SPILLAGE SCHEDULE Foxtrot - WATER-SOLUBLE MARINE POLLUTANTS
Stowage category (IMDG)	:	A

IATA

PCA Excepted quantities (IATA)	:	E1
PCA Limited quantities (IATA)	:	Y964
PCA limited quantity max net quantity (IATA)	:	30kgG
PCA packing instructions (IATA)	:	964
PCA max net quantity (IATA)	:	450L
CAO packing instructions (IATA)	:	964
CAO max net quantity (IATA)	:	450L
ERG code (IATA)	:	9L

SECTION 15 Regulatory information

15.1. Federal regulations

All components of this product are present and listed as Active on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory, except for:		
Spinosad Technical	CAS-No. 168316-95-8	42.68 – 45.32%

This product or mixture is not known to contain a toxic chemical or chemicals in excess of the applicable de minimis concentration as specified in 40 CFR §372.38(a) subject to the reporting requirements of section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372.

FIFRA Labelling	
EPA Registration Number	71368-146
This chemical is a pesticide product registered by the U.S. 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. The following is the hazard information as required on the pesticide label.	
FIFRA Signal Word	Caution
FIFRA Precautionary Statement	Keep out of reach of children. Harmful if absorbed through skin.

15.2. International regulations

CANADA

Spinosad Technical (168316-95-8)

Not listed on the Canadian DSL (Domestic Substances List)/NDSL (Non-Domestic Substances List)

Propylene glycol (57-55-6)

Listed on the Canadian DSL (Domestic Substances List)

Naphthalenesulfonic acid, formaldehyde ammonium salt copolymer (9069-80-1)

Listed on the Canadian DSL (Domestic Substances List)

EU-Regulations

No additional information available

National regulations

Spinosad Technical (168316-95-8)

Listed on INSQ (Mexican National Inventory of Chemical Substances)

Propylene glycol (57-55-6)

Listed on INSQ (Mexican National Inventory of Chemical Substances)

15.3. State regulations

California Proposition 65 - This product does not contain any substances known to the state of California to cause cancer, developmental and/or reproductive harm

Component	State or local regulations
Propylene glycol(57-55-6)	U.S. - New Jersey - Right to Know Hazardous Substance List; U.S. - Pennsylvania - RTK (Right to Know) List

SECTION 16 Other information

According to 29 CFR § 1910.1200, Hazard Communication Standard (HCS)

Revision date : 10/6/2025

Issue date : 4/10/2024

Full text of hazard classes and H-statements	
H319	Causes serious eye irritation
H400	Very toxic to aquatic life

Indication of changes:
FIFRA Labelling.

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.