

SECTION 1 Identification**1.1. Product identifier**

Product form : Mixture
Product name : CLETHODIM 2E
Product code : 3000429

1.2. Other means of identification

Other means of identification : US EPA Reg. No. 42750-72

1.3. Recommended use of the chemical and restrictions on use

Use of the substance/mixture : Herbicide
Restrictions on use : It is a violation of Federal law to use this product in a manner inconsistent with its label.

1.4. Supplier's details

Albaugh, LLC
1525 NE 36th Street
Ankeny, Iowa 50021
United States
T 800-247-8013
ContactUS@albaughllc.com - albaughllc.com

1.5. Emergency phone number

Emergency number : For Chemical Emergency Spill, Leak, Fire, Exposure, or Accident:
• Call CHEMTREC Day or Night within USA and Canada: 1-800-424-9300, Outside USA and Canada: +1 703-741-5970 (collect calls accepted)

For Medical Emergencies Only:
• Call Albaugh LLC Day or Night within USA and Canada: 1-888-347-6732
24 hours a day, 7 days a week

SECTION 2 Hazard identification**2.1. Classification of the substance or mixture****GHS US classification**

Flammable liquid, Category 4	H227	Combustible liquid.
Acute toxicity (inhalation:dust,mist), Category 4	H332	Harmful if inhaled.
Skin corrosion/irritation, Category 2	H315	Causes skin irritation.
Serious eye damage/eye irritation, Category 2B	H320	Causes eye irritation.
Carcinogenicity, Category 2	H351	Suspected of causing cancer.
Specific target organ toxicity – Single exposure, Category 3, Respiratory tract irritation	H335	May cause respiratory irritation.
Aspiration hazard, Category 1	H304	May be fatal if swallowed and enters airways.
Hazardous to the aquatic environment — Acute Hazard, Category 2	H401	Toxic to aquatic life.
Hazardous to the aquatic environment — Chronic Hazard, Category 2	H411	Toxic to aquatic life with long lasting effects.

Full text of H-statements: see section 16

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2.2. Label elements

GHS US labelling

Hazard pictograms (GHS US)



Signal word (GHS US)

: Danger

Hazard statements (GHS US)

: H227 - Combustible liquid
H304 - May be fatal if swallowed and enters airways
H315 - Causes skin irritation
H320 - Causes eye irritation
H332 - Harmful if inhaled
H335 - May cause respiratory irritation
H351 - Suspected of causing cancer.
H401 - Toxic to aquatic life
H411 - Toxic to aquatic life with long lasting effects

Precautionary statements (GHS US)

: P201 - Obtain special instructions before use.
P202 - Do not handle until all safety precautions have been read and understood.
P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P261 - Avoid breathing dust, fume, gas, mist, vapours, spray.
P264 - Wash hands, forearms and face thoroughly after handling.
P271 - Use only outdoors or in a well-ventilated area.
P273 - Avoid release to the environment.
P280 - Wear protective gloves.
P301+P310 - If swallowed: Immediately call a poison center or doctor.
P302+P352 - If on skin: Wash with plenty of water.
P304+P340 - If inhaled: Remove person to fresh air and keep comfortable for breathing.
P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P308+P313 - If exposed or concerned: Get medical advice/attention.
P312 - Call a poison center or doctor if you feel unwell.
P321 - Specific treatment (see supplemental first aid instruction on this label).
P331 - Do NOT induce vomiting.
P332+P313 - If skin irritation occurs: Get medical advice or attention.
P337+P313 - If eye irritation persists: Get medical advice or attention.
P362+P364 - Take off contaminated clothing and wash it before reuse.
P370+P378 - In case of fire: Use appropriate media to extinguish.
P391 - Collect spillage.
P403 - Store in a well-ventilated place.
P403+P233 - Store in a well-ventilated place. Keep container tightly closed.
P405 - Store locked up.
P501 - Dispose of contents and/or container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulations.

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

31.38% of the mixture consists of ingredient(s) of unknown acute toxicity (Oral)

60.98% of the mixture consists of ingredient(s) of unknown acute toxicity (Dermal)

7.43% of the mixture consists of ingredient(s) of unknown acute toxicity (Inhalation (Dust/Mist))

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SECTION 3 Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	GHS US classification
solvent naphtha (petroleum), heavy aromatic	CAS-No.: 64742-94-5	62.93 – 70.347	Flam. Liq. 4, H227 Acute Tox. 3 (Inhalation:dust,mist), H331 Asp. Tox. 1, H304 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
clethodim (ISO); (5RS)-2-[(1EZ)-1-[(2E)-3-chloroal-lyloxyimino]propyl]-5-[(2RS)-2-(ethylthio)pro-pyl]-3-hydroxycyclohex-2-en-1-one	CAS-No.: 99129-21-2	25.6 - 27.2	Flam. Liq. 4, H227 Acute Tox. 4 (Oral), H302 Acute Tox. 4 (Inhalation:dust,mist), H332 Skin Sens. 1, H317 Aquatic Chronic 4, H413
naphthalene	CAS-No.: 91-20-3	<0.8	Flam. Sol. 2, H228 Acute Tox. 4 (Oral), H302 Carc. 2, H351 Aquatic Acute 1, H400 Aquatic Chronic 1, H410

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	: Call a physician immediately.
First-aid measures after inhalation	: Remove person to fresh air and keep comfortable for breathing. Call a poison center or a doctor if you feel unwell.
First-aid measures after skin contact	: Wash skin with plenty of water. Take off contaminated clothing. If skin irritation occurs: Get medical advice/attention.
First-aid measures after eye contact	: 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	: Do not induce vomiting. Call a physician immediately.
Self protection of the first-aiders	: First aid workers will be equipped with suitable personal protective equipment.

4.2. Most important symptoms/effects, acute and delayed

Symptoms/effects after inhalation	: Harmful if inhaled. May cause respiratory irritation.
Symptoms/effects after skin contact	: Irritation.
Symptoms/effects after eye contact	: mild eye irritation.
Symptoms/effects after ingestion	: Risk of lung oedema.

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

Other medical advice or treatment	: Treat symptomatically.
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SECTION 5: Fire-fighting measures

5.1. Suitable (and unsuitable) extinguishing media

Suitable extinguishing media : Water spray. Dry powder. Foam. Carbon dioxide.
Unsuitable extinguishing media : Do not use a heavy water stream.

5.2. Specific hazards arising from the chemical

Fire hazard : Combustible liquid.
Explosion hazard : No direct explosion hazard.
Hazardous decomposition products in case of fire : Toxic fumes may be released.

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.
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

General measures : Stop leak if safe to do so. Notify authorities if product enters sewers or public waters. Absorb spillage to prevent material damage.

For non-emergency personnel

Protective equipment : Wear recommended personal protective equipment.
Emergency procedures : Ventilate spillage area. No open flames, no sparks, and no smoking. Avoid breathing dust/fume/gas/mist/vapours/spray. Avoid contact with skin and eyes.

For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".
Emergency procedures : Evacuate unnecessary personnel. Stop leak if safe to do so.
Environmental precautions : Avoid release to the environment.

6.2. Methods and materials for containment and cleaning up

For containment : Collect spillage. Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams. Stop leak without risks if possible.
Methods for cleaning up : Take up liquid spill into absorbent material. Notify authorities if product enters sewers or public waters.
Other information : Dispose of materials or solid residues at an authorized site.

For further information refer to section 13.

SECTION 7 Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Wear personal protective equipment. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Use only outdoors or in a well-ventilated area. Avoid breathing dust/fume/gas/mist/vapours/spray. Avoid contact with skin and eyes.

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Hygiene measures	: Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.
Additional hazards when processed	: Not expected to present a significant hazard under anticipated conditions of normal use.

7.2. Conditions for safe storage, including incompatibilities

Technical measures	: Keep in a cool, well-ventilated place away from heat.
Storage conditions	: Store in a well-ventilated place. Keep cool. Store locked up. Keep container tightly closed.
Packaging materials	: Always store product in container of same material as original container.

SECTION 8 Exposure controls/personal protection

8.1. Control parameters

naphthalene (91-20-3)	
USA - ACGIH - Occupational Exposure Limits	
Local name	Naphthalene
ACGIH® TLV® TWA	52 mg/m³
	10 ppm
Remark (ACGIH®)	TLV® Basis: URT irr; Cataracts; Hemolytic anemia. Notations: Skin; A3 (Confirmed Animal Carcinogen with Unknown Relevance to Humans); BEI
Regulatory reference	ACGIH 2025
USA - ACGIH - Biological Exposure Indices	
Local name	Naphthalene
BEI	Parameter: 1-Naphthol + 2-Naphthol - Sampling time: End of shift - Notations: Nq, Ns
Regulatory reference	ACGIH 2025
USA - OSHA - Occupational Exposure Limits	
Local name	Naphthalene
OSHA PEL TWA	50 mg/m³
	10 ppm
Regulatory reference (US-OSHA)	OSHA Annotated Table Z-1
USA - Cal/OSHA - Occupational Exposure Limits	
Local name	Naphthalene
Cal/OSHA PEL (OEL TWA)	0.5 mg/m³
	0.1 ppm
Remark (Cal/OSHA)	S - Skin notation and Protecting Clothing
Regulatory reference	California Division of Occupational Safety and Health (Cal/OSHA) - Permissible Exposure Limit for Chemical Contaminants (Table AC-1)
USA - NIOSH - Occupational Exposure Limits	
Local name	Naphthalene
NIOSH REL 10h TWA	10 ppm
NIOSH REL STEL	15 ppm
Regulatory reference (US-NIOSH)	OSHA Annotated Table Z-1 (NIOSH Pocket Guide to Chemical Hazards (NPG))

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8.2. Appropriate engineering controls

Appropriate engineering controls : Ensure good ventilation of the work station.
Environmental exposure controls : Avoid release to the environment.

8.3. Individual protection measures, such as personal protective equipment

Personal protective equipment:

Wear recommended personal protective equipment.

Hand protection:
Protective gloves
Eye protection:
Safety glasses
Skin and body protection:
Wear suitable protective clothing
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	: Amber liquid.
Colour	: amber dark brown
Odour	: aromatic
Odour threshold	: No data available
pH	: 4.31
Melting point	: Not applicable
Freezing point	: No data available
Boiling point	: No data available
Flash point	: 65 °C
Flammability (solid, gas)	: 65 °C Not applicable.
Vapour pressure	: No data available
Relative vapour density at 20°C	: No data available
Relative density	: No data available
Density	: 0.955 g/ml
Solubility	: Emulsifiable.
Partition coefficient n-octanol/water (Log Pow)	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Viscosity, kinematic	: 3.34 mm²/s
Explosive limits	: No data available
Explosive properties	: Not Explosive.
Oxidising properties	: Not oxidising.
Particle characteristics	: No data available

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

Bulk density : 7.97 lbs/gallon

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

Combustible liquid.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

Heat. High temperature. Sparks. Open flame. Avoid contact with hot surfaces. No flames, no sparks. Eliminate all sources of ignition.

10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11 Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral) : Not classified
Acute toxicity (dermal) : Not classified
Acute toxicity (inhalation) : Inhalation:dust,mist: Harmful if inhaled.

CLETHODIM 2E	
LD50 oral rat	5000 mg/kg
LD50 dermal rat	> 5000 mg/kg
ATE US (oral)	5000 mg/kg bodyweight
ATE US (dust,mist)	1.802 mg/l/4h
Unknown acute toxicity (GHS US)	31.38% of the mixture consists of ingredient(s) of unknown acute toxicity (Oral) 60.98% of the mixture consists of ingredient(s) of unknown acute toxicity (Dermal) 7.43% of the mixture consists of ingredient(s) of unknown acute toxicity (Inhalation (Dust/Mist))
clethodim (ISO); (5RS)-2-((1EZ)-1-[(2E)-3-chloroal-lyloxyimino]propyl)-5-[(2RS)-2-(ethylthio)pro-pyl]-3-hydroxycyclohex-2-en-1-one (99129-21-2)	
LD50 dermal rabbit	> 5000 mg/kg Source: HSDB
LC50 Inhalation - Rat	3.9 mg/l Source: HSDB
ATE US (oral)	500 mg/kg bodyweight
ATE US (vapours)	3.9 mg/l/4h
ATE US (dust,mist)	3.9 mg/l/4h

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solvent naphtha (petroleum), heavy aromatic (64742-94-5)	
LD50 oral rat	> 5000 mg/kg Source: IUCLID
LD50 dermal rat	> 2000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 402 (Acute Dermal Toxicity), Guideline: other:
LD50 dermal rabbit	> 2000 mg/kg Source: RTECS
LC50 Inhalation - Rat (Dust/Mist)	> 0.59 mg/l Source: RTECS
ATE US (dust,mist)	0.5 mg/l/4h
naphthalene (91-20-3)	
LD50 oral rat	533 mg/kg
LD50 oral	533 mg/kg bodyweight (Equivalent or similar to OECD 401, Mouse, Male, Experimental value, Oral, 14 day(s))
LD50 dermal rat	> 16000 mg/kg bodyweight (Equivalent or similar to OECD 402, 24 h, Rat, Male / female, Experimental value, Dermal, 14 day(s))
LD50 dermal rabbit	2500 mg/kg Source: ChemIDplus
LC50 Inhalation - Rat	> 0.4 mg/l (Equivalent or similar to OECD 403, 4 h, Rat, Male / female, Experimental value, (maximum achievable concentration), Inhalation (vapours), 14 day(s))
LC50 Inhalation - Rat (Vapours)	> 0.4 mg/l Source: ECHA
ATE US (oral)	533 mg/kg bodyweight
ATE US (dermal)	2500 mg/kg bodyweight
Skin corrosion/irritation	: Causes skin irritation. Causes skin irritation. pH: 4.31
naphthalene (91-20-3)	
pH	No data available in the literature
Serious eye damage/irritation	: Causes eye irritation. Causes eye irritation pH: 4.31
naphthalene (91-20-3)	
pH	No data available in the literature
Respiratory or skin sensitisation	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Suspected of causing cancer.
naphthalene (91-20-3)	
IARC group	2B - Possibly carcinogenic to humans
National Toxicity Program (NTP) Status	Reasonably anticipated to be Human Carcinogen
Reproductive toxicity	: Not classified
solvent naphtha (petroleum), heavy aromatic (64742-94-5)	
NOAEL (animal/male, F0/P)	35 mg/kg bodyweight Animal: rat, Animal sex: male, Guideline: OECD Guideline 422 (Combined Repeated Dose Toxicity Study with the Reproduction / Developmental Toxicity Screening Test), Guideline: other:
NOAEL (animal/female, F0/P)	125 mg/kg bodyweight Animal: rat, Animal sex: female, Guideline: OECD Guideline 422 (Combined Repeated Dose Toxicity Study with the Reproduction / Developmental Toxicity Screening Test), Guideline: other:

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naphthalene (91-20-3)	
LOAEL (animal/female, F0/P)	50 mg/kg bodyweight Animal: rat, Animal sex: female, Guideline: other:
LOAEL (animal/female, F1)	450 mg/kg bodyweight Animal: rat, Animal sex: female, Guideline: other:
NOAEL (animal/female, F0/P)	120 mg/kg bodyweight Animal: rabbit, Animal sex: female, Guideline: other:

STOT-single exposure : May cause respiratory irritation.

STOT-repeated exposure : Not classified

solvent naphtha (petroleum), heavy aromatic (64742-94-5)	
LOAEC (inhalation, rat, vapour, 90 days)	4.71 mg/l air Animal: rat, Guideline: EU Method B.29 (Sub-Chronic Inhalation Toxicity:90-Day Study)
NOAEC (inhalation, rat, vapour, 90 days)	2.355 mg/l air Animal: rat, Guideline: EU Method B.29 (Sub-Chronic Inhalation Toxicity:90-Day Study)

naphthalene (91-20-3)	
LOAEL (oral, rat, 90 days)	400 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity Study in Rodents)
LOAEC (inhalation, rat, vapour, 90 days)	0.011 mg/l air Animal: rat, Guideline: EPA OPP 82-4 (90-Day Inhalation Toxicity), Guideline: OECD Guideline 413 (Subchronic Inhalation Toxicity: 90-Day Study)
NOAEL (oral, rat, 90 days)	200 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity Study in Rodents)
NOAEL (dermal, rat/rabbit, 90 days)	1000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 411 (Subchronic Dermal Toxicity: 90-Day Study)

Aspiration hazard : May be fatal if swallowed and enters airways.

CLETHODIM 2E	
Viscosity, kinematic	3.34 mm ² /s
naphthalene (91-20-3)	
Viscosity, kinematic	1 mm ² /s (80 °C, OECD 114: Viscosity of Liquids)

Symptoms/effects after inhalation : Harmful if inhaled. May cause respiratory irritation.

Symptoms/effects after skin contact : Irritation.

Symptoms/effects after eye contact : mild eye irritation.

Symptoms/effects after ingestion : Risk of lung oedema.

SECTION 12 Ecological information

12.1. Ecotoxicity

Ecology - general : Toxic to aquatic life. Toxic to aquatic life with long lasting effects.

Hazardous to the aquatic environment, short-term (acute) : Toxic to aquatic life.

Hazardous to the aquatic environment, long-term (chronic) : Toxic to aquatic life with long lasting effects.

solvent naphtha (petroleum), heavy aromatic (64742-94-5)	
LC50 - Fish [1]	45 mg/l Source: IUCLID
EC50 - Crustacea [1]	0.95 mg/l Source: IUCLID
EC50 - Other aquatic organisms [1]	2.9 mg/l Test organisms (species): other:
LC50 - Fish [2]	6.1 mg/l Test organisms (species): Oncorhynchus mykiss (previous name: Salmo gairdneri)

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solvent naphtha (petroleum), heavy aromatic (64742-94-5)	
EC50 72h - Algae [1]	2.5 mg/l Source: IUCLID
naphthalene (91-20-3)	
LC50 - Fish [1]	0.96 ppm (Oncorhynchus gorbuscha, Flow-through system, Salt water, Experimental value, Lethal)
EC50 - Crustacea [1]	2.16 mg/l (Equivalent or similar to OECD 202, 48 h, Daphnia magna, Static system, Fresh water, Experimental value, Locomotor effect)
EC50 72h - Algae [1]	0.4 mg/l (Skeletonema costatum, Literature study, Growth rate)
NOEC (chronic)	0.59 mg/l Test organisms (species): Daphnia pulex Duration: '125 d'

12.2. Persistence and degradability

CLETHODIM 2E	
Persistence and degradability	Not rapidly degradable
clethodim (ISO); (5RS)-2-[(1EZ)-1-[(2E)-3-chloroal-lyloxyimino]propyl]-5-[(2RS)-2-(ethylthio)pro-pyl]-3-hydroxycyclohex-2-en-1-one (99129-21-2)	
Persistence and degradability	Not rapidly degradable
solvent naphtha (petroleum), heavy aromatic (64742-94-5)	
Persistence and degradability	Not rapidly degradable
naphthalene (91-20-3)	
Persistence and degradability	Readily biodegradable in the soil, Readily biodegradable in water.
Biochemical oxygen demand (BOD)	0 g O ₂ /g substance
Chemical oxygen demand (COD)	0.22 g O ₂ /g substance
ThOD	2.99 g O ₂ /g substance

12.3. Bioaccumulative potential

clethodim (ISO); (5RS)-2-[(1EZ)-1-[(2E)-3-chloroal-lyloxyimino]propyl]-5-[(2RS)-2-(ethylthio)pro-pyl]-3-hydroxycyclohex-2-en-1-one (99129-21-2)	
Partition coefficient n-octanol/water (Log Pow)	4.21 Source: HSDB
solvent naphtha (petroleum), heavy aromatic (64742-94-5)	
Partition coefficient n-octanol/water (Log Pow)	2.9 – 6.1 Source: IUCLID
naphthalene (91-20-3)	
BCF - Fish [1]	23 – 168 (OECD 305: Bioconcentration: Flow-Through Fish Test, 8 week(s), Cyprinus carpio, Flow-through system, Fresh water, Experimental value)
Partition coefficient n-octanol/water (Log Pow)	3.4 (Experimental value, OECD 107: Partition Coefficient (n-octanol/water): Shake Flask Method, 25 °C)
Bioaccumulative potential	Low potential for bioaccumulation (BCF < 500).

12.4. Mobility in soil

naphthalene (91-20-3)	
Surface tension	No data available in the literature

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naphthalene (91-20-3)

Organic Carbon Normalized Adsorption Coefficient (Log Koc)	2.864 (log Koc, SRC PCKOCWIN v2.0, Calculated value)
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Ecology - soil	Low potential for adsorption in soil.
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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.
Additional information	: Do not re-use empty containers.

SECTION 14 Transport information

DOT

NOTE: This product may be shipped as NOT REGULATED when shipped domestically by highway in non-bulk containers (< or=119 gallons) as per 49 CFR 171.4(c)(1).

14.1. UN number

NA1993

14.2. Proper Shipping Name

Combustible liquid, n.o.s. (Contains Petroleum Distillates, Naphthalene)

14.3. Transport hazard class(es)

Combustible liquid



14.4. Packing group

III

14.5. Environmental hazards

Dangerous for the environment: Yes

14.6. Transport in bulk

Not applicable

14.7. Special precautions for user

DOT	
UN-No. (DOT)	: NA1993

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DOT Special Provisions (49 CFR 172.102)	: 148 - Except for transportation by aircraft, when transported as a limited quantity or a consumer commodity, the maximum net capacity specified in §173.150(b)(2) of this subchapter for inner packagings may be increased to 5 L (1.3 gallons). IB3 - Authorized IBCs: Metal (31A, 31B and 31N); Rigid plastics (31H1 and 31H2); Composite (31HZ1 and 31HA2, 31HB2, 31HN2, 31HD2 and 31HH2). Additional Requirement: Only liquids with a vapor pressure less than or equal to 110 kPa at 50 C (1.1 bar at 122 F), or 130 kPa at 55 C (1.3 bar at 131 F) are authorized, except for UN2672 (also see Special Provision IP8 in Table 2 for UN2672). T1 - 1.5 178.274(d)(2) Normal..... 178.275(d)(2) TP1 - The maximum degree of filling must not exceed the degree of filling determined by the following: Degree of filling = $97 / (1 + a (tr - tf))$ Where: tr is the maximum mean bulk temperature during transport, and tf is the temperature in degrees celsius of the liquid during filling.
DOT Packaging Exceptions (49 CFR 173.xxx)	: 150
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)	: 60 L
DOT Quantity Limitations Cargo aircraft only (49 CFR 175.75)	: 220 L
DOT Vessel Stowage Location	: A - The material may be stowed "on deck" or "under deck" on a cargo vessel and on a passenger vessel.

SECTION 15 Regulatory information

15.1. Federal regulations

Commercial status of components according to the United States Environmental Protection Agency's Toxic Substances Control Act (TSCA):

Name	CAS-No.	Listing	Commercial status	Flags
clethodim (ISO); (5RS)-2-[(1EZ)-1-[(2E)-3-chloroal-lyloxyimino]propyl]-5-[(2RS)-2-(ethylthio)pro-pyl]-3-hydroxycyclohex-2-en-1-one	99129-21-2	Not present	-	
solvent naphtha (petroleum), heavy aromatic	64742-94-5	Present	Active	
naphthalene	91-20-3	Present	Active	

Chemical(s) subject to the reporting requirements of Section 313 or Title III of the Superfund Amendments and Reauthorization Act (SARA) of 1986 and 40 CFR Part 372.

naphthalene	CAS-No. 91-20-3	<0.8%
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naphthalene (91-20-3)

Listed on EPA Hazardous Air Pollutant (HAPS)
Listed on EPA HAPs Chronic Dose Response Assessment List - Carcinogens
Listed on EPA HAPs Acute Dose Response Assessment List – Exposure limits

CERCLA RQ	100 lb
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FIFRA Labelling

EPA Registration Number	42750-72
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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.

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FIFRA Labelling	
FIFRA Signal Word	Caution
FIFRA Precautionary Statement	Hazards To Humans and Domestic Animals.
FIFRA Human Health Hazards	Causes moderate eye irritation. Harmful if swallowed. Avoid contact with eyes, skin or clothing. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or using the toilet.
FIFRA First Aid	<p>IF IN EYES:</p> <ul style="list-style-type: none">•Hold eye open and rinse slowly and gently with water for 15-20 minutes.•Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.•Call a poison control center or doctor for treatment advice. <p>IF ON SKIN OR CLOTHING:</p> <ul style="list-style-type: none">•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. <p>IF SWALLOWED:</p> <ul style="list-style-type: none">•Immediately call a poison control center or doctor.•DO NOT induce vomiting unless told to do so by a poison control center or doctor.•DO NOT give any liquid to the person.•DO NOT give anything by mouth to an unconscious person. <p>IF INHALED:</p> <ul style="list-style-type: none">•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. <p>NOTE TO PHYSICIAN - Contains petroleum distillate – vomiting may cause aspiration pneumonia.</p>
FIFRA Environmental Hazards	<p>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 apply where runoff is likely to occur. DO NOT apply where weather conditions favor drift from areas treated. DO NOT contaminate water when disposing of equipment washwater or rinsate.</p> <p>NON-TARGET ORGANISM ADVISORY: This product is toxic to plants and may adversely impact the forage and habitat of non-target organisms, including pollinators, in areas adjacent to the treated area. Protect the forage and habitat of non-target organisms by following label directions intended to minimize spray drift.</p>
FIFRA Physical Hazard	Combustible. DO NOT use or store near heat or open flame.

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FIFRA Labelling

FIFRA Other

STORAGE AND DISPOSAL

DO NOT contaminate water, food, or feed by storage or disposal.

PESTICIDE STORAGE: Store in a cool, dry place in original container.

PESTICIDE DISPOSAL: Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

CONTAINER DISPOSAL:

Non-refillable containers (<5 Gallons): DO NOT reuse or refill this container. Offer for recycling, if available. Triple rinse or pressure rinse container (or equivalent) promptly after emptying.

Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container ¼ full of water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times.

15.2. International regulations

CANADA

clethodim (ISO); (5RS)-2-((1EZ)-1-[(2E)-3-chloroal-lyloxyimino]propyl)-5-[(2RS)-2-(ethylthio)pro-pyl]-3-hydroxycyclohex-2-en-1-one (99129-21-2)

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

solvent naphtha (petroleum), heavy aromatic (64742-94-5)

Listed on the Canadian DSL (Domestic Substances List)

naphthalene (91-20-3)

Listed on the Canadian DSL (Domestic Substances List)

EU-Regulations

No additional information available

National regulations

clethodim (ISO); (5RS)-2-((1EZ)-1-[(2E)-3-chloroal-lyloxyimino]propyl)-5-[(2RS)-2-(ethylthio)pro-pyl]-3-hydroxycyclohex-2-en-1-one (99129-21-2)

Listed on INSQ (Mexican National Inventory of Chemical Substances)

solvent naphtha (petroleum), heavy aromatic (64742-94-5)

Listed on INSQ (Mexican National Inventory of Chemical Substances)

naphthalene (91-20-3)

Listed on IARC (International Agency for Research on Cancer)

Listed as carcinogen on NTP (National Toxicology Program)

Listed on EPA HAPs Chronic Dose Response Assessment List - Carcinogens

Listed on EPA HAPs Acute Dose Response Assessment List – Exposure limits


Listed on INSQ (Mexican National Inventory of Chemical Substances)

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15.3. State regulations

 **WARNING:** This product can expose you to Naphthalene, which is known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov.

SECTION 16 Other Information

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Issue date : 1/13/2026

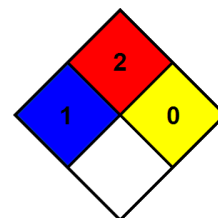
Full text of hazard classes and H-statements

H227	Combustible liquid
H228	Flammable solid
H302	Harmful if swallowed
H304	May be fatal if swallowed and enters airways
H315	Causes skin irritation
H317	May cause an allergic skin reaction
H320	Causes eye irritation
H331	Toxic if inhaled
H332	Harmful if inhaled
H335	May cause respiratory irritation
H351	Suspected of causing cancer.
H400	Very toxic to aquatic life
H401	Toxic to aquatic life
H410	Very toxic to aquatic life with long lasting effects
H411	Toxic to aquatic life with long lasting effects
H413	May cause long lasting harmful effects to aquatic life

NFPA health hazard : 1 - Materials that, under emergency conditions, can cause significant irritation.

NFPA fire hazard : 2 - Materials that must be moderately heated or exposed to relatively high ambient temperatures before ignition can occur.

NFPA reactivity : 0 - Material that in themselves are normally stable, even under fire conditions.



Hazard Rating

Health : 1 Slight Hazard - Irritation or minor reversible injury possible

Flammability : 2 Moderate Hazard - Materials which must be moderately heated or exposed to high ambient temperatures before ignition will occur. Includes liquids having a flash point at or above 100 F but below 200 F. (Classes II & IIIA)

Physical : 0 Minimal Hazard - Materials that are normally stable, even under fire conditions, and will NOT react with water, polymerize, decompose, condense, or self-react. Non-Explosives.

SDS USA-ALBAUGH

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The information provided in this Safety Data Sheet is correct to the best of Albaugh, LLC 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.