# INNVICTIS CROP CARE

# **ABREEV**

# Safety Data Sheet

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

Date of issue: 12/19/2023

### **SECTION 1: Identification**

### 1.1. Identification

Product form : Mixture
Product name : ABREEV
Product code : 89167-104-89391

#### 1.2. Recommended use and restrictions on use

#### 1.3. Supplier

INNVICTIS® CROP CARE, LLC 1880 Fall River Drive, Suite 100 Loveland, CO 80538 T 855-466-8428

#### 1.4. Emergency telephone number

Emergency number : ChemTrec 1-800-424-9300

## **SECTION 2: Hazard(s) identification**

### 2.1. Classification of the substance or mixture

#### **GHS-US** classification

Flammable liquids, Category 4

Serious eye damage/eye irritation, Category 2B

Carcinogenicity, Category 1B

Specific target organ toxicity — Single exposure, Category 3,

Narcosis

Specific target organ toxicity — Repeated exposure, Category 2

Aspiration hazard, Category 1

Hazardous to the aquatic environment — Acute Hazard, Category 2

Full text of H statements : see section 16

H227 Combustible liquid

H320 Causes eye irritation

H350 May cause cancer.

H336 May cause drowsiness or dizziness.

H373 May cause damage to organs through prolonged or repeated

exposure.

H304 May be fatal if swallowed and enters airways.

H401 Toxic to aquatic life

### 2.2. GHS Label elements, including precautionary statements

### **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.

H320 - Causes eye irritation

H336 - May cause drowsiness or dizziness.

H350 - May cause cancer.

H373 - May cause damage to organs through prolonged or repeated exposure.

H401 - Toxic to aquatic life

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.

P260 - Do not breathe dust/fume/gas/mist/vapours/spray.
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.

 ${\tt P280 - Wear \ protective \ gloves/protective \ clothing/eye \ protection/face \ protection.}$ 

P301+P310 - If swallowed: Immediately call a poison center/doctor/...

P304+P340 - If inhaled: Remove person to fresh air and keep comfortable for breathing

12/19/2023 EN (English) Page 1

# Safety Data Sheet

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

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 attention P312 - Call a poison center/doctor/... if you feel unwell P314 - Get medical advice/attention if you feel unwell.

P331 - Do NOT induce vomiting.

P337+P313 - If eye irritation persists: Get medical attention

P370+P378 - In case of fire: Use media other than water to extinguish. P403+P233 - Store in a well-ventilated place. Keep container tightly closed.

P403+P235 - Store in a well-ventilated place. Keep cool.

P405 - Store locked up.

P501 - Dispose of contents/container to hazardous or special waste collection point, in

accordance with local, regional, national and/or international regulation

### 2.3. Other hazards which do not result in classification

No additional information available

### 2.4. Unknown acute toxicity (GHS US)

Not applicable

# **SECTION 3: Composition/information on ingredients**

#### 3.1. Substances

Not applicable

#### 3.2. Mixtures

Name	Product identifier	%	GHS-US classification
Trinexapac-Ethyl	(CAS-No.) 95266-40-3	12	Not classified
naphthalene	(CAS-No.) 91-20-3	< 5	Acute Tox. 4 (Oral), H302 Carc. 2, H351
1,2,4-trimethylbenzene	(CAS-No.) 95-63-6	<1	Flam. Liq. 3, H226 Acute Tox. 4 (Inhalation:dust,mist), H332 Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335

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

### **SECTION 4: First-aid measures**

# 4.1. Description of 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.

First-aid measures after skin contact : Wash skin with plenty of water.

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 attention.

First-aid measures after ingestion : Do not induce vomiting. Call a physician immediately.

### 4.2. Most important symptoms and effects (acute and delayed)

Symptoms/effects : May cause drowsiness or dizziness.

Symptoms/effects after eye contact : mild eye irritation.
Symptoms/effects after ingestion : Risk of lung oedema.

### 4.3. Immediate medical attention and special treatment, if necessary

Treat symptomatically.

# **SECTION 5: Fire-fighting measures**

### 5.1. Suitable (and unsuitable) extinguishing media

Suitable extinguishing media : Water spray. Dry powder. Foam. Carbon dioxide.

#### 5.2. Specific hazards arising from the chemical

Fire hazard : Combustible liquid.

Hazardous decomposition products in case of : Toxic fumes may be released.

fire

12/19/2023 EN (English) 2/8

# Safety Data Sheet

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

#### 5.3. Special protective equipment and precautions for fire-fighters

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

### 6.1.1. For non-emergency personnel

**Emergency procedures** 

: No open flames, no sparks, and no smoking. Only qualified personnel equipped with suitable protective equipment may intervene. Do not breathe dust/fume/gas/mist/vapours/spray.

#### 6.1.2. 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".

### 6.2. Environmental precautions

Avoid release to the environment. Notify authorities if product enters sewers or public waters.

### 6.3. Methods and material for containment and cleaning up

For containment

: Collect spillage.

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.

### 6.4. Reference to other sections

For further information refer to section 13.

## SECTION 7: Handling and storage

# 7.1. Precautions for safe handling

Precautions for safe handling

: Ensure good ventilation of the work station. 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. Take all necessary technical measures to avoid or minimize the release of the product on the workplace. Limit quantities of product at the minimum necessary for handling and limit the number of exposed workers. Provide local exhaust or general room ventilation. Floors, walls and other surfaces in the hazard area must be cleaned regularly. Do not breathe dust/fume/gas/mist/vapours/spray. Avoid contact with skin and eyes.

Hygiene measures

: Separate working clothes from town clothes. Launder separately. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

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

Storage conditions

: Store in a well-ventilated place. Keep cool. Store locked up. Keep container tightly closed.

# SECTION 8: Exposure controls/personal protection

# 8.1. Control parameters

ABREEV		
No additional information available		
Trinexapac-Ethyl (95266-40-3)		
No additional information available		
1,2,4-trimethylbenzene (95-63-6)		
No additional information available		
naphthalene (91-20-3)		
USA - ACGIH - Occupational Exposure Limits		
ACGIH TWA (ppm) 10 ppm		

# 8.2. Appropriate engineering controls

Appropriate engineering controls

: Ensure good ventilation of the work station.

Environmental exposure controls

: Avoid release to the environment

12/19/2023 EN (English) 3/8

# Safety Data Sheet

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

### 8.3. Individual protection measures/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. Information on basic physical and chemical properties

Physical state : Liquid
Colour : Amber
Odour : Sweet

Odour threshold : No data available

pH : 3-4

Melting point Not applicable Freezing point : No data available No data available Boiling point Flash point : No data available Relative evaporation rate (butylacetate=1) : No data available Flammability (solid, gas) : Not applicable. Vapour pressure : No data available Relative vapour density at 20 °C No data available Relative density : No data available Density 0.9 - 1.1 g/cm3Solubility No data available Partition coefficient n-octanol/water (Log Pow) : No data available Auto-ignition temperature No data available : No data available Decomposition temperature Viscosity, kinematic : No data available

Viscosity, dynamic : 7.23 cP

Explosive limits : No data available
Explosive properties : No data available
Oxidising properties : No data available

## 9.2. Other information

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

12/19/2023 EN (English) 4/8

# Safety Data Sheet

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

Stable under normal conditions.

### 10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

### 10.4. Conditions to avoid

Avoid contact with hot surfaces. Heat. 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) : Not classified

1,2,4-trimethylbenzene (95-63-6)			
LD50 oral rat	6000 mg/kg bodyweight (EU Method B.1 tris: Acute oral toxic – Acute toxic class method, Rat, Male, Experimental value, Oral, 014 day(s))		
LD50 dermal rat	3440 mg/kg (24 h, Rat, Male / female, Read-across, Dermal)		
LC50 inhalation rat (mg/l)	> 10.2 mg/l air (4 h, Rat, Male / female, Read-across, Inhalation (vapours), 14 day(s))		
naphthalene (91-20-3)			
LD50 dermal rat	> 2500 mg/kg (Rat, Dermal)		
Skin corrosion/irritation	: Not classified		
	pH: 3 – 4		
Serious eye damage/irritation	: Causes eye irritation.		
	pH: 3 – 4		
Respiratory or skin sensitisation	: Not classified		
Germ cell mutagenicity	: Not classified		
Carcinogenicity	: May cause cancer.		

naphthalene (91-20-3)	
IARC group	2B - Possibly carcinogenic to humans
National Toxicology Program (NTP) Status	Reasonably anticipated to be Human Carcinogen

Reproductive toxicity : Not classified

STOT-single exposure : May cause drowsiness or dizziness.

1,2,4-trimethylbenzene (95-63-6)	
STOT-single exposure	May cause respiratory irritation.
STOT-repeated exposure	: May cause damage to organs through prolonged or repeated exposure.
Aspiration hazard	: May be fatal if swallowed and enters airways.
Viscosity, kinematic	: No data available
Symptoms/effects	: May cause drowsiness or dizziness.
Symptoms/effects after eye contact	: mild eye irritation.
Symptoms/effects after ingestion	: Risk of lung oedema.

# **SECTION 12: Ecological information**

### 12.1. Toxicity

Ecology - general : Toxic to aquatic life.

12/19/2023 EN (English) 5/8

# Safety Data Sheet

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

1,2,4-trimethylbenzene (95-63-6)		
LC50 fish 1 7.72 mg/l (96 h, Pimephales promelas, Flow-through system, Fresh water, Experimental value, Lethal)		
naphthalene (91-20-3)		
LC50 fish 1	0.11 mg/l (96 h, Oncorhynchus mykiss, Literature study)	
EC50 Daphnia 1	2.16 mg/l (48 h, Daphnia magna, Literature study)	

# 12.2. Persistence and degradability

1,2,4-trimethylbenzene (95-63-6)		
Persistence and degradability	Not readily biodegradable in water.	
Chemical oxygen demand (COD)	0.44 g O <sub>2</sub> /g substance	
naphthalene (91-20-3)		
Persistence and degradability	Biodegradable in the soil. Readily biodegradable in water.	
Biochemical oxygen demand (BOD)	0 g O <sub>2</sub> /g substance	
Chemical oxygen demand (COD)	0.22 g O <sub>2</sub> /g substance	
ThOD	2.99 g O <sub>2</sub> /g substance	

### 12.3. Bioaccumulative potential

1,2,4-trimethylbenzene (95-63-6)		
BCF fish 1	243 (Pimephales promelas, QSAR)	
Partition coefficient n-octanol/water (Log Pow)	3.63 (Experimental value, KOWWIN)	
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).	
naphthalene (91-20-3)		
BCF fish 1	23 – 168 (8 week(s), Cyprinus carpio, Literature study)	
Partition coefficient n-octanol/water (Log Pow)	3.3 (Experimental value)	
Bioaccumulative potential	Low potential for bioaccumulation (BCF < 500).	

# 12.4. Mobility in soil

1,2,4-trimethylbenzene (95-63-6)	
Surface tension	No data available in the literature
Partition coefficient n-octanol/water (Log Koc)	3.04 (log Koc, Calculated value)
Ecology - soil	Low potential for mobility in soil. May be harmful to plant growth, blooming and fruit formation.
naphthalene (91-20-3)	
Surface tension	0.03 N/m (100 °C)
Ecology - soil	Adsorbs into the soil.

## 12.5. Other adverse effects

No additional information available

# **SECTION 13: Disposal considerations**

## 13.1. Disposal methods

Waste treatment methods

: Dispose of contents/container in accordance with licensed collector's sorting instructions.

12/19/2023 EN (English) 6/8

# Safety Data Sheet

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

### **SECTION 14: Transport information**

### **Department of Transportation (DOT)**

# **US-DOT:**

### Containers ≤ 1.3 gal. (5 L) in strong outer packaging:

Not regulated

#### Containers > 1.3 gal. (5 L) and < 119 gal. (450 L) shipped "ground only":

Not regulated

### Containers > 1.3 gal. (5 L) shipped all or in part by vessel:

Shipping Description: UN3082, Environmentally hazardous substance, liquid, N.O.S. (trinexapac-ethyl, naphthalene), 9, PG III, Marine Pollutant

Hazardous Substance RQ: 100 lbs. (approximately 2,000 gallons of product)

Emergency Guide: 171

# Containers > 119 gal. (450 L) shipped "ground only":

Shipping Description: NA1993, Combustible liquid, N.O.S. (trinexapac-ethyl, naphthalene), PG III, Marine Pollutant

Emergency Guide: 128

## IMDG:

### Containers ≤ 1.3 gal. (5 L) in strong outer packaging:

Not regulated

### Containers > 1.3 gal. (5 L):

Shipped internationally by vessel: UN3082, Environmentally hazardous substance, liquid, N.O.S. (trinexapac-ethyl, naphthalene), 9, PG III, Marine Pollutant

# IATA:

### Containers ≤ 1.3 gal. (5 L) in strong outer packaging:

Not regulated

### Containers > 1.3 gal. (5 L):

Shipped internationally by air: UN3082, Environmentally hazardous substance, liquid, N.O.S. (trinexapac-ethyl, naphthalene), 9, PG III

### **SECTION 15: Regulatory information**

### 15.1. US Federal regulations

## 1,2,4-trimethylbenzene (95-63-6)

Listed on the United States TSCA (Toxic Substances Control Act) inventory Subject to reporting requirements of United States SARA Section 313

### naphthalene (91-20-3)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

Subject to reporting requirements of United States SARA Section 313

Listed on EPA Hazardous Air Pollutant (HAPS)

CERCLA RQ 100 lb

### 15.2. International regulations

## **CANADA**

### 1,2,4-trimethylbenzene (95-63-6)

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** 

12/19/2023 EN (English) 7/8

# Safety Data Sheet

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

### naphthalene (91-20-3)

Listed on IARC (International Agency for Research on Cancer) Listed as carcinogen on NTP (National Toxicology Program)

### 15.3. US State regulations

naphthalene (91	1-20-3)				
U.S California - Proposition 65 - Carcinogens List	U.S California - Proposition 65 - Developmental Toxicity	U.S California - Proposition 65 - Reproductive Toxicity - Female	U.S California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)	Maximum allowable dose level (MADL)
Yes	No	No	No	5.8 μg/day	

Component	State or local regulations
1,2,4-trimethylbenzene(95-63-6)	U.S Massachusetts - Right To Know List; U.S New Jersey - Right to Know Hazardous Substance List; U.S Pennsylvania - RTK (Right to Know) List
naphthalene(91-20-3)	U.S Massachusetts - Right To Know List; U.S New Jersey - Right to Know Hazardous Substance List; U.S Pennsylvania - RTK (Right to Know) List

# **SECTION 16: Other information**

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

### Full text of H-statements:

text of 11 statements.	
H226	Flammable liquid and vapour.
H227	Combustible liquid
H302	Harmful if swallowed.
H304	May be fatal if swallowed and enters airways.
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H320	Causes eye irritation
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.
H350	May cause cancer.
H351	Suspected of causing cancer.
H373	May cause damage to organs through prolonged or repeated exposure.
H401	Toxic to aquatic life

# SDS US (GHS HazCom 2012)

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.

12/19/2023 EN (English) 8/8