

SECTION 1: Identification

1.1. Identification

Product form : Mixture
 Product name : PAVILION 3.3 EC HERBICIDE
 Product code : 89167-29-89391

1.2. Recommended use and restrictions on use

1.3. Supplier

INNICTIS® 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

Acute toxicity (inhal.), Category 3	H331 Toxic if inhaled.
Serious eye damage/eye irritation, Category 2B	H320 Causes eye irritation
Skin sensitisation, category 1B	H317 May cause an allergic skin reaction.
Carcinogenicity, Category 2	H351 Suspected of causing cancer.
Specific target organ toxicity — Repeated exposure, Category 2	H373 May cause damage to organs through prolonged or repeated exposure.
Aspiration hazard, Category 1	H304 May be fatal if swallowed and enters airways.
Hazardous to the aquatic environment — Acute Hazard, Category 1	H400 Very toxic to aquatic life.
Hazardous to the aquatic environment — Chronic Hazard, Category 1	H410 Very toxic to aquatic life with long lasting effects.

Full text of H statements : see section 16

2.2. GHS Label elements, including precautionary statements

GHS US labelling

Hazard pictograms (GHS US) :



Signal word (GHS US) : Danger

Hazard statements (GHS US) :

- H304 - May be fatal if swallowed and enters airways.
- H317 - May cause an allergic skin reaction.
- H320 - Causes eye irritation
- H331 - Toxic if inhaled.
- H351 - Suspected of causing cancer.
- H373 - May cause damage to organs through prolonged or repeated exposure.
- H400 - Very toxic to aquatic life.
- H410 - Very 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.
- 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.
- P272 - Contaminated work clothing must not be allowed out of the workplace
- P273 - Avoid release to the environment.
- P280 - Wear protective gloves/protective clothing/eye protection/face protection.
- P301+P310 - If swallowed: Immediately call a poison center/doctor/...

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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 attention
P311 - Call a poison center/doctor/...
P314 - Get medical advice/attention if you feel unwell.
P321 - Specific treatment (see supplemental first aid instruction on this label)
P331 - Do NOT induce vomiting.
P333+P313 - If skin irritation or rash occurs: Get medical advice/attention.
P337+P313 - If eye irritation persists: Get medical attention
P363 - Wash contaminated clothing before reuse.
P391 - Collect spillage.
P403+P233 - Store in a well-ventilated place. Keep container tightly closed.
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
naphtha,heavy aromatic	(CAS-No.) 64742-94-5	< 75	Asp. Tox. 1, H304
pendimethaline	(CAS-No.) 40487-42-1	37.4	Acute Tox. 4 (Oral), H302 Skin Sens. 1, H317
naphthalene	(CAS-No.) 91-20-3	< 10	Acute Tox. 4 (Oral), H302 Carc. 2, H351

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. Call a doctor.
First-aid measures after skin contact	: Wash skin with plenty of water. Take off contaminated clothing. If skin irritation or rash 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 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 after skin contact	: May cause an allergic skin reaction.
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.
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5.2. Specific hazards arising from the chemical

Hazardous decomposition products in case of fire	: Toxic fumes may be released.
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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 : Ventilate spillage area. Do not breathe dust/fume/gas/mist/vapours/spray. Avoid contact with skin and eyes.

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.

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 : Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear personal protective equipment. Do not breathe dust/fume/gas/mist/vapours/spray. Use only outdoors or in a well-ventilated area. Avoid contact with skin and eyes.
- Hygiene measures : Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reuse. 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 locked up. Store in a well-ventilated place. Keep container tightly closed. Keep cool.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

PAVILION 3.3 EC HERBICIDE	
No additional information available	
pendimethaline (40487-42-1)	
No additional information available	
naphthalene (91-20-3)	
USA - ACGIH - Occupational Exposure Limits	
ACGIH TWA (ppm)	10 ppm
naphtha,heavy aromatic (64742-94-5)	
No additional information available	

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/Personal protective equipment

Hand protection:

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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
Appearance	: Liquid.
Colour	: Amber
Odour	: aromatic
Odour threshold	: No data available
pH	: 6 – 7
Melting point	: Not applicable
Freezing point	: No data available
Boiling point	: No data available
Flash point	: 212 °F
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	: 8.93 lb/gal
Solubility	: No data available
Partition coefficient n-octanol/water (Log Pow)	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
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

Stable under normal conditions.

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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).

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) : Toxic if inhaled.

PAVILION 3.3 EC HERBICIDE	
LD50 oral rat	> 3956
LD50 dermal rat	> 2000
LC50 inhalation rat (mg/l)	5.35 mg/l/4h
ATE US (gases)	700 ppmv/4h
ATE US (vapours)	5.35 mg/l/4h
ATE US (dust,mist)	0.5 mg/l/4h

pendimethaline (40487-42-1)	
LD50 oral rat	1250 mg/kg (Rat, Oral)
LD50 dermal rabbit	> 5000 mg/kg (Rabbit, Dermal)

naphthalene (91-20-3)	
LD50 dermal rat	> 2500 mg/kg (Rat, Dermal)

naphtha,heavy aromatic (64742-94-5)	
LD50 oral rat	> 5000 mg/kg (Rat)
LD50 dermal rabbit	> 2000 mg/kg (Rabbit)
LC50 inhalation rat (mg/l)	> 5 mg/l/4h (Rat)

Skin corrosion/irritation : Not classified
pH: 6 – 7
Serious eye damage/irritation : Causes eye irritation.
pH: 6 – 7
Respiratory or skin sensitisation : May cause an allergic skin reaction.
Germ cell mutagenicity : Not classified
Carcinogenicity : Suspected of causing 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 : Not classified

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 after skin contact : May cause an allergic skin reaction.
Symptoms/effects after eye contact : mild eye irritation.
Symptoms/effects after ingestion : Risk of lung oedema.

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SECTION 12: Ecological information

12.1. Toxicity

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

pendimethaline (40487-42-1)	
LC50 fish 1	0.14 mg/l (96 h, Salmo gairdneri)
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)
naphtha,heavy aromatic (64742-94-5)	
EC50 Daphnia 1	0.95 mg/l (EC50; 48 h)
LC50 fish 2	2.34 mg/l (LC50; 96 h; Oncorhynchus mykiss)
Threshold limit algae 2	2.5 mg/l (EC50; 72 h)

12.2. Persistence and degradability

pendimethaline (40487-42-1)	
Persistence and degradability	Biodegradability in soil: no data available.
naphthalene (91-20-3)	
Persistence and degradability	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
naphtha,heavy aromatic (64742-94-5)	
Persistence and degradability	Not readily biodegradable in water. Not established.

12.3. Bioaccumulative potential

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).
naphtha,heavy aromatic (64742-94-5)	
Partition coefficient n-octanol/water (Log Pow)	2.9 – 6.1
Bioaccumulative potential	Bioaccumable. Not established.

12.4. Mobility in soil

pendimethaline (40487-42-1)	
Ecology - soil	Not toxic to bees.
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.

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SECTION 14: Transport information

Land transport

USDOT

Not classified as a dangerous good under transport regulations

Sea transport

IMDG

Hazard class: 9

Packing group: III

ID number: UN 3082

Hazard label: 9, EHSM

Marine pollutant: YES

Proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID,

N.O.S. (contains PENDIMETHALIN, SOLVENT NAPHTHA)



Air transport

IATA/ICAO

Hazard class: 9

Packing group: III

ID number: UN 3082

Hazard label: 9, EHSM

Proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID,

N.O.S. (contains PENDIMETHALIN, SOLVENT NAPHTHA)

Further information

Product may be shipped as non-hazardous in suitable packages containing a net quantity of 5 L or less under the provisions of various regulatory agencies: ADR, RID, ADN: Special Provision 375; IMDG: 2.10.2.7; IATA: A197; TDG: Special Provision 99(2); 49CFR: 171.4 (c) (2) and also the Special Provision 375 in Appendix B which is regulated in China "Regulations Concerning Road Transportation of Dangerous Goods Part 3: Index of dangerous goods name and transportation requirements" (JT/T 617.3)

DOT: This product is regulated if the amount in a single receptacle exceeds the Reportable Quantity (RQ). Please refer to Section 15 of this SDS or the RQ for this product.

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SECTION 15: Regulatory information

Federal Regulations

Registration status:

Crop Protection TSCA, US released / exempt

EPCRA 311/312 (Hazard categories): Refer to SDS section 2 for GHS hazard classes applicable for this product.

EPCRA 313:

CAS Number	Chemical name
40487-42-1	pendimethalin
91-20-3	naphthalene

CERCLA RQ	CAS Number	Chemical name
5000 LBS	107-21-1	ethylene glycol
1000 LBS	75-07-0	acetaldehyde
100 LBS	91-20-3; 107-06-2; 75-56-9; 123-91-1; 64742-94-5	naphthalene; 1,2-dichloroethane; Propylene oxide; 1,4- dioxane; solvent naphtha
100 LBS	91-20-3	naphthalene
10 LBS	75-21-8	Ethylene Oxide

State regulations

State RTK	CAS Number	Chemical name
NJ	91-20-3	naphthalene
	40487-42-1	pendimethalin
	64742-94-5	solvent naphtha
	90-12-0	Naphthalene, 1-methyl-
PA	91-20-3	naphthalene
	64742-94-5	solvent naphtha
	90-12-0	Naphthalene, 1-methyl-
	91-57-6	Naphthalene, 2-methyl-
	107-06-2	1,2-dichloroethane

Safe Drinking Water & Toxic Enforcement Act, CA Prop. 65:

Innvictis Risk Assessment, CA Prop. 65:

Based on an evaluation of the product's composition and the use(s), this product does not require a California Proposition 65 Warning.

NFPA Hazard codes:

Health: 1 Fire: 1 Reactivity: 1 Special:

Labeling requirements under FIFRA

This chemical is a pesticide product regulated 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 workplace labels of non-pesticide chemicals. Following is the hazard information as required on the pesticide label.

CAUTION:

KEEP OUT OF REACH OF CHILDREN.

KEEP OUT OF REACH OF DOMESTIC ANIMALS.

HARMFUL IF SWALLOWED.

HARMFUL IF ABSORBED THROUGH SKIN.

Causes eye irritation.

Avoid contact with the skin, eyes and clothing.

Wash thoroughly after handling.

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SECTION 16: Other information

Full text of H-statements

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H302	Harmful if swallowed.
H304	May be fatal if swallowed and enters airways.
H317	May cause an allergic skin reaction.
H320	Causes eye irritation
H331	Toxic if inhaled.
H351	Suspected of causing cancer.
H373	May cause damage to organs through prolonged or repeated exposure.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.

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 warranting any specific property of the product.

SDS US (GHS HazCom 2012)