

Issuing Date 01-Aug-2023

Revision date 06-Aug-2025

Revision Number 2

1. Identification

Product identifier

Product Name Advantage Deltamethrin 5 EC

Other means of identification

Product Code(s) PMRA Reg. No.: 34043

Synonyms None

Recommended use of the chemical and restrictions on use

Recommended use Insecticide

Restrictions on use Use only as directed on product label

Details of the supplier of the safety data sheet

Manufacturer Address

Advantage Crop Protection Inc.
620 4th Avenue East
Regina, Saskatchewan, Canada
Phone: 1888 931 2530

Emergency telephone number

Emergency telephone For Emergency Medical Assistance (Human or Animal) contact Rocky Mountain Poison Control at 866-767-5040
For Chemical Emergency Assistance (Spill, Leak, Fire or Accident) contact CHEMTREC at 800-424-9300 (North America) or 703-527-3887 (International)

2. Hazard(s) identification

Classification of the substance or mixture

Acute toxicity - Oral	Category 4
Acute toxicity - Dermal	Category 4

Label elements



Warning

Hazard statements

Harmful if swallowed
 Harmful in contact with skin

Precautionary Statements - Prevention

Wash face, hands and any exposed skin thoroughly after handling
 Do not eat, drink or smoke when using this product
 Wear protective gloves, protective clothing, eye protection and face protection

Precautionary Statements - Response

Specific treatment (see supplemental first aid instructions on this label)

Skin

IF ON SKIN: Wash with plenty of water and soap
 Call a POISON CENTER or doctor if you feel unwell
 Take off contaminated clothing and wash it before reuse

Ingestion

IF SWALLOWED: Call a POISON CENTER or doctor if you feel unwell
 Rinse mouth

Precautionary Statements - Disposal

Dispose of contents and container in accordance with local, regional, national, and international regulations as applicable

Other information

Very toxic to aquatic life with long lasting effects.

Unknown acute toxicity

8 % of the mixture consists of ingredient(s) of unknown acute oral toxicity
 8 % of the mixture consists of ingredient(s) of unknown acute dermal toxicity

3. Composition/information on ingredients

Substance

Not applicable.

Mixture

Chemical name	CAS No.	Weight-%	Hazardous Material Information Review Act registry number (HMIRA registry #)	Date HMIRA filed and date exemption granted (if applicable)
Solvent naphtha, light aromatic	64742-95-6	80 -90	-	
Deltamethrin	52918-63-5	5 - 10	-	
Phenol, 2,6-bis(1,1-dimethylethyl)-4-methyl-	128-37-0	0.1 - 0.5	-	

4. First-aid measures

Description of first aid measures

General advice	Show this safety data sheet to the doctor in attendance.
Inhalation	Remove to fresh air.
Eye contact	Rinse thoroughly with plenty of water, also under the eyelids. Get medical attention if symptoms occur.
Skin contact	Wash off immediately with plenty of water for at least 15 minutes. If symptoms persist, call a physician.

Ingestion Do NOT induce vomiting. Rinse mouth. Never give anything by mouth to an unconscious person. Call a physician.

Self-protection of the first aider Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination. Wear personal protective clothing (see section 8).

Most important symptoms and effects, both acute and delayed

Symptoms None known.

Effects of Exposure See Section 11 for additional Toxicological Information.

Indication of any immediate medical attention and special treatment needed

Note to physicians Treat symptomatically.

5. Fire-fighting measures

Suitable Extinguishing Media Dry chemical, CO₂, water spray or regular foam.

Unsuitable extinguishing media None known based on information supplied.

Specific hazards arising from the chemical May emit toxic fumes under fire conditions.

Hazardous combustion products Carbon oxides, Nitrogen oxides (NO_x), Hydrogen cyanide.

Explosion data

Sensitivity to mechanical impact None.

Sensitivity to static discharge None.

Special protective equipment and precautions for fire-fighters Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Personal precautions Avoid contact with skin, eyes or clothing. Ensure adequate ventilation. Use personal protective equipment as required.

Other information Refer to protective measures listed in Sections 7 and 8.

Methods and material for containment and cleaning up

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

Methods for cleaning up Dam up. Soak up with inert absorbent material. Pick up and transfer to properly labeled containers. Clean contaminated surface thoroughly.

Prevention of secondary hazards Clean contaminated objects and areas thoroughly observing environmental regulations.

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, eyes or clothing. Ensure adequate ventilation.

General hygiene considerations Avoid contact with skin, eyes or clothing. Wear suitable gloves and eye/face protection.

Conditions for safe storage, including any incompatibilities

Storage Conditions Keep containers tightly closed in a dry, cool and well-ventilated place. Keep out of the reach of children. Keep/store only in original container. Keep from freezing. Keep away from food, drink and animal feeding stuffs.

8. Exposure controls/personal protection

Control Parameters

Exposure Limits

Chemical name	Alberta	British Columbia	Ontario	Quebec
Phenol, 2,6-bis(1,1-dimethylethyl)-4-methyl-128-37-0	TWA: 10 mg/m ³ ;	TWA: 2 mg/m ³ ; inhalable; inhalable aerosol and vapour	TWA: 2 mg/m ³ ; inhalable fraction and vapor	TWAEV: 2 mg/m ³ ; inhalable fraction and vapour

Chemical name	Manitoba	New Brunswick	Newfoundland and Labrador	Nova Scotia
Phenol, 2,6-bis(1,1-dimethylethyl)-4-methyl-	TWA: 2 mg/m ³ ; inhalable fraction and vapor	TWA: 2 mg/m ³ ; inhalable fraction and vapor	TWA: 2 mg/m ³ ; inhalable fraction and vapor	TWA: 2 mg/m ³ ; inhalable fraction and vapor

Chemical name	Nunavut	Prince Edward Island	Saskatchewan	Yukon
Phenol, 2,6-bis(1,1-dimethylethyl)-4-methyl-	TWA: 2 mg/m ³ ; inhalable fraction and vapour STEL: 4 mg/m ³ ; inhalable fraction and vapour	TWA: 2 mg/m ³ ; inhalable fraction and vapor	TWA: 2 mg/m ³ ; inhalable fraction and vapour STEL: 4 mg/m ³ ; inhalable fraction and vapour	TWA: 10 mg/m ³ ; STEL: 20 mg/m ³ ;

Note See section 16 for terms and abbreviations.

Appropriate engineering controls

Engineering controls Showers
Eyewash stations
Ventilation systems.

Individual protection measures, such as personal protective equipment

Eye/face protection Wear safety glasses with side shields (or goggles).

Hand protection Wear suitable gloves.

Skin and body protection Wear suitable protective clothing.

Respiratory protection No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required.

Environmental exposure controls Local authorities should be advised if significant spillages cannot be contained. Prevent product from entering drains. Avoid release to the environment. Prevent further leakage or spillage if safe to do so. Keep out of drains, sewers, ditches and waterways.

9. Physical and chemical properties

Information on basic physical and chemical properties

Appearance

Physical state	Liquid
Color	Yellow
Odor	Aromatic
Odor threshold	No information available

Property	Values	Remarks • Method
Melting point / freezing point		No data available
Initial boiling point and boiling range		No data available
Flammability		No data available
Flammability Limit in Air		
Upper flammability or explosive limits		No data available
Lower flammability or explosive limits		No data available
Flash point	>45 °C	
Autoignition temperature		No data available
Decomposition temperature		No data available
SADT (°C)		No data available
pH	5.84	
pH (as aqueous solution)		No data available
Kinematic viscosity		No data available
Dynamic viscosity	1.36 mPa s	
Water solubility		No data available
Solubility(ies)		No data available
Partition Coefficient (n-octanol/water)		No data available
Vapor pressure		No data available
Relative density		No data available
Bulk density		No data available
Liquid Density	0.88 - 0.91 g/mL @ 20°C	
Relative vapor density		No data available
Particle characteristics		No information available
Particle Size		No data available
Particle Size Distribution		No data available

Other information

Molecular weight	No information available
VOC content	No information available
Softening point	No information available

Information with regard to physical hazard classes

Explosives

Explosive properties No information available.

Oxidizing properties

No information available.

10. Stability and reactivity

Reactivity None under normal use conditions.

Chemical stability Stable under normal conditions.

Possibility of hazardous reactions None under normal processing.

Conditions to avoid Incompatible materials.

Incompatible materials Strong oxidizing agents, Alkalis.

Hazardous decomposition products None known based on information supplied.

11. Toxicological information

Information on likely routes of exposure

Product Information

Inhalation Specific test data for the substance or mixture is not available.

Eye contact Specific test data for the substance or mixture is not available. Contact with eyes may cause irritation.

Skin contact Specific test data for the substance or mixture is not available. Harmful in contact with skin. (based on components). May be absorbed through the skin in harmful amounts.

Ingestion Specific test data for the substance or mixture is not available. Harmful if swallowed. (based on components).

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms None known.

Acute toxicity Harmful if swallowed. Harmful by skin contact.

Numerical measures of toxicity

The following ATE values have been calculated for the mixture:

ATEmix (oral) 1,798.56 mg/kg
 ATEmix (dermal) 1,960.00 mg/kg
 ATEmix (inhalation-dust/mist) > 5 mg/l

Unknown acute toxicity

8 % of the mixture consists of ingredient(s) of unknown acute oral toxicity
 8 % of the mixture consists of ingredient(s) of unknown acute dermal toxicity

Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Solvent naphtha, light aromatic 64742-95-6	= 8400 mg/kg (Rat)	> 2000 mg/kg (Rabbit)	= 3400 ppm (Rat) 4 h
Deltamethrin 52918-63-5	= 9360 µg/kg (Rat)	= 700 mg/kg (Rat)	= 785 mg/m ³ (Rat) 2 h
Phenol, 2,6-bis(1,1-dimethylethyl)-4-met hyl- 128-37-0	> 2930 mg/kg (Rat)	> 2000 mg/kg (Rat)	-

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Skin corrosion/irritation No information available.

Serious eye damage/eye irritation No information available.

Respiratory or skin sensitization No information available.

Germ cell mutagenicity No information available.

Carcinogenicity Based on available data, the classification criteria are not met.

The table below indicates whether each agency has listed any ingredient as a carcinogen.

Chemical name	ACGIH	IARC	NTP	OSHA
Deltamethrin 52918-63-5	-	Group 3 - Not classifiable as to carcinogenicity in humans	-	Present
Phenol, 2,6-bis(1,1-dimethylethyl)-4-methyl- 128-37-0	A4 - Not classifiable as a human carcinogen	Group 3 - Not classifiable as to carcinogenicity in humans	-	-

Reproductive toxicity No information available.

STOT - single exposure No information available.

STOT - repeated exposure No information available.

Aspiration hazard No information available.

12. Ecological information

Ecotoxicity Very toxic to aquatic life with long lasting effects.

Chemical name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
Solvent naphtha, light aromatic 64742-95-6	-	LC50: =9.22mg/L (96h, Oncorhynchus mykiss)	-	EC50: =6.14mg/L (48h, Daphnia magna)
Phenol, 2,6-bis(1,1-dimethylethyl)-4-methyl- 128-37-0	EC50: =6mg/L (72h, Pseudokirchneriella subcapitata) EC50: >0.42mg/L (72h, Desmodesmus subspicatus)	-	-	-

Persistence and degradability No information available.

Bioaccumulative potential

Component Information

Chemical name	Partition coefficient
Phenol, 2,6-bis(1,1-dimethylethyl)-4-methyl- 128-37-0	5.1

Mobility No information available.

Other adverse effects No information available.

13. Disposal considerations

Disposal methods

Waste from residues/unused products Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation.

Contaminated packaging Do not reuse empty containers.

14. Transport information

TDG

Basic Description UN3351, Pyrethroid Pesticide, Liquid, toxic, flammable, 6.1, (3), PG III
UN Number UN3351
Hazard Class 6.1 (3)
Packaging Group III
Marine Pollutant Yes
Proper Shipping Name Pyrethroid Pesticide, Liquid, toxic, flammable

IATA

Basic Description UN3351, Pyrethroid Pesticide, Liquid, toxic, flammable, 6.1, (3), PG III
UN Number UN3351
Hazard Class Packaging 6.1 (3)
Group Marine Pollutant III
Proper Shipping Name Yes
 Pyrethroid Pesticide, Liquid, toxic, flammable

IMDG

Basic Description UN3351, Pyrethroid Pesticide, Liquid, toxic, flammable, 6.1, (3), PG III
UN Number UN3351
Hazard Class Packaging 6.1 (3)
Group Marine Pollutant III
Proper Shipping Name Yes
 Pyrethroid Pesticide, Liquid, toxic, flammable

15. Regulatory information

Safety, health and environmental regulations/legislation specific for the substance or mixture

International Regulations

The Montreal Protocol on Substances that Deplete the Ozone Layer Not applicable

The Stockholm Convention on Persistent Organic Pollutants Not applicable

The Rotterdam Convention Not applicable

International Inventories

Contact supplier for inventory compliance status

16. Other information

NFPA	Health hazards 2	Flammability 1	Instability 0	Special hazards -
HMIS	Health hazards 1	Flammability 1	Physical hazards 0	Personal protection X

Key or legend to abbreviations and acronyms used in the safety data sheet

Legend

ACGIH	American Conference of Governmental Industrial Hygienists
ADN	Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways (Europe)
ADR	Agreement concerning the International Carriage of Dangerous Goods by Road (Europe)
AIIC	Australian Inventory of Industrial Chemicals
ATE	Acute Toxicity Estimate
ASTM	American Society for the Testing of Materials
bar	Biological Reference Values for Chemical Compounds in the Work Area
BAT	Biological tolerance values for occupational exposure
BEL	Biological exposure limits
bw	Body weight
Ceiling	Maximum limit value
CMR	Carcinogen, Mutagen or Reproductive Toxicant
DOT	Department of Transportation (United States)
DSL	Domestic Substances List (Canada)
EmS	Emergency Schedule
ENCS	Existing and New Chemical Substances (Japan)
EPA	U.S. Environmental Protection Agency
GHS	Globally Harmonized System
HMIS	Hazardous Materials Identification System
IARC	International Agency for Research on Cancer
IATA	International Air Transport Association
IBC	International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk
ICAO	International Civil Aviation Organization
IECSC	Inventory of Existing Chemical Substances in China
IMDG	International Maritime Dangerous Goods
IMO	International Maritime Organization
ISO	International Organization for Standardization
KECI	Korean Existing Chemicals Inventory
LC50	Lethal Concentration to 50% of a test population
LD50	Lethal Dose to 50% of a test population (Median Lethal Dose)
MARPOL	International Convention for the Prevention of Pollution from Ships
NFPA	National Fire Protection Association
n.o.s.	Not Otherwise Specified
NOAEC	No Observed Adverse Effect Concentration
NOAEL	No Observed Adverse Effect Level
NOELR	No Observable Effect Loading Rate
NZIoC	New Zealand Inventory of Chemicals
OECD	Organization for Economic Cooperation and Development
OEL	Occupational exposure limits
PBT	Persistent, Bioaccumulative and Toxic substance
PICCS	Philippines Inventory of Chemicals and Chemical Substances
PMT	Persistent, Mobile and Toxic
PPE	Personal protective equipment
QSAR	Quantitative Structure Activity Relationship
RID	Agreement concerning the International Carriage of Dangerous Goods by Rail (Europe)
SADT	Self-Accelerating Decomposition Temperature
SAR	Structure-activity relationship
SDS	Safety Data Sheet
SL	Surface Limit
STEL	Short Term Exposure Limit
STOT RE	Specific target organ toxicity - Repeated exposure
STOT SE	Specific target organ toxicity - Single exposure

TCSI	Taiwan Chemical Substance Inventory
TDG	Transport of Dangerous Goods (Canada)
TSCA	Toxic Substances Control Act (United States)
TWA	Time-Weighted Average
UN	United Nations
VOC	Volatile organic compounds
vPvB	Very Persistent and Very Bioaccumulative
vPvM	Very Persistent and Very Mobile
As	Allergenic substance
DS	Dermal Sensitizer
Ot	Ototoxicant
pOt	Ototoxicant - potential to cause hearing disorders
PS	Photosensitizer
RS	Respiratory Sensitizer
S	Sensitizer
poS	Sensitizer - capable of causing occupational asthma
Sa	Simple asphyxiant
Sd	Skin designation
pSd	Skin designation - potential for cutaneous absorption
Sdv	Skin designation - vacated
Sk	Skin notation
dSk	Skin notation - danger of cutaneous absorption
pSk	Skin notation - potential for cutaneous absorption

Key literature references and sources for data used to compile the SDS

U.S. Environmental Protection Agency ChemView Database
 European Food Safety Authority (EFSA)
 U.S. Environmental Protection Agency
 Acute Exposure Guideline Level(s) (AEGL(s))
 U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act
 U.S. Environmental Protection Agency High Production Volume Chemicals
 Food Research Journal
 Hazardous Substance Database
 International Uniform Chemical Information Database (IUCLID)
 Japan GHS Classification
 Australia National Industrial Chemicals Notification and Assessment Scheme (NICNAS)
 NIOSH (National Institute for Occupational Safety and Health)
 National Library of Medicine's ChemID Plus (NLM CIP)
 National Library of Medicine's PubMed database (NLM PUBMED)
 U.S. National Toxicology Program (NTP)
 New Zealand's Chemical Classification and Information Database (CCID)
 International Organization for Economic Co-operation and Development (OECD) Environment, Health, and Safety Publications
 International Organization for Economic Co-operation and Development (OECD) High Production Volume Chemicals Program
 International Organization for Economic Co-operation and Development (OECD) Screening Information Data Set
 United Nations World Health Organization (WHO)

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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