

SAFETY DATA SHEET

1. Identification

Product identifier Avesta CS

Other means of identification

SDS number 535

Recommended use Pyrethroid type insecticide/miticide.

Recommended restrictions Keep out of the Reach of Children!

EPA Registration number EPA: 74530-53-5481

Manufacturer/Importer/Supplier/Distributor information

Manufacturer

Company name AMVAC Chemical Corporation

Address 4100 E Washington Blvd
Los Angeles, CA 90023 USA

Telephone AMVAC Chemical Corp 323-264-3910
AMVAC Chemical Corp 323-268-1028 (FAX)

Website www.Amvac-Chemical.com

E-mail CustServ@Amvac-Chemical.com

Emergency phone number Medical 888-681-4261
CHEMTREC® (USA+Canada) 800-424-9300
Product Use 888-462-6822
CHEMTREC® (Outside USA) +1-703-527-3887

2. Hazard(s) identification

Physical hazards Not classified.

Health hazards Not classified.

Environmental hazards Not classified.

OSHA defined hazards Not classified.

Label elements

Hazard symbol None.

Signal word None.

Hazard statement Not available.

Precautionary statement

Prevention Wear protective gloves and eye/face protection.

Response 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.
IF ON SKIN: Wash with plenty of soap and water.

Storage Not available.

Disposal Not available.

Hazard(s) not otherwise classified (HNOC) Very toxic to aquatic life. Very toxic to aquatic life with long lasting effects.

Supplemental information May cause mild eye irritation.

3. Composition/information on ingredients

Mixtures

Chemical name	Common name and synonyms	CAS number	%
Lambda-Cyhalothrin		68085-85-8	9.7
ACETOPHENONE		98-86-2	4

4. First-aid measures

Inhalation	Move 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 CENTER or doctor/physician for further treatment advice.
Skin contact	Remove contaminated clothing immediately and wash skin with soap and water. If skin irritation occurs: Get medical advice/attention.
Eye contact	Immediately flush with plenty of water for at least 15 minutes. If easy to do, remove contact lenses. Call a physician or poison control center for treatment advice.
Ingestion	Call a physician or poison control center immediately. Do not give any liquid to the person. Do not induce vomiting without advice from poison control center.
Most important symptoms/effects, acute and delayed	Not available.
Indication of immediate medical attention and special treatment needed	Treat symptomatically.

5. Fire-fighting measures

Suitable extinguishing media	The product itself does not burn. Use extinguishing agent suitable for type of surrounding fire.
Unsuitable extinguishing media	Not applicable, non-combustible.
Specific hazards arising from the chemical	Not applicable.
Special protective equipment and precautions for firefighters	As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.
Fire fighting equipment/instructions	Move containers from fire area if you can do so without risk. Use standard firefighting procedures and consider the hazards of other involved materials.
General fire hazards	This is a water base non-flammable liquid that will support fire only if the solvent is evaporated off first.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures	Wear appropriate protective equipment and clothing during clean-up. Avoid contact with eyes, skin, and clothing. Ensure adequate ventilation.
Methods and materials for containment and cleaning up	Dike the spilled material. Absorb spill with vermiculite or other inert material. Shovel, sweep or vacuum up spillage and collect in suitable container for disposal.
Environmental precautions	Collect and dispose of spillage as indicated in section 13 of the SDS. Do not discharge into drains, water courses or onto the ground.

7. Handling and storage

Precautions for safe handling	Use only outdoors or in a well-ventilated area. Avoid contact with eyes, skin, and clothing. Wash thoroughly after handling. Do not eat, drink, or smoke when using this product. Avoid breathing mist or vapor.
Conditions for safe storage, including any incompatibilities	Store in accordance with local/regional/national/international regulation. Store in a tightly closed container. Store in cool, dry place. Store in a well-ventilated place. Store away from incompatible materials (see Section 10 of the SDS). Do not store near food, feed, fertilizers, seeds, insecticides or fungicides. Do not allow material to freeze.

8. Exposure controls/personal protection

Occupational exposure limits

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value
Lambda-Cyhalothrin (CAS 68085-85-8)	PEL	5 mg/m ³

US. ACGIH Threshold Limit Values

Components	Type	Value
ACETOPHENONE (CAS 98-86-2)	TWA	10 ppm
Lambda-Cyhalothrin (CAS 68085-85-8)	TWA	5 mg/m ³

US. NIOSH: Pocket Guide to Chemical Hazards

Components	Type	Value
Lambda-Cyhalothrin (CAS 68085-85-8)	TWA	5 mg/m ³

US. Workplace Environmental Exposure Level (WEEL) Guides

Components	Type	Value
ACETOPHENONE (CAS 98-86-2)	TWA	50 mg/m ³ 10 ppm

Biological limit values No biological exposure limits noted for the ingredient(s).

Appropriate engineering controls Not available.

Individual protection measures, such as personal protective equipment

Eye/face protection Tight fitting chemical goggles are recommended.

Skin protection

Hand protection Chemical resistant gloves.

Other

Long-sleeved shirt and long pants or coveralls, socks and closed toe shoes are required.

Respiratory protection In case of insufficient ventilation, wear suitable respiratory equipment.: Chemical respirator with organic vapor cartridge.

Thermal hazards Not available.

9. Physical and chemical properties**Appearance**

Physical state Liquid.

Form Encapsulated suspension.

Color Off-white

Odor Pungent

Odor threshold Not available.

pH 4.17

Melting point/freezing point Not available.

Initial boiling point and boiling range Not available.

Flash point Not available.

Evaporation rate Not available.

Flammability (solid, gas) Not available.

Upper/lower flammability or explosive limits

Flammability limit - lower (%) Not available.

Flammability limit - upper (%) Not available.

Explosive limit - lower (%) Not available.

Explosive limit - upper (%) Not available.

Vapor pressure Not available.

Vapor density Not available.

Relative density 1.01

Solubility(ies)

Solubility (water) Miscible

Auto-ignition temperature Not available.
Decomposition temperature Not available.
Viscosity Not available.

10. Stability and reactivity

Reactivity Not available.
Chemical stability Stable at normal conditions and storage conditions.
Possibility of hazardous reactions None known.
Conditions to avoid None known.
Incompatible materials Not available.
Hazardous decomposition products Carbon oxides. Nitrogen oxides (NOx).

11. Toxicological information

Information on likely routes of exposure

Inhalation Based on available data, the classification criteria are not met.
Skin contact Not a skin irritant or skin sensitizer.
Eye contact Not an eye irritant
Ingestion None known.
Symptoms related to the physical, chemical and toxicological characteristics None known.

Information on toxicological effects

Acute toxicity

Product	Species	Test Results
Avesta CS		
Acute		
Dermal		
<i>Liquid</i>		
LD50	Rat	> 5000 mg/kg
Inhalation		
<i>Liquid</i>		
LC50	Rat	> 2.23 mg/l, 4 h
Oral		
<i>Liquid</i>		
LD50	Rat	> 5000 mg/kg

Skin corrosion/irritation Non irritating to skin.

Serious eye damage/eye irritation Non-irritating

Respiratory or skin sensitization

Respiratory sensitization None known.

Skin sensitization Not a sensitizer.

Germ cell mutagenicity Based on available data, the classification criteria are not met.

Carcinogenicity None of the components present in this material at concentrations equal to or greater than 0.1% are listed by IARC, NTP, or OSHA, as a carcinogen.

IARC Monographs. Overall Evaluation of Carcinogenicity

Not listed.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not regulated.

US. National Toxicology Program (NTP) Report on Carcinogens

Not listed.

Reproductive toxicity	Based on available data, the classification criteria are not met.
Specific target organ toxicity - single exposure	No specific target organ toxicity is expected after single exposure.
Specific target organ toxicity - repeated exposure	No specific target organ toxicity is expected after repeated exposure.
Aspiration hazard	None known.

12. Ecological information

Ecotoxicity	Very toxic to aquatic life. Do not apply directly to water, to areas where surface water is present, or to intertidal areas below the mean high water mark.
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Product	Species	Test Results
Avesta CS		
Aquatic		
<i>Acute</i>		
Algae	LC50	Algae 28.7 mg/l, 72 h
Crustacea	LC50	Daphnia magna 24.3 µg/l, 48 h
Fish	LC50	Rainbow Trout (oncorhynchus mykiss) 0.06 mg/l, 96 h

Persistence and degradability	Moderately persistent in the soil environment, with a half-life of approximately 30 days in most soils.
Bioaccumulative potential	Bioaccumulation is unlikely.
Mobility in soil	Active ingredient has a high affinity for soil.
Other adverse effects	No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

13. Disposal considerations

Disposal instructions	Collect and reclaim or dispose in sealed containers at licensed waste disposal site according to all applicable regulations.
Hazardous waste code	Not regulated.
Waste from residues / unused products	Not available.
Contaminated packaging	Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal in accordance with all applicable regulations.

14. Transport information

DOT
Not regulated as dangerous goods.

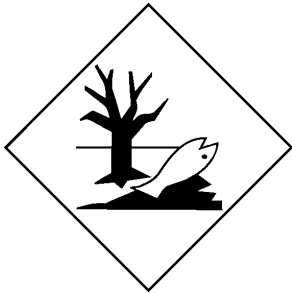
IATA
Not regulated as dangerous goods.

IMDG	
UN number	UN3082
UN proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S., MARINE POLLUTANT
Transport hazard class(es)	
Class	9
Subsidiary risk	-
Packing group	III
Environmental hazards	
Marine pollutant	Yes
EmS	F-A, S-F
Special precautions for user	Not available.
Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code	Not available.

IMDG



Marine pollutant



15. Regulatory information

US federal regulations

This product is not a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

This product is registered under EPA/FIFRA Regulations. It is a violation of Federal Law to use this product in any manner inconsistent with its labeling. Read and follow all label directions. This product is excluded from listing requirements under EPA/TSCA.

United States Environmental Protection Agency (EPA) Labeling Requirements: This chemical is a pesticide product registered by the United States 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 (SDS), and for workplace labels of non-pesticide chemicals. The hazard information required on the pesticide label is reproduced below. The pesticide label also includes other important information, including directions for use.

CAUTION!

Harmful if absorbed through skin. Avoid contact with eyes, skin, and clothing. Wash hands after handling and before eating, drinking, chewing gum or using tobacco. Remove and wash contaminated clothing before reuse. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

CERCLA Hazardous Substance List (40 CFR 302.4)

ACETOPHENONE (CAS 98-86-2)

Listed.

Lambda-Cyhalothrin (CAS 68085-85-8)

Listed.

SARA 304 Emergency release notification

Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not regulated.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories

Immediate Hazard - Yes

Delayed Hazard - Yes

Fire Hazard - No

Pressure Hazard - No

Reactivity Hazard - No

SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 Hazardous chemical No

SARA 313 (TRI reporting)

Chemical name	CAS number	% by wt.
Lambda-Cyhalothrin	68085-85-8	9.7
ACETOPHENONE	98-86-2	4

Other federal regulations**Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List**

ACETOPHENONE (CAS 98-86-2)

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

Safe Drinking Water Act (SDWA) Not regulated.**US state regulations****US. California Controlled Substances. CA Department of Justice (California Health and Safety Code Section 11100)**

Not listed.

US. California. Candidate Chemicals List. Safer Consumer Products Regulations (Cal. Code Regs, tit. 22, 69502.3, subd. (a))

ACETOPHENONE (CAS 98-86-2)

US. Massachusetts RTK - Substance ListACETOPHENONE (CAS 98-86-2)
Lambda-Cyhalothrin (CAS 68085-85-8)**US. New Jersey Worker and Community Right-to-Know Act**ACETOPHENONE (CAS 98-86-2)
Lambda-Cyhalothrin (CAS 68085-85-8)**US. Pennsylvania Worker and Community Right-to-Know Law**ACETOPHENONE (CAS 98-86-2)
Lambda-Cyhalothrin (CAS 68085-85-8)**US. Rhode Island RTK**ACETOPHENONE (CAS 98-86-2)
Lambda-Cyhalothrin (CAS 68085-85-8)**US. California Proposition 65**

Not Listed.

International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	Yes
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	No

*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

16. Other information, including date of preparation or last revision

Issue date	06-28-2016
Version #	01
Further information	Not available.
HMIS® ratings	Health: 2* Flammability: 0 Physical hazard: 0
NFPA ratings	Health: 2 Flammability: 0 Instability: 0

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