

CAUSTRA™

600 EC

SAFETY DATA SHEET

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/ MIXTURE AND OF THE COMPANY/UNDERTAKING

Product identifiers

Product name: Caustra™ 600 EC

PMRA Registration No.: 35837

Relevant identified uses of the substance or mixture and uses advised against

Crop protection product, herbicide

Details of the supplier of the safety data sheet

Company: Avesta CropScience Inc.

Address: Suite 2900, Bentall 5
550 Burrard Street
Vancouver, BC, V6C 0A3

Telephone: 1-720-625-2797

Website: <https://avestacrop.com>

Emergency telephone number: 1-800-424-9300

SECTION 2: HAZARDS IDENTIFICATION

| | |
|---|------------|
| Acute toxicity - oral | Category 4 |
| Acute toxicity - dermal | Category 4 |
| Acute toxicity - inhalation (dusts/mists) | Category 4 |
| Skin sensitization | Category 1 |
| Serious eye damage/eye irritation | Category 1 |

Signal word: Danger

Hazard statements:

Harmful if swallowed

Harmful in contact with skin

Harmful if inhaled

Causes serious eye damage

May cause an allergic skin reaction

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. Avoid breathing vapors or mists. Use only outdoors or in a well-ventilated area. Contaminated work clothing should not be allowed out of the workplace. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking while using this product.

Precautionary statements - response

If in eyes: Rinse cautiously with water for several minutes.

Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a poison control centre or doctor.

If on skin: Wash with plenty of soap and water. Call a poison control centre or doctor if you feel unwell. Take off contaminated clothing and wash it before reuse. If skin irritation or rash occurs, seek medical advice/attention.

If swallowed: Call a poison control centre or doctor if you feel unwell. Rinse mouth.

If inhaled: Remove person to fresh air and keep comfortable for breathing. Call a poison control centre or doctor if you feel unwell.

In case of fire: Use dry chemical, CO₂, water spray or regular foam to extinguish.

Precautionary statements - storage

Store in a well-ventilated place.

Precautionary statements - disposal

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

Other information

Causes mild skin irritation. Toxic to aquatic organisms. Avoid release to the environment.

Unknown acute toxicity

6.539% of the mixture consists of ingredient(s) of unknown acute oral toxicity/

6.539% of the mixture consists of ingredient(s) of unknown acute dermal toxicity.

6.539% of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (dust/mist).

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Chemical name: 2-Ethylhexyl (4-chloro-2-methylphenoxy)acetate

CAS No.: 29450-45-1

Weight-%: 90-99%

Weight-%: 90-99%

Chemical name: Benzenesulfonic acid, 4-C10-13-sec-alkyl derivs., calcium salts

CAS No.: 84989-14-0

Weight-%: 1-< 3%

Chemical name: Isobutyl alcohol

CAS No.: 78-83-1

Weight-%: 1-< 3%

SECTION 4: FIRST-AID MEASURES

General advice: Show this safety data sheet to the doctor in attendance. Immediate medical attention is required.

Inhalation: Remove to fresh air. Seek medical attention immediately. If breathing has stopped, give artificial respiration.

Eye contact: Rinse immediately with plenty of water for at least 15 minutes, including under the eyelids. Keep eyes wide open while rinsing. Do not rub affected area. Remove contact lenses, if present and easy to do. Continue rinsing. Get immediate medical attention.

Skin contact: Wash immediately with soap and plenty of water while removing all contaminated clothing and shoes. May cause an allergic skin reaction in susceptible individuals. If symptoms persist, call a physician.

Ingestion: Do NOT induce vomiting. Rinse mouth. Never give anything by mouth to an unconscious person. Get medical attention.

Self-protection of the first aider: Remove all sources of ignition. Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination. Avoid contact with skin, eyes or clothing. Avoid breathing vapors or mists. Use personal protective equipment as required. See section 8 for more information.

Symptoms: Burning sensation. May cause blindness. May cause redness and tearing of the eyes. Itching. Rashes. Hives. Prolonged contact may cause redness and irritation. Coughing and/or wheezing. Difficulty in breathing.

Note to physicians: May cause sensitization in susceptible persons. Treat symptomatically.

SECTION 5: FIREFIGHTING MEASURES

Suitable extinguishing media: Dry chemical, CO₂, water spray or regular foam.

Unsuitable extinguishing media: None known based on information supplied.

Special hazards arising from the substance or mixture: Keep product and empty container away from heat and sources of ignition. In the event of fire, cool tanks with water spray. Product may contain a sensitizer. May cause sensitization by skin contact.

Hazardous combustion products: May emit toxic fumes under fire conditions.

Explosion data

Sensitivity to mechanical impact: None.

Sensitivity to static discharge: Yes.

Special protective equipment and precautions for firefighters:

Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protective equipment.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Evacuate personnel to safe areas. Use personal protective equipment as required. See section 8 for more information. Take precautionary measures against static discharges. Do not touch or walk through spilled material. Avoid contact with skin, eyes or clothing. Ensure adequate ventilation. Keep people away from and upwind of spill/leak. Avoid breathing vapors or mists.

Methods for containment: Stop leak if it can be done without risk. Do not touch or walk through spilled material. Dike far ahead of liquid spill for later disposal.

Methods for cleaning up: Take precautionary measures against static discharges. Dam up. Soak up with inert absorbent material. Pick up and transfer to properly labeled containers.

Prevention of secondary hazards: Clean contaminated objects and areas thoroughly in accordance with environmental regulations.

SECTION 7: HANDLING AND STORAGE

Precautions for safe handling: Use personal protective equipment as required. Avoid contact with skin, eyes or clothing. Use with adequate ventilation. Avoid exposure to excessive heat, sparks, or open flames. Handle in accordance with good industrial hygiene and safety practice. Do not eat, drink or smoke when using this product. Take off contaminated clothing and wash before reuse.

General hygiene considerations: Do not eat, drink, or smoke when using this product. Wash hands before breaks and immediately after handling. Contaminated work clothing should not be allowed out of the workplace. Regular cleaning of equipment, work area, and clothing is recommended.

Conditions for safe storage, including any incompatibilities
Keep containers tightly closed in a dry, cool and well-ventilated place. Keep away from heat, sparks, flame and other sources of ignition (i.e., pilot lights, electric motors and static electricity). Keep in properly labeled containers. Store in accordance with the applicable national regulations. Store in accordance with local regulations. Keep out of the reach of children.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering controls:

Showers
Eyewash stations
Ventilation systems.

Individual protection measures, such as personal protective equipment

Eye/face protection: Face protection shield. Tight sealing safety goggles.

Hand protection: Wear suitable gloves.

Skin and body protection: Wear suitable protective clothing appropriate to the task being performed, such as chemical-resistant clothing or apron where splashing may occur.

Respiratory protection: Use appropriate respiratory protection where engineering controls are insufficient to maintain airborne concentrations at acceptable levels. Consult an industrial hygienist to determine appropriate respiratory protection for specific use conditions.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Form: Transparent liquid

Odor: Ester

Odor threshold: No data available.

Color: Light brown

pH value (as aqueous solution): 3.61

Melting point: No data available.

Boiling temperature: No data available.

Flash point: 81°C

Flammability: No data available.

Dynamic viscosity: 27.1–27.7 mPa·s at 20°C

Relative density: 1.06 g/mL

SECTION 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: Heat, flames and sparks.

Incompatible materials: Strong acids, strong bases, oxidizing agents.

Hazardous decomposition products: None known based on information supplied.

SECTION 11: TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Inhalation: Specific test data for the substance or mixture is not available. Harmful by inhalation (based on components).

Eye contact: Specific test data for the substance or mixture is not available. Causes serious eye damage. May cause irreversible damage to eyes.

Skin contact: Specific test data for the substance or mixture is not available. May cause sensitization by skin contact. Repeated or prolonged skin contact may cause allergic reactions with susceptible persons. May be absorbed through the skin in harmful amounts. Causes mild skin irritation. Harmful in contact with skin.

Ingestion: Specific test data for the substance or mixture is not available. Ingestion may cause gastrointestinal irritation, nausea, vomiting or diarrhea. Harmful if swallowed.

Symptoms: Burning sensation. May cause blindness. May cause redness and tearing of the eyes. Itching. Rashes. Hives. Prolonged contact may cause redness and irritation. Coughing or wheezing. Difficulty breathing.

Acute toxicity: Harmful if swallowed. Harmful by skin contact. Harmful by inhalation.

The following ATE values have been calculated for the mixture:

ATEmix (oral) 1,395.84 mg/kg

ATEmix (dermal) 1,184.20 mg/kg

ATEmix (inhalation-dust/mist) 1.62 mg/L

Unknown acute toxicity

6.539% of the mixture consists of ingredient(s) of unknown acute oral toxicity

6.539% of the mixture consists of ingredient(s) of unknown acute dermal toxicity

6.539% of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (dust/mist)

Chemical name: 2-Ethylhexyl (4-chloro-2-methylphenoxy) acetate
29450-45-1

Oral LD50: = 1300 mg/kg (rat)

Dermal LD50: > 2000 mg/kg (rat)

Inhalation LC50: > 5.05 mg/L (rat) 4 h

Chemical name: Isobutyl alcohol
78-83-1

Oral LD50: = 2460 mg/kg (rat)

Dermal LD50: = 3400 mg/kg (rabbit)

Inhalation LC50: > 18.18 mg/L (rat) 4 h

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

Skin corrosion/irritation: Classification based on data available for ingredients. Causes mild skin irritation.

Serious eye damage/eye irritation: Classification based on data available for ingredients. Causes serious eye damage.

Respiratory or skin sensitization: May cause an allergic skin reaction.

Germ cell mutagenicity: No information available.

Carcinogenicity: No information available.

Reproductive toxicity: No information available.

STOT - single exposure: No information available.

STOT - repeated exposure: No information available.

Aspiration hazard: No information available.

SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicity: Very toxic to aquatic life with long lasting effects.

Aquatic ecotoxicity

Chemical name: 2-Ethylhexyl (4-chloro-2-methylphenoxy)acetate

Fish: LC50: 3.2-4.6 mg/L (96 h, *Lepomis macrochirus*)

LC50: =3.2 mg/L (96 h, *Oncorhynchus mykiss*)

LC50: >0.55 mg/L (96 h, *Lepomis macrochirus*)

Crustacea: EC50: =0.29 mg/L (48 h, *Daphnia magna*)

Algae/aquatic plants: EC50: =0.46 mg/L (72 h, *Pseudokirchneriella subcapitata*)

EC50: =0.43 mg/L (96 h, *Pseudokirchneriella subcapitata*)

Toxicity to microorganisms: Not applicable.

Terrestrial ecotoxicity

Chemical name: 2-Ethylhexyl (4-chloro-2-methylphenoxy)acetate

Earthworm: Not applicable.

Avian: Dietary toxicity: LC50 > 5620 ppm (Anas platyrhynchos, 5 days)

Dietary toxicity: LC50 > 5620 ppm (Colinus virginianus, 5 days)

Dietary toxicity: NOEC = 562 ppm (Anas platyrhynchos, 5 days)

Dietary toxicity: NOEC = 1780 ppm (Colinus virginianus, 5 days)

Bioaccumulative potential

Chemical name: 2-Ethylhexyl (4-chloro-2-methylphenoxy)acetate

Partition coefficient: 4.49

Bioconcentration factor (BCF): Not applicable.

Trophic magnification factor (TMF): Not applicable.

Chemical name: Benzenesulfonic acid, 4-C10-13-sec-alkyl derivs., calcium salts

Partition coefficient: 6

Bioconcentration factor (BCF): Not applicable.

Trophic magnification factor (TMF): Not applicable.

Chemical name: Isobutyl alcohol

Partition coefficient: 1

Bioconcentration factor (BCF): Not applicable.

Trophic magnification factor (TMF): Not applicable.

SECTION 13: DISPOSAL CONSIDERATIONS

Disposal considerations

Waste disposal of substance: Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation.

Container disposal: Do not reuse empty containers.

SECTION 14: TRANSPORTATION INFORMATION

TDG: Not regulated/Non-hazardous

Shipment by ground via highway or rail is not regulated as a dangerous good as long as the packaging meets TDG requirements. No marks, labels, placards or shipping papers apply per TDG 1.45.1, but may be used to facilitate multi-modal transport involving ICAO (IATA) or IMO.

IATA: Not regulated in quantities less than 5 L per individual container. See IATA SP A197.

UN number or ID number: UN3082

UN proper shipping name: Environmentally hazardous substance, liquid, n.o.s.

IATA Technical Name: 2-Ethylhexyl (4-chloro-2-methylphenoxy) acetate

Transport hazard class(es): 9

Packing group: III

Special Provisions: A97, A158, A197

ERG Code: 9L

Description: UN3082, Environmentally hazardous substance, liquid, n.o.s. (2-Ethylhexyl (4-chloro-2-methylphenoxy) acetate), 9, III

IMDG: Not regulated in quantities less than 5 L per individual container. See IMDG 2.10.2.7

UN number or ID number: UN3082

UN proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.

Transport hazard class(es): 9

Packing group: III

Marine pollutant indicator: M

Special Provisions: 274, 335, 969

EmS-No.: F-A S-F

Description UN3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (2-Ethylhexyl (4-chloro-2-methylphenoxy)acetate), 9, III, Marine pollutant

SECTION 15: REGULATORY INFORMATION

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.

SECTION 16: OTHER INFORMATION

This SDS summarizes our current understanding of the health and safety hazards associated with the product and guides how to handle and use it safely in the workplace. Each user should read this SDS and consider the information in the context of how the product will be handled and used in the workplace, including in conjunction with other products. If clarification or further information is needed to ensure that an appropriate risk assessment can be made, the user should contact the company. This Safety Data Sheet has been prepared in accordance with the Canadian Hazardous Products Act (HPA) and the Hazardous Products Regulations (HPR) and follows the requirements of WHMIS 2015.