

# SAFETY DATA SHEET

## MCPA 2 EH ESTER 600

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### 1. IDENTIFICATION

Product name: **MCPA 2 EH Ester 600 (PCP REG. NO. 31669)**  
Chemical name of active ingredient(s): MCPA : 4-chloro-2-methylphenoxyacetic acid  
Manufacturer/Registrant: ADAMA Agricultural Solutions Canada Ltd.  
302 – 179 McDermot Ave  
Winnipeg MB R3B 0S1  
Phone: 1-855-264-6262  
Phone: 1-800-535-5053

For fire, spill, and/or leak emergencies, contact Infotrac: Phone: 1-877-250-9291  
For medical emergencies and health and safety inquiries, contact Prosar:

### 2. COMPOSITION/INFORMATION ON INGREDIENTS

#### PHYSICAL PROPERTIES:

**Appearance:** Amber liquid

**Odor:** Characteristic phenolic and hydrocarbon

**EMERGENCY OVERVIEW:** WARNING-POISON. KEEP OUT OF REACH OF CHILDREN. KEEP OUT OF REACH OF CHILDREN. Harmful or fatal if swallowed. Avoid contact with skin, eye and clothing. Wash concentrate from skin or eyes IMMEDIATELY. After use, wash hands and other exposed skin. Avoid breathing spray mist.

#### IMMEDIATE EFFECTS:

**INGESTION:** Harmful or fatal if swallowed. May cause headache, dizziness, nausea, vomiting, gastrointestinal irritation, weakness, central nervous system depression, unconsciousness, respiratory failure, or in extreme cases, death. Small amounts of liquid aspirated into the respiratory system during ingestion or from vomiting may cause mild to severe pulmonary injury and possibly death.

**SKIN CONTACT:** May causes moderate skin irritation. Harmful if absorbed through the skin. Overexposure by skin absorption may cause symptoms similar to those for ingestion. May cause allergic reactions in sensitive individuals.

**INHALATION:** Low to moderate inhalation toxicity based on laboratory animal testing of a similar formulation as a mist. Inhalation toxicity by vapor is unlikely under normal conditions, however, high concentrations of vapors from undiluted product may cause headache, dizziness, respiratory tract irritation and symptoms similar to those from ingestion.

**EYE CONTACT:** May cause severe eye irritation.

**MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE:** Skin exposure may aggravate preexisting skin conditions. Inhalation of spray mist may aggravate preexisting respiratory conditions.

**PRIMARY ROUTES OF EXPOSURE:** Eye contact, skin absorption, inhalation and ingestion.

**OTHER HAZARDS:** See Section 11 and 12.

### 3. HAZARDS IDENTIFICATIONS

CHEMICAL NAME	CAS NO.	%	OSHA PEL	ACGIH TLV	OTHER	NTP/IARC/OSHA (CARCINOGEN)
MCPA (present as 2-ethylhexyl ester)	29450-45-1	90-95	NE	NE	NE	NA
Heavy aromatic petroleum hydrocarbons:	64742-47-8	< 5		200 mg/m <sup>3</sup> (TWA)*	1200 mg/m <sup>3</sup> **	NA

NA: Not applicable; NE: Not established.

\*Manufacturers recommendation, total hydrocarbon.

\*\* Non-aerosol; total hydrocarbon vapor. Can be absorbed through the skin as total hydrocarbon vapor.

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### 4. FIRST AID

#### FIRST AID:

If **swallowed**, call a poison control centre or doctor immediately for treatment advice. Do not induce vomiting unless told to do so by a poison control centre or doctor. Do not give any liquid to the person. Do not give anything by mouth to an unconscious person.

If **on skin or clothing**, take off contaminated clothing. Rinse skin immediately with plenty of water for 15–20 minutes. Call a poison control centre or doctor for treatment advice.

If **inhaled**, move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. Call a poison control centre or doctor for further treatment advice.

If **in eyes**, hold eye open and rinse slowly and gently with water for 15–20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control centre or doctor for treatment advice.

Take container, label or product name and Pest Control Product Registration Number with you when seeking medical attention.

**TOXICOLOGICAL INFORMATION:** DO NOT induce vomiting. This product contains PETROLEUM DISTILLATES. Vomiting may cause aspiration pneumonia. High concentrations of MCPA may cause severe irritation to the eyes. Symptoms of overexposure to MCPA could include slurred speech, twitching, jerking and spasms, drooling, low-blood pressure and unconsciousness. Treat symptomatically.

### 5. FIRE FIGHTING MEASURES

**FLASH POINT:** >100°C

**FLAMMABLE LIMITS: LFL:** NA

**EXTINGUISHING MEDIA:** Water fog, alcohol foam, carbon dioxide, dry chemical.

**HAZARDOUS DECOMPOSITION PRODUCTS:** Hydrogen bromide, other bromine compounds, hydrogen chloride, other chlorine compounds, carbon dioxide, carbon monoxide, oxides of nitrogen, oxides of sulfur and other potentially toxic combustion products may be present.

**FIRE AND EXPLOSION HAZARDS:** When heated above the flash point, this material emits vapors which, when mixed with air, can burn or be explosive. Heavier than air vapors may travel to an ignition source.

**SPECIAL FIRE-FIGHTING PROCEDURES:** Firefighters should wear NIOSH/MSHA approved self-contained breathing apparatus and full protective clothing. Keep unnecessary people away, isolate hazard area and deny entry. Evacuate residents who are downwind of fire. Dike area to prevent runoff and contamination of water sources. Dispose of fire control water later.

### 6. ACCIDENTAL RELEASE MEASURES

**ACTION TO TAKE FOR SPILLS/LEAKS:** Use safety equipment and procedures appropriate to the size of the spill. Keep potential ignition sources and unnecessary people away. Avoid runoff to natural waters and sewers. Surround and absorb spills with inert material such as perlite, clay granules, vermiculite, sand or dirt. Contain all affected material in a closed, labeled container for proper disposal. Isolate from other waste materials. Clean contaminated area such as hard surfaces with detergent and water, collecting cleaning solution for proper disposal. Large spills to soil or similar surfaces may necessitate removal of top soil.

### 7. HANDLING AND STORAGE

**PRECAUTIONS TO BE TAKEN IN HANDLING:** Keep away from food and feed products. Wash concentrate from skin or eyes immediately. Do not inhale spray mist. After use wash hands and other exposed skin. Avoid contamination of ponds, streams, rivers and other water sources.

**PRECAUTIONS TO BE TAKEN IN STORAGE:** Store the container tightly closed away from seeds, fertilizer, plants and foodstuffs. May be stored at any temperature. Shake well before using.

**STORAGE TEMPERATURE (MIN/MAX):** Normal ambient temperatures.

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### 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

THE FOLLOWING RECOMMENDATIONS FOR EXPOSURE CONTROLS/PERSONAL PROTECTION ARE INTENDED FOR THE MANUFACTURE, FORMULATION, PACKAGING AND USE OF THIS PRODUCT.

FOR COMMERCIAL APPLICATIONS AND/OR ON-FARM APPLICATIONS CONSULT THE PRODUCT LABEL.

**RESPIRATORY PROTECTION EQUIPMENT:** Use an approved pesticide respirator if ventilation is not adequate or exposure to sprays, mists or concentrated vapours is likely.

**PROTECTIVE GLOVES:** Chemical-resistant gloves such as nitrile or neoprene.

**EYE AND FACE PROTECTION:** Goggles or face shield when handling concentrate.

**OTHER PROTECTIVE EQUIPMENT:** Long sleeved shirt, long pants, socks and shoes suggested as minimum work clothing. Generally, a second layer such as coveralls suggested for handling concentrate. Use other equipment appropriate to specific situation.

**VENTILATION:** Use only in well ventilated area.

**ENGINEERING CONTROLS:** Use in a well ventilated area. General ventilation with a good source of make-up air recommended as minimum for indoor situations. Ventilation should be adequate to maintain air concentrations below flammable limits.

**ADDITIONAL PROTECTIVE MEASURES:** Discarded clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them. Follow manufacturer's instructions for cleaning and maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

#### USER SAFETY RECOMMENDATIONS:

Users should:

- Wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet.
- Remove clothing immediately after handling this product. Wash outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

**EXPOSURE GUIDELINES:** Refer to Section 3.

### 9. PHYSICAL AND CHEMICAL PROPERTIES

**APPEARANCE:** Amber liquid

**ODOR:** Characteristic phenolic and hydrocarbon

**FLASH POINT:** > 100°C

**pH:** 4.3 (1% dilution)

**DENSITY:** 1.06@25°C

**BOILING POINT:** > 150°C

**VAPOR PRESSURE:** NA

**VAPOR DENSITY (air = 1):** NA. Hydrocarbon component > 1.

**FREEZING POINT:** NA

**MELTING POINT:** NA

**SOLUBILITY IN WATER (20°C):** Product is emulsifiable in water.

### 10. STABILITY AND REACTIVITY

**STABILITY:** Stable under normal use and storage conditions.

**CONDITIONS TO AVOID:** None known

**MATERIALS TO AVOID:** Avoid contact with strong acidic, basic or oxidizing agents.

**HAZARDOUS POLYMERIZATION:** Will not occur.

**HAZARDOUS DECOMPOSITION PRODUCTS:** : Hydrogen bromide, other bromine compounds, hydrogen chloride, other chlorine compounds, carbon dioxide, carbon monoxide, oxides of nitrogen, oxides of sulfur and other potentially toxic combustion products may be present.

### 11. TOXICOLOGICAL INFORMATION

**ACUTE TOXICITY/IRRITATION STUDIES:**

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Acute Oral LD50 (Rat):	1046 mg/kg
Acute Dermal LD50 (Rabbit):	> 2,000 mg/kg
Acute Inhalation LC50 (Rat):	> 2.64 mg/L (4-hr, nose-only exposure)
Eye Irritation (Rabbit):	Moderately irritating
Dermal Irritation (Rabbit):	Moderately irritating
Dermal Sensitization (Guinea Pig):	Not available.

**SUBCHRONIC (TARGET ORGAN) EFFECTS:** (An adverse effect with symptoms that develop slowly over a long period of time): Repeated overexposure may cause effects to liver, kidneys, blood chemistry, testes and gross motor function. Rare cases of peripheral nerve damage have been reported, but extensive animal studies have failed to substantiate these observations, even at high doses of MCPA for prolonged periods. Repeated overexposure may also cause chronic dermatitis and developmental effects.

**CHRONIC EFFECTS/CARCINOGENICITY:** The International Agency for Research on Cancer (IARC) lists exposure to chlorophenoxy herbicides as a class 2B carcinogen, the category for limited evidence for carcinogenicity in humans. Newer MCPA lifetime feeding studies in rats and mice did not show carcinogenic potential. Products similar to the hydrocarbon component are not considered to be mutagenic and are unlikely to cause tumors.

**REPRODUCTIVE TOXICITY:** Testicular effects and lower male fertility have been noted in animal studies.

**DEVELOPMENTAL TOXICITY:** MCPA studies in laboratory animals have shown decreased fetal body weights and delayed development in the offspring at doses toxic to mother animals. Products similar to the hydrocarbon component are not considered to be developmental toxicants.

**GENOTOXICITY:** There have been some positive and some negative studies, but the weight of evidence is that MCPA is not mutagenic.

## 12. ECOLOGICAL INFORMATION

**ENVIRONMENTAL HAZARDS:** Toxic to aquatic organisms and non-target terrestrial plants. This product contains a petroleum distillate which is moderately to highly toxic to aquatic organisms. Avoid contamination of aquatic systems during application. Do not contaminate these systems through direct application, disposal of waste or cleaning equipment.

### ECOLOGICAL TOXICITY:

Data on MCPA 2EHE emulsifiable concentrate formulation unless noted:

96-HOUR LC <sub>50</sub> (mg/L):	> 5.8 (Rainbow Trout)
96-HOUR LC <sub>50</sub> (mg/L):	> 6.6 (Bluegill)
48-HOUR EC <sub>50</sub> (mg/L):	0.3 (Daphnia)
DIETARY LC <sub>50</sub> (ppm):	>5620 (Bobwhite Quail) (Data on MCPA 2EHE)
DIETARY LC <sub>50</sub> (ppm):	>5620 (Mallard Duck) (Data on MCPA 2EHE)

**CHEMICAL FATE INFORMATION:** MCPA 2EHE rapidly hydrolyzes to parent MCPA acid. In soil, MCPA is microbially degraded with typical half-life of approximately 10 to 14 days.

## 13. DISPOSAL CONSIDERATIONS

**END USERS MUST DISPOSE OF ANY UNUSED PRODUCT AS PER THE LABEL RECOMMENDATIONS.**

**PRODUCT DISPOSAL:** For information on disposal of unused, unwanted product, contact the manufacturer or the provincial regulatory agency. Contact the manufacturer and the provincial regulatory agency in case of a spill, and for cleanup of spills.

**CONTAINER DISPOSAL:** Emptied container retains vapor and product residue. Observe all labeled safeguards until container is cleaned, reconditioned or destroyed. Do not reuse container for any purpose. If applicable, return container in accordance with return program. If a recyclable container, dispose of at a container collection site. Contact local distributor, dealer or municipality for the location of the nearest collection site. Before taking the container to the collection site, triple or pressure rinse the empty container adding rinsings to spray tank, and make container unsuitable for further use. If there is no container collection site in your area, dispose of the container in accordance with provincial requirements.

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## 14. TRANSPORT INFORMATION

### CANADIAN TDG DESCRIPTION (Road & Rail):

Not regulated

## 15. REGULATORY INFORMATION

### CANADIAN REGULATIONS:

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the CPR.

### DOMESTIC SUBSTANCES LIST:

Heavy aromatic petroleum hydrocarbons CAS #: 64742-94-5 (< 5%)

### U.S. FEDERAL REGULATIONS:

**REGULATIONS UNDER FIFRA:** All pesticides are governed under FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act). Therefore, the regulations presented below are pertinent only when handled outside of the normal use and applications of pesticides. This includes waste streams resulting from manufacturing/formulation facilities, spills or misuse of products, and storage of large quantities of products containing hazardous or extremely hazardous substances.

### SARA TITLE III CLASSIFICATION:

Section 302: Not applicable.  
Section 311/312: Acute health hazard (immediate)  
Delayed health hazard (chronic)  
Section 313: Not applicable

**CERCLA RQ:** Not applicable

**CA Prop 65:** Not applicable

**RCRA CLASSIFICATION:** Under RCRA, it is the responsibility of the product user to determine at the time of disposal, whether a material containing the product or derived from the product should be classified as a hazardous waste.

**TSCA STATUS:** The ingredients of this product are listed on the TSCA inventory or are exempt.

## 16. OTHER INFORMATION

HAZARD RATINGS	NFPA	HMIS	
HEALTH:	2	2	0 MINIMAL
FLAMMABILITY:	1	2	1 SLIGHT
REACTIVITY:	1	0	2 MODERATE
			3 HIGH
			4 SEVERE

**SDS DATE:** 2-6-2015.

The information contained herein is given in good faith and is believed to be correct, but no warrant, express or implied, is made. Consult ADAMA Agricultural Solutions Canada Ltd. for further information.