



## Nufarm MCPA Amine 600 Liquid Herbicide Safety Data Sheet

Issue Date: 2017-12-21

Supersedes Date: 2017-05-17

{Reserved}

### 1. Identification

**Product Name:** Nufarm MCPA Amine 600 Liquid Herbicide

**PCP Registration No.:** 28384

Refer to the approved product label for handling and use instructions.

**Product Type:** Herbicide

**Supplier:** Nufarm Agriculture Inc.  
Suite 350, 2618 Hopewell Place NE  
Calgary, Alberta, T1Y 7J7, Canada  
1-800-868-5444

**Telephone Numbers:** 24 Hour Emergency Response Number, Chemtrec, 1-800-424-9300.  
For medical emergencies, ProPharma Group, 1-877-325-1840.  
For product and use information, Nufarm Agriculture Inc.,  
1-800-868-5444.

### 2. Hazard Identification

Classified according to UN GHS Version 5.

**Physical Hazards:**

None

**Health Hazards:**

Serious eye damage	Category 1
Skin irritation	Category 3
Acute toxicity (Oral)	Category 4
Acute toxicity (Inhalation)	Category 4
Acute toxicity (Dermal)	Category 5

**Environmental Hazards:**

None

**Signal Word:**

DANGER

**Hazard Statements:**

Causes serious eye damage. Causes mild skin irritation. Harmful if swallowed. Harmful if inhaled. May be harmful in contact with skin.



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### Precautionary Statements:

Causes serious eye damage. Wear goggles or face shield during mixing/loading. Wash concentrate from skin or eyes immediately.

Causes mild skin irritation. May be harmful in contact with skin. Avoid contact with skin, eyes and clothing. After use, wash hands and other exposed skin. Wear a long-sleeved shirt, long pants, socks, shoes and chemical-resistant gloves. Rinse gloves before removal. Remove and wash contaminated clothing before reuse.

Avoid breathing spray mist. Harmful if swallowed.

### 3. Composition / Information on Ingredients

Hazardous Components	CAS No.	Wt. %
MCPA-dimethylammonium	2039-46-5	80-85
Chemical Synonyms: MCPA DMA; 2-Methyl-4-chlorophenoxyacetic acid, dimethylamine salt; 2-(4-chloro-2-methylphenoxy)acetic acid compound with <i>N</i> -methylmethanamine (1:1)		

Other ingredients are considered non-hazardous.

### Content as Expressed on Product Label

MCPA, present as dimethylamine salt ... 600 g a.e./L

### 4. First Aid Measures

**If swallowed**, call a poison control centre or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by a poison control centre or doctor. 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 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.

**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.

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

No specific antidote. Employ supportive care. Treatment should be based on judgement of the physician in response to reactions of the patient. 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.

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## 5. Fire-fighting Measures

**Extinguishing Media:** Water fog, alcohol foam, carbon dioxide, dry chemical.

**Special Firefighting Procedures:** Firefighters should wear self-contained breathing apparatus and full protective clothing when fighting chemical fires. Minimize and contain water runoff.

**Flash Point** ..... >109 C

**Conditions of Flammability** ..... None

**Hazardous Decomposition Products:** ... Under fire conditions, may produce gases such as hydrogen chloride, nitrogen oxides and carbon oxides.

**National Fire Protection Association (NFPA) Hazard Rating:**

**Rating for this product: Health: 2      Flammability: 1      Reactivity: 0**

Hazards Scale: 0 = Minimal   1 = Slight   2 = Moderate   3 = Serious   4 = Severe

## 6. Accidental Release Measures

Use safety equipment and procedures appropriate to the size of the spill. Keep unnecessary people away. Avoid runoff to natural waters and sewers. Surround and absorb spills with inert material such as perlite, sawdust, 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

**Handling:** Avoid contact with skin, eyes and clothing. Wear goggles or face shield during mixing/loading. Wash concentrate from skin or eyes immediately. After use, wash hands and other exposed skin. Wear a long-sleeved shirt, long pants, socks, shoes and chemical-resistant gloves. Rinse gloves before removal. Remove and wash contaminated clothing before reuse.

**Storage:** Store the container tightly closed away from seeds, fertilizer, plants and foodstuffs. Store at temperatures above 0°C. If subjected to freezing temperatures, warm to at least 5°C and mix thoroughly. Shake well before using.

## 8. Exposure Controls / Personal Protection

**Engineering Controls:** Use only outdoors or in a well-ventilated area.

**Personal Protective Equipment:** Goggles or face shield, long-sleeved shirt, long pants, socks, shoes and chemical-resistant gloves. Rinse gloves before removal.

**Exposure Guidelines:**

Component	TWA*	STEL**	Reference/Note
MCPA-dimethylammonium	NE	NE	None found

\*Time-weighted Average, 8-hour unless otherwise noted.

\*\*Short Term Exposure Limit

NE = Not Established

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Refer to approved product label for additional exposure control guidance.

### 9. Physical and Chemical Properties

**NOTE:** Physical data are typical values, but may vary from sample to sample. A typical value should not be construed as a guaranteed analysis or as a specification.

<b>Appearance (physical state, colour, etc.)</b>	clear brown liquid
<b>Odour</b>	phenolic amine
<b>Odour threshold</b>	not available
<b>pH</b>	7.5 – 9.0
<b>Melting point / Freezing point</b>	not available
<b>Initial boiling point and boiling range</b>	not available
<b>Flash point</b>	>109C
<b>Evaporation rate</b>	not available
<b>Flammability (solids, gases)</b>	not applicable
<b>Upper / Lower flammability or explosive limits</b>	not applicable
<b>Vapour pressure</b>	not available
<b>Vapour density</b>	not available
<b>Relative density</b>	1.14 at 25C
<b>Solubility(ies)</b>	866,000 mg/L, MCPA DMA in water
<b>Partition coefficient: n-octanol/water</b>	not applicable
<b>Autoignition temperature</b>	not applicable
<b>Decomposition temperature</b>	not available
<b>Viscosity</b>	not available

### 10. Stability and Reactivity

**Reactivity:** Not reactive.

**Chemical Stability:** Stable under normal handling and storage conditions.

**Possibility of Hazardous Reactions:** Hazardous polymerization will not occur.

**Conditions to Avoid:** Excessive heat. Do not store near heat or flame.

**Incompatible Materials:** Avoid contact with strong acidic, basic or oxidizing agents.

**Hazardous Decomposition Products:** Under fire conditions, may produce gases such as hydrogen chloride, nitrogen oxides and carbon oxides.

### 11. Toxicological Information

**Likely routes of exposure:** Inhalation, ingestion, skin and eye contact.

Symptoms of overexposure to MCPA could include slurred speech, twitching, jerking and spasms, drooling, low-blood pressure and unconsciousness.

**Eye contact:** Severe eye irritation / corrosion. Causes redness and tearing.

**Skin contact:** May be harmful if absorbed through skin. Causes slight skin irritation.

**Ingestion:** May cause headache, dizziness, nausea, vomiting, gastrointestinal irritation, weakness and central nervous system depression.

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**Inhalation:** Contains materials that may be moderately toxic. Vapours could cause headache, nausea, dizziness and respiratory irritation if inhaled.

**Medical Conditions Aggravated by Exposure:** Skin exposure may aggravate preexisting skin conditions. Inhalation of mist may aggravate preexisting respiratory conditions.

## **Toxicological Data:**

Data are from laboratory studies conducted on similar MCPA products.

**Acute oral LD<sub>50</sub> (mg/kg)** ..... 900 to 1400 (Rat, combined male/female)

**Acute dermal LD<sub>50</sub> (mg/kg)** ..... >2000 (Rabbit)

**Acute inhalation LC<sub>50</sub> (mg/l)** ..... >4.72 (Rat, 4-hour, whole body exposure)

**Skin corrosion/irritation** ..... Slightly irritating to the skin (Rabbit)

**Serious eye damage/irritation** ..... Severely irritating / corrosive to the eye (Rabbit)

**Respiratory or skin sensitization** ... Not considered a skin sensitizer

**Germ cell mutagenicity** ..... The weight of evidence is that MCPA is not mutagenic.

**Carcinogenicity** ..... The International Agency for Research on Cancer (IARC) lists exposure to chlorophenoxy herbicides as possibly carcinogenic to humans (Group 2B), the category for limited evidence for carcinogenicity in humans. MCPA was not carcinogenic to rats or mice in lifetime feeding studies.

**Reproductive toxicity** ..... Animal reproduction studies indicate there is no increased sensitivity of the young relative to maternal animals.

## **12. Ecological Information**

### **Ecotoxicity:**

Data are from laboratory studies conducted on similar MCPA products.

**Aquatic Invertebrate:** 48-Hour EC<sub>50</sub> (mg/L) ..... 190 (*Daphnia*)

**Fish:** 96-Hour LC<sub>50</sub> (mg/L) ..... 230 (Rainbow Trout), >310 (Bluegill)

**Algae:** EC<sub>50</sub> (mg/L) ..... 392 (*Selenastrum*)

**Birds:** Oral LD<sub>50</sub> (mg/kg) ..... 390 (Bobwhite Quail), Dietary LC<sub>50</sub> >5620 ppm (Mallard)

**Bees:** Oral and Contact LD<sub>50</sub> ..... >200 µg/bee

**Persistence and Degradability:** MCPA DMA rapidly dissociates to parent MCPA in the environment. In soil, MCPA is microbially degraded with typical half-life of approximately 10 to 14 days.

**Mobility in Soil:** Moderate to high mobility potential, but rapidly degraded.

**Bioaccumulation Potential:** Negligible.

## **13. Disposal Considerations**

For information on disposal of unused, unwanted product, contact the manufacturer or the provincial regulatory agency. Disposal should be made in accordance with federal, provincial and local regulations.

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

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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.

## 14. Transport Information

**Canadian TDG Description (Road & Rail):** Not regulated for transport by road/rail.

**United States:**

**DOT Description:**

Non Regulated

**IMDG**

Non Regulated

**IATA**

Non Regulated

## 15. Regulatory Information

*Pest Control Products Act* Registration Number: ..... 28384

OPAC Schedule: .... 3

Read the approved label, authorized under the *Pest Control Products Act*, prior to using or handling the pest control product.

This chemical is a pest control product registered by Health Canada Pest Management Regulatory Agency and is subject to certain labelling requirements under the *Pest Control Products Act*. These requirements differ from the classification criteria and hazard information required for GHS-consistent safety data sheets. Following is the hazard information required on the pest control product label:



WARNING POISON  
DANGER – CORROSIVE TO EYES

WHMIS exempt.

## 16. Other Information

This Safety Data Sheet (SDS) is designed to comply with the Globally Harmonized System (GHS) of classification, and the *Hazardous Products Regulations*.

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This SDS provides important health, safety and environmental information for employers, employees, emergency responders and others handling large quantities of the product in activities generally other than product use. The product labeling provides that information specifically for product use as intended.

Company and published information is used in the development of this SDS. The information herein is presented in good faith and believed accurate at the date of publication. However, no warranty, expressed or implied, is given.

Revisions to the last issue: Addition of PMRA guidance info to Section 15.

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