

## DREXEL MSMA 6 PLUS

### SECTION 1: MATERIAL IDENTIFICATION

**Product Name:** Drexel MSMA 6 PLUS  
**EPA Reg. No.:** 19713-42  
**Product Usage:** Herbicide  
**Manufacturer:** Drexel Chemical Company  
**Address:** 1700 Channel Avenue  
 PO Box 13327  
 Memphis, Tennessee, 38113-0327, USA  
 901-774-4370

**Emergency Telephone Numbers:** CHEMTREC 800-424-9300  
 DREXEL CHEMICAL COMPANY 901-774-4370

This product is an EPA FIFRA registered pesticide. Some of the classifications on this SDS are not the same as the FIFRA label. Certain sections of this SDS are superseded by federal law governed by EPA for a registered pesticide. Refer to SECTION 15: REGULATORY INFORMATION for explanation.

### SECTION 2: HAZARD IDENTIFICATION

(As defined by the OSHA Hazard Communication Standard, 29)

**Label Elements:**

**Signal Word:** WARNING



**Classifications:**

<b>Hazard Class:</b>	<b>Toxicity Study:</b>	<b>Category:</b>
	Acute Toxicity, Oral	Category 5
	Acute Toxicity, Inhalation	Category 4
	Skin corrosion/ irritation	Category 2
	Corrosive to Metals:	Category 1
	Hazard to Aquatic Environment, short term (Acute)	Category 2

**Hazard Statements:**

<b>H Code:</b>	<b>Statement:</b>
H290	May be corrosive to metals
H303	May be harmful if swallowed
H315	Causes skin irritation
H332	Harmful if inhaled
H400	Very toxic to aquatic life

**Precautionary Statements:**

**Prevention:** Obtain special instructions before use.  
 Do not handle until all safety precautions have been read and understood.  
 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/face protection.  
 Avoid breathing dust/fume/gas/mist/vapors/spray.  
 Use only outdoors or in a well-ventilated area.  
 In case of inadequate ventilation, wear respiratory protection.  
 Avoid release into the environment.  
 May react with aluminum, zinc or steel.

**Response:**

- If in Eyes:** Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do so. Continue rinsing. Get immediate medical advice/attention.
- If Swallowed:** Call a POISON CENTER or doctor/physician if you feel unwell. Treat symptomatically.
- If Inhaled:** Remove person to fresh air and keep comfortable for breathing. Call POISON CENTER or doctor if you feel unwell.
- If on Skin or Clothing:** Wash with plenty of water. If skin irritation or rash occurs: Get medical advice/attention. Take off contaminated clothing and wash it before reuse.
- If exposed or concerned:** None available, get medical attention.

**Storage:**

Store in a well-ventilated place. Keep container tightly closed. Store locked up.

**Disposal:**

Dispose of contents/container in accordance with your local or area regulatory authorities.

**Specific hazards:**

None available.

### SECTION 3: COMPOSITION INFORMATION

<u>Chemical Name:</u>	<u>Synonym:</u>	<u>CAS No.:</u>	<u>EC No.:</u>	<u>RTECS:</u>	<u>% By Wt.:</u>
<b>Active Ingredient:</b> Monosodium acid methanearsonate*	MSMA, Monosodium methanearsonate	2163-80-6	218-495-9	PA2625000	47.6%
<b>Inert Ingredients:</b>	N/A	N/A	N/A	N/A	52.4%

\*Total Arsenic (as elemental), all in water-soluble form, is 22.0%.

### SECTION 4: FIRST-AID MEASURES

**Have the product container or label with you when calling a poison control center or doctor or going for treatment. You may also call CHEMTREC at 800-424-9300 for emergency medical treatment information.**

- Eye Contact:** Hold eye open and rinse slowly and gently with water for 15 to 20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.
- If Swallowed:** Call a poison control center 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 center or doctor. Do not give anything by mouth to an unconscious person.
- Skin/Clothing Contact:** Take off contaminated clothing. Rinse skin immediately with plenty of water for 15 to 20 minutes. Call a poison control center 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 mouth-to-mouth, if possible. Call a poison control center or doctor for further treatment advice.
- Indication of Medical Attention and Special Treatment Needed:** Treat symptomatically  
This product has low oral, dermal, and inhalation toxicity. If swallowed, gastric lavage using an endotracheal tube may be preferred to vomiting. Literature recommendations for arsenic poisoning call for chelation therapy with BAL or d-penicillin. Persons with sensitivity to penicillin may suffer an allergic reaction. BAL is recommended for persons allergic to penicillin.

### SECTION 5: FIRE FIGHTING MEASURES

- Fire Fighting Media:** Use dry chemical or carbon dioxide when fighting fires involving this product. Do not use water or foam, as this may spread material.

**Fire Fighting Procedures:** Keep people away. Isolate fire and deny unnecessary entry. Evacuate the area and fight the fire from upwind at a safe distance to avoid hazardous vapors or decomposition products. Cool containers with water if possible. Dike and collect fire-extinguishing water to prevent environmental damage and excessive waste runoff.

**Special Protective Equipment for Firefighters:** Wear positive-pressure self-contained breathing apparatus (SCBA) and protective firefighting clothing (includes firefighting helmet, coat, trousers, boots, and gloves). Use full face shield and operate in positive pressure mode. Avoid contact with this material during firefighting operations. If contact is likely, change to full chemical resistant firefighting clothing with self-contained breathing apparatus. If this is not available, wear full chemical resistant clothing with self-contained breathing apparatus and fight fire from a remote location. For protective equipment in post-fire or non-fire clean-up situations, refer to the relevant sections.

**Specific Fire Hazards:** Closed containers may rupture if exposed to excess heat or flame due to a build-up of internal pressure.  
 Thermal decomposition during a fire can produce fumes and irritating gases.

Flammability classification (OSHA 29 CFR 1910.1200): Non-combustible  
 Flash point: Non-combustible (Aqueous Formulation)  
 Lower flammable limit (% by volume): N/A  
 Upper flammable limit (% by volume): N/A

**Hazardous Combustion Products:** May generate toxic fumes and smoke.

**National Fire Protection Association:**

NFPA:	Health		Fire		Reactivity	
		3		0		0
Ratings:		4-Extreme	3-High	2-Moderate	1-Slight	0-Insignificant

**SECTION 6: ACCIDENTAL RELEASE MEASURES**

**Personal Precautions:** Isolate area. Keep unnecessary and unprotected personnel from entering the area. Refer to SECTION 7: HANDLING AND STORAGE, for additional precautionary measures. Ventilate area of leak or spill. Use appropriate safety equipment. For additional information, refer to SECTION 8: EXPOSURE CONTROLS / PERSONAL PROTECTION.

**Environmental Precautions:** Prevent from entering soil, ditches, sewers, waterways and/or groundwater. Refer to SECTION 12: ECOLOGICAL INFORMATION.

**Steps to be taken if Material is Released or Spilled:**  
 Control the spill at its source.  
 Small spills: Apply suitable absorbent and sweep up. Collect in suitable and properly labeled containers.  
 Large spills: Contact Drexel Chemical Company for clean-up assistance. Refer to SECTION 13: DISPOSAL CONSIDERATIONS, for additional information. Prevent entry into waterways, sewers, basements or confined areas.

**SECTION 7: HANDLING AND STORAGE**

**KEEP OUT OF REACH OF CHILDREN**  
**Handling:** **General Handling:** Avoid contact with eyes, skin and clothing. Wash thoroughly after handling. Do not swallow. Avoid breathing dust. Use with adequate ventilation. Wear long-sleeved shirt, long pants and shoes with socks when handling. Keep away from heat, sparks and flame. Refer to SECTION 8: EXPOSURE CONTROLS / PERSONAL PROTECTION

**Storage:** Store in a cool, dry, ventilated and secure area designated specifically for pesticides and away from heat sources. Keep in original containers and keep containers closed when not in use. Do not store in excessive heat. Do not store near children, food, foodstuffs, drugs or potable water supplies.

**SECTION 8: EXPOSURE CONTROLS / PERSONAL PROTECTION**

**Occupational Exposure Limits:**

<b>Components:</b>	<b>OSHA PEL</b>	<b>ACGIH TLV</b>
Monosodium acid methanearsonate	N/A	0.5 mg/m <sup>3</sup>

**THIS SECTION IS FOR MANUFACTURING, COMMERCIAL BLENDING AND PACKAGING WORKERS. APPLICATORS AND HANDLERS SHOULD REFER TO THE PRODUCT LABEL FOR PROPER PERSONAL PROTECTIVE EQUIPMENT AND CLOTHING.**

**Engineering Controls:**

**Ventilation:** Investigate engineering techniques to reduce exposures. When handling this product proper ventilation is required to maintain exposure below the TLV. Ventilate all transport vehicles prior to unloading. Facilities storing or utilizing this material should be equipped with and eyewash facility and safety shower.

**Personal Protection:**

**Eye/Face Protection:** Eye contact should be avoided through the use of chemical safety glasses, goggles, or a face shield selected in regard to exposure potential. Wear chemical splash goggles to prevent vapors or mists from entering the eyes. Where there is potential for eye contact have eye flushing equipment available. Safety glasses with side-shields.

**Ingestion:** Avoid ingestion of even very small amounts; do not consume or store food or tobacco in the work area; wash hands and face thoroughly with soap and water before smoking or eating. Avoid getting wash water in eyes.

**Hand Protection:** Use gloves chemically resistant to this material. Examples of preferred glove barrier materials include: Neoprene, Nitrile/butadiene rubber (“nitrile” or “NBR”) or Polyvinyl chloride (“PVC” or “vinyl”).

**Skin Protection:** Use protective clothing chemically resistant to this material. Selection of specific items such as face shield, boots, apron, or full body suit will depend on the task. Safety shower should be located in immediate work area. Remove contaminated clothing immediately, wash skin area with soap and water, and launder clothing before reuse or dispose of properly. Items which cannot be decontaminated, such as shoes, belts and watchbands, should be removed and disposed of properly.

**Respiratory Protection:** Respiratory protection should be worn when there is a potential to exceed the exposure limit requirements or guidelines. When handling in enclosed areas, when large quantities of dusts are generated or prolonged exposure is possible in excess of the TLV, use a respirator with either an organic vapor-removing cartridge with a prefilter approved for pesticides (MSHA/NIOSH approval number prefix TC-23C) or a canister approved for pesticides (MSHA/NIOSH approval number prefix TC-14G).

**SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES**

<b>Property</b>	<b>Reported Value</b>
Physical State	Liquid
Appearance / Color	Green to Yellow
Odor	Slight garlic
Odor threshold	Not available
pH	5.0 – 7.0
Melting point	Not applicable
Freezing point	-25 to -15°C
Boiling point	220°F
Flash point	> 100°C
Evaporation rate	Not available
Flammability	Not available
Upper flammability/explosive limits	Not available

Lower flammability/explosive limits	Not available
Vapor pressure	15 mm/Hg
Vapor density	0.6
Relative density	12.45 lbs. / gal.
Solubility in water	Complete
Solubility in organic solvents	Not available
Partition coefficient (n-octanol/water)	Not available
Auto-ignition temperature	Not available
Decomposition temperature	Not available
Viscosity	Not available
Explosive properties	Not available
Oxidizing properties	Not available
Dissociation Constant	Not available
% Volatiles	Not available

### SECTION 10: STABILITY AND REACTIVITY

<b>Reactivity:</b>	Thermally stable at typical use temperatures and in closed containers. Heavy metal salts may cause precipitation. Mildly corrosive to steel. May react with reducing agents such as aluminum, zinc, sodium borohydride, sulfur dioxide.
<b>Chemical Stability:</b>	Stable under recommended storage conditions.
<b>Hazardous Polymerization:</b>	Will not occur.
<b>Conditions to Avoid:</b>	Avoid heat of open flame. Avoid high temperatures above 130°F (54.4°C).
<b>Incompatible Materials:</b>	Avoid contact with: Reducing agents such as aluminium and zinc.
<b>Hazardous Decomposition Products:</b>	Hazardous decomposition products can include and are not limited to: Arsine gas.

### SECTION 11: TOXICOLOGICAL INFORMATION

<b>Acute Toxicity:</b>	
<b>Potential routes of exposure/potential health effects:</b>	Skin contact. Inhalation.
<b>Acute Oral:</b>	<b>LD<sub>50</sub> (Rat):</b> 2, 833 mg/kg
<b>Acute Dermal:</b>	<b>LD<sub>50</sub> (Rat):</b> >2,500 mg/kg
<b>Acute Inhalation:</b>	<b>LC<sub>50</sub> (Rat):</b> >2.2 mg/kg
<b>Eye Irritation:</b>	<b>(Rabbit):</b> Not a primary irritant
<b>Skin Irritation:</b>	<b>(Rabbit):</b> Slight irritant
<b>Skin Sensitization:</b>	<b>(Guinea Pig):</b> Non-sensitizer (guinea pigs)
<b>Chronic Toxicity:</b>	Exposure below levels of concern.
<b>Carcinogenicity:</b>	MSMA is not a carcinogen. Not listed as carcinogenic in humans by IARC, NTP and OSHA.
<b>Mutagenicity:</b>	No data available
<b>Teratogenicity:</b>	No data available
<b>Reproductive Toxicity:</b>	No data available
<b>Developmental Toxicity:</b>	No data available
<b>Other Hazards Effects:</b>	None / No data available

## SECTION 12: ECOLOGICAL INFORMATION

**ENVIRONMENTAL FATE:**

Monosodium acid  
methanearsonate

Slightly toxic to fish, aquatic invertebrates, and aquatic plants. Practically non-toxic to bees. Moderately toxic to birds.

**ECO-ACUTE TOXICITY**

**Aquatic Toxicity:**

**Rainbow Trout, LC<sub>50</sub> 96 hour** >167 mg/L  
**Bluegill Sunfish, LC<sub>50</sub> 96 hour** >51 mg/L  
**Daphnia magna, LC<sub>50</sub> 48 hour** 77.5 mg/L

**Arthropod Toxicity:**

**Bees, Acute LD<sub>50</sub>** 68 µg/bee

**Bird Toxicity:**

**Mallard Duck, LD<sub>50</sub>** >5,620 mg/kg  
**Bobwhite Quail, LD<sub>50</sub>** 425 mg/kg

**Persistence and degradability:**

Not biodegradable

**Bioaccumulation:**

No bioaccumulative potential.

**Mobility in soil:**

Immobilized by binding to soil particles and not easily leached to groundwater except in sandy soils.

**Other adverse effects:**

Do not contaminate water supplies, lakes, streams, ponds or drains with this product.

## SECTION 13: DISPOSAL CONSIDERATIONS

If wastes and/or containers cannot be disposed of according to the product label directions, disposal of this material must be in accordance with your local or area regulatory authorities. This information presented below only applies to the material as supplied. The identification based on characteristic(s) or listing may not apply if the material has been used or otherwise contaminated. It is the responsibility of the waste generator to determine the toxicity and physical properties of the material generated to determine the proper waste identification and disposal methods in compliance with applicable regulations. If the material as supplied becomes a waste, follow all applicable regional, national and local laws.

## SECTION 14: TRANSPORT INFORMATION

**DOT:** Not Regulated  
**IMDG:** Not Regulated  
**IATA / ICOA:** Not Regulated

**UN Identification No.:** Not applicable  
**Proper Shipping Name:** Not applicable  
**Hazard Class:** Not applicable  
**Packing Group:** Not applicable  
**Reportable Quantity:** Not applicable  
**Environmental Hazard:** Not applicable  
**Freight Description:** Agricultural Herbicide, Liquid, N.O.S.  
**ERG Guide No.:** 171

**Transport Information Note:** Consult appropriate ICAO/IATA regulations for shipment requirements in the Air. This information is not intended to convey all specific regulatory or operational requirements/information relating to this product. Additional transportation system information can be obtained through an authorized sales or customer service representative. It is the responsibility of the transporting organization to follow all applicable laws, regulations and rules relating to the transportation of the material.

## SECTION 15: REGULATORY INFORMATION

**OSHA Hazard Communication Standard:** This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR1910.1200.

**Arsenic is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR1910.1200.**

**Pesticide Registration:** This product is a pesticide registered by the Environmental Protection Agency (EPA) and is subject to certain FIFRA 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.

**EPA Reg. No.:** 19713-42  
**FIFRA Label Signal Word:** CAUTION  
**FIFRA Label Information:** KEEP OUT OF REACH OF CHILDREN  
**FIFRA Label Information:** Hazards to Humans and Domestic Animals  
 CAUTION: Harmful if swallowed or absorbed through skin. Causes moderate eye irritation. Avoid contact with eyes, skin and clothing. Avoid breathing spray mist.

**EPCRA SARA Title III Classification:**

**Section 302:** Extremely Hazardous Substance Notification: This material is not known to contain any Extremely Hazardous Substance.  
**Sections 311 and 312:** Immediate (Acute) Health Hazard: Yes  
 Delayed (Chronic) Health Hazard: Yes  
 Fire Hazard: No  
 Reactive Hazard: No  
 Sudden Release of Pressure Hazard: No

**Section 313 Toxic Release Inventory (TRI):** Arsenic Compounds

**CERCLA/SARA 304 Reportable Quantity (RQ):** Not listed

**RCRA Hazardous Waste Classification (40 CFR 261):** Not listed / Not available

**US EPA Toxic Substances Control Act (TSCA):** All components of this product are on the TSCA Inventory or are exempt from TSCA Inventory requirements under 40 CFR 720.30.

**California Proposition 65 (Safe Drinking Water and Toxic Enforcement Act of 1986):** Monosodium acid methanearsonate  
 Listed as causing: Not Listed  
 Listing date: Not listed  
 Listing basis: Not listed

**SECTION 16: OTHER INFORMATION**

**Date Issued:** August 27, 2019      **Date Supersedes:** August 04, 2016      **Revision:** 0

**For all non-emergency questions about this product, please contact:** 1700 Channel Avenue      Phone: 901-774-4370  
 PO Box 13327      Fax: 901-774-4666  
 Memphis, Tennessee 38113-0327, USA      Website: [www.drexchem.com](http://www.drexchem.com)

Drexel Chemical Company recommends that each customer or recipient of this SDS to study it carefully and consult appropriate expertise, as necessary or appropriate, to become aware of and understand the data contained in this SDS and any hazards associated with the product. The information herein is provided in good faith and believed to be accurate as of the effective date shown above. However, no warranty, express or implied, is given. Regulatory requirements are subject to change and may differ between various locations. It is the buyer's/user's responsibility to ensure that his activities comply with all federal, state, provincial or local laws. The information presented here pertains only to the product as shipped. Since conditions for use of the product are not under the control of the manufacturer, it is the buyer's/user's duty to determine the conditions necessary for the safe use of this product. Due to the proliferation of sources for information such as manufacturer-specific SDSs, we are not and cannot be responsible for SDSs obtained from any source other than ourselves. If you have obtained an SDS from another source or if you are not sure that the SDS you have is current, please contact us for the most current version.