Material Safety Data Sheet

BUENO 6

Version: 1 Date Issued: 02/11/02 MSDS No. US 021102

SECTION 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

COMPANY: KMG-Bernuth, Inc.

10611 Harwin, Suite 402 Houston, Texas 77036

PHONE NUMBER: 713-988-9252

EMERGENCY PHONE: CHEMTREC: 1 800-424-9300

NAME USED ON LABEL: BUENO 6
PRODUCT USE: Herbicide

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SECTION 2. COMPOSITION/INFORMATION ON INGREDIENTS

IDENTITY CAS NUMBER TYPICAL % OTHER INFORMATION

Monosodium Acid Methanearsonate 2163-80-6 48.3%

Ingredients not precisely identified are proprietary or non-hazardous.

Values are not product specifications.

SECTION 3. HAZARDS IDENTIFICATION

PHYSICAL HAZARDS:

None

HEALTH HAZARDS:

Slightly toxic by ingestion. Slight irritant to skin and eyes.

SECTION 4. FIRST AID MEASURES

IF IN EYES: Check for and remove contact lenses. Immediately flush with plenty of water for at

least 15 minutes. Hold the eyelids apart to ensure flushing of the entire eye surface.

Seek medical attention.

IF ON SKIN: Wash material off skin with plenty of soap and water.

IF SWALLOWED: Provided the patient is conscious, give 1 or 2 glasses of water to drink. Induce vomiting

by sticking finger down throat. Never give anything by mouth to an unconscious person.

Obtain medical attention.

IF INHALED: Remove victim to fresh air. Until adequate ventilation or other control measures are

restored, employ proper respiratory protection. If symptoms develop, seek medical

attention.

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MEDICAL ADVICE:

If ingested, gastric lavage may be required. Chelation therapy with BAL or D-penicillamine has been recommended in the literature for symptomatic arsenic poisoning. Persons allergic to penicillin may suffer reaction to D-penicillamine; they should be treated with BAL only.

5. FIREFIGHTING MEASURES

FLASH POINT:

Nonflammable

AUTOIGNITION TEMPERATURE:

Not applicable

FLAMMABLE LIMITS (STP):

Noncombustible

EXTINGUISHING MEDIA:

Use dry chemical or carbon dioxide. Use of water or foam should be discouraged to prevent spreading of material.

PROTECTIVE EQUIPMENT:

Self-contained breathing apparatus with full facepiece and protective clothing.

HMI S RATING

Health

1

Fire

Reactivity

0

PPE

a

NFPA RATING

Health

0

Fire

Reactivity

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SPECIAL HAZARDS

Unusual Fire and Explosion Hazards:

Noxious fumes may be emitted under fire conditions.

6. ACCIDENTAL RELEASE MEASURES

METHODS FOR CLEANING UP:

Remove as much as possible by absorbing with inert material. Remove any contaminated soil. Place in closed, labeled containers and store in a safe place to await disposal. Flush spill area with large amounts of water.

7. HANDLING AND STORAGE

REQUIREMENTS FOR STORAGE ROOMS:

Keep in a cool, well ventilated place. Keep away from heat..

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8. EXPOSURE CONTROLS/PERSONAL PROTECTION

OCCUPATIONAL EXPOSURE LIMITS

ACGIH TLV arsenic

Elemental and inorganic

TWA 0.01 mg/m^3

OSHA PEL arsenic

Elemental and inorganic

TWA 0.5 mg/m^3

OCCUPATIONAL EXPOSURE STANDARDS

Not established

VENTILATION

Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective threshold limit value.

EYE PROTECTION:

Use protective eyewear.

BODY PROTECTION:

Applicators and other handlers must wear long-sleeved shirt and long pants, waterproof gloves, chemical-resistant footwear plus socks.

RESPIRATORY PROTECTION:

Use MSHA-NIOSH approved respirator for organic vapors, dusts and mists.

OTHER PROTECTIVE EQUIPMENT:

Eyewash station and safety shower in work area.

9. PHYSICAL AND CHEMICAL PROPERTIES

FORM: liquid

PHYSICAL STATE: Soluble concentrate

COLOR: light yellow odorless
BOILING POINT: 108° C +/- 2
MELTING POINT: Not applicable

FREEZING TEMPERATURE: -32° C Do not allow product to freeze.

VAPOR PRESSURE: <= 7.5 ...1. OE-08 Torr at 25° C

EVAPORATION RATE:

BULK DENSITY:

VAPOR DENSITY:

VAPOR DENSITY:

SOLUBILITY

Not determined

1.51 (water=1)

1.52 (water=1)

1.53 (water=1)

SOLUBILITY: soluble in/with water 100%

pH-value (quant.): 5.7 ... 6.7 VOLATILE BY VOLUME: 60% (v/v)

10. STABILITY AND REACTIVITY

HAZARDOUS REACTIONS (CONDITIONS TO AVOID):

Stability:

Stable under normal conditions.

Incompatibility:

Avoid contact with acids, nascent hydrogen and many metals as aluminum, zinc, copper and tin. Do not

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mix with other spray solutions without label clearance.

Hazardous polymerization:

Material is not known to polymerize.

HAZARDOUS DECOMPOSITION PRODUCTS:

Arsenic, in the presence of acids and metals such as aluminum, zinc, copper and tin can combine with nascent hydrogen to form arsine gas. This gas is highly poisonous, colorless, nonirritating and has a mild garlic odor.

11. TOXICOLOGICAL INFORMATION

ACUTE TOXICITY (LETHAL DOSES)

LD₅₀ Ingestion rat

Dose: 1580 mg/kg

Additional information: A single dose of this product is classified as "slightly toxic" by ingestion. Probable

lethal dose in man is between 1 ounce and 1 pint of liquid

LD50 Dermal rabbit

Dose: 4200 mg/kg

Additional information: Repeated and/or prolonged contact may cause irritation.

LD₅₀ Inhalation rat

Dose: >20 mg/l Period: 4 hours

Additional information: No mortality was produced in rats during a 4-hour exposure to an atmosphere greater

than 20.0 mg/l. Prolonged exposure might induce mild irritation of lungs in man but

recovery following exposure should be rapid.

Skin absorption

Additional information: Not readily absorbed through intact skin

ACUTE TOXICITY (IRRITATION, SENSITIZATION, ETC)

Eye Contact

Additional information: Although MSMA is non-irritating to the cornea, mild conjunctival irritation may persist

for several days in unwashed eyes. Washing eyes immediately following exposure should

prevent eye irritation.

GENERAL INFORMATION ABOUT ACUTE OR OTHER TOXICITIES

Other effects of overexposure: Acute overexposure may result in mild irritation to tissue. Symptoms of arsenic poisoning

are headache, dizziness, stupor, vomiting, diarrhea, convulsions, paralysis or death. Degree of irritation may increase with chronic exposure. Poisoning effects can be salty taste in mouth,

burning throat and stomach and intestinal pains.

12. ECOLOGICAL INFORMATION

ECOTOXICITY

Assessment: May be toxic to aquatic life.

ADDITIONAL INFORMATION ABOUT ECOLOGY

Toxic to wildlife

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13. DISPOSAL CONSIDERATIONS

Disposal Method:

Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility. Do not contaminate waterways by cleaning of equipment or by disposal of wastes.

Container disposal:

Empty container retains product residue. Triple rinse, or equivalent, empty container, return rinse water to dilution mixture, and dispose of dilution mixture as hazardous waste if it cannot be disposed of by use according to label instructions. Do not reuse container. Offer it for recycling or reconditioning, or puncture and dispose of in properly permitted landfill.

14. TRANSPORT INFORMATION

ROAD TRANSPORT DOT:

Not regulated by DOT

I5. REGULATORY INFORMATION

OTHER REGULATIONS. RESTRICTIONS AND PROHIBITIONS

SARA 313 Inventory Ingredients: Arsenic compounds (22.3%)

SARA 312 Hazards Classification: Not applicable

California Proposition 65: No warnings are necessary

EPA

EPA Registration number: 61483-15

16. OTHER INFORMATION

We assigned NFPA and HMIS ratings to this product based on the hazards of its ingredient(s). Because the customer is most aware of the application of the product, he must ensure that the proper personal protective equipment (PPE) is provided consistent with information contained in the product MSDS. This information is intended solely for the use of individuals trained in the particular hazard rating system.

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