# SAFETY DATA SHEET



#### 1. Identification

**Product identifier** Methylarsonic acid

Other means of identification

N-12922

Recommended use For Laboratory Use Only

**Recommended restrictions** None known.

Manufacturer/Importer/Supplier/Distributor information

Manufacturer

Company name Chem Service, Inc. **Address** 660 Tower Lane

West Chester, PA 19380

**United States** 

Toll Free 800-452-9994 **Telephone** Direct

610-692-3026

Website www.chemservice.com E-mail info@chemservice.com

Chemtrec US 800-424-9300 **Emergency phone number** 

> Chemtrec outside US +1 703-527-3887

## 2. Hazard(s) identification

Physical hazards Not classified.

Health hazards Acute toxicity, oral Category 3

> Acute toxicity, inhalation Category 3 Carcinogenicity Category 1 Category 1

**Environmental hazards** Hazardous to the aquatic environment, acute

hazard

Hazardous to the aquatic environment, Category 1

long-term hazard

**OSHA** defined hazards Not classified.

Label elements



Signal word Danger

**Hazard statement** Toxic if swallowed. Toxic if inhaled. May cause cancer. Very toxic to aquatic life. Very toxic to

aquatic life with long lasting effects.

**Precautionary statement** 

Prevention Obtain special instructions before use. Do not handle until all safety precautions have been read

and understood. Use only outdoors or in a well-ventilated area. Avoid breathing dust/fume. Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Avoid release to the environment. Wear protective gloves/protective clothing/eye protection/face protection.

Response If swallowed: Immediately call a poison center/doctor. If inhaled: Remove person to fresh air and

keep comfortable for breathing. Call a poison center/doctor. Specific treatment (see this label).

Rinse mouth. Collect spillage.

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

**Disposal** Dispose of contents/container in accordance with local/regional/national/international regulations.

Hazard(s) not otherwise

classified (HNOC)

None known.

**Supplemental information** Not applicable.

### 3. Composition/information on ingredients

**Substances** 

Material name: Methylarsonic acid SDS US **Chemical name** Common name and synonyms CAS number % Methylarsonic acid 124-58-3 100

\*Designates that a specific chemical identity and/or percentage of composition has been withheld as a trade secret.

### 4. First-aid measures

Inhalation Remove victim to fresh air and keep at rest in a position comfortable for breathing. Oxygen or

artificial respiration if needed. Do not use mouth-to-mouth method if victim inhaled the substance. Induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other

proper respiratory medical device. Call a POISON CENTER or doctor/physician.

Skin contact Rinse with water. Get medical attention if irritation develops and persists.

Do not rub eyes. Rinse with water. Get medical attention if irritation develops and persists. Eye contact

Ingestion Call a physician or poison control center immediately. Rinse mouth. Do not induce vomiting without advice from poison control center. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs. Do not use mouth-to-mouth method if victim ingested the substance.

proper respiratory medical device.

Most important

symptoms/effects, acute and

delayed

Indication of immediate medical attention and special treatment needed

General information

Direct contact with eyes may cause temporary irritation.

Provide general supportive measures and treat symptomatically. In case of shortness of breath, give oxygen. Keep victim warm. Keep victim under observation. Symptoms may be delayed.

Induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other

IF exposed or concerned: Get medical advice/attention. Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance.

## 5. Fire-fighting measures

Suitable extinguishing media

Unsuitable extinguishing

media

Water fog. Foam. Dry chemical powder. Carbon dioxide (CO2).

Do not use water jet as an extinguisher, as this will spread the fire.

Specific hazards arising from

the chemical

During fire, gases hazardous to health may be formed.

discharge into drains, water courses or onto the ground.

Special protective equipment and precautions for firefighters Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

Fire-fighting

equipment/instructions

Use water spray to cool unopened containers.

Specific methods

Use standard firefighting procedures and consider the hazards of other involved materials.

General fire hazards No unusual fire or explosion hazards noted.

#### 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Immediately evacuate personnel to safe areas. Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Keep out of low areas. Wear appropriate protective equipment and clothing during clean-up. Avoid inhalation of dust. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ventilate closed spaces before entering them. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.

Methods and materials for containment and cleaning up Avoid dispersal of dust in the air (i.e., clearing dust surfaces with compressed air). Stop the flow of material, if this is without risk. Collect spillage.

Large Spills: Wet down with water and dike for later disposal. Prevent entry into waterways, sewer, basements or confined areas. Following product recovery, flush area with water.

Small Spills: Sweep up or vacuum up spillage and collect in suitable container for disposal.

**Environmental precautions** 

Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS. Avoid release to the environment. Contact local authorities in case of spillage to drain/aquatic environment. Prevent further leakage or spillage if safe to do so. Do not contaminate water. Avoid

## 7. Handling and storage

Precautions for safe handling

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Minimize dust generation and accumulation. Do not taste or swallow. Avoid breathing dust. Avoid prolonged exposure. Use only outdoors or in a well-ventilated area. Wear appropriate personal protective equipment. Observe good industrial hygiene practices. When using, do not eat, drink or smoke. Wash hands thoroughly after handling. Avoid release to the environment. Do not empty into drains.

Conditions for safe storage, including any incompatibilities

Store locked up. Store in original tightly closed container. Store in a well-ventilated place. Store away from incompatible materials (see Section 10 of the SDS).

# 8. Exposure controls/personal protection

### Occupational exposure limits

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Material Value Type Methylarsonic acid (CAS PEL 0.5 mg/m3 124-58-3)

**Biological limit values** No biological exposure limits noted for the ingredient(s).

Appropriate engineering controls

Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

Individual protection measures, such as personal protective equipment

Eye/face protection If contact is likely, safety glasses with side shields are recommended.

Skin protection

Hand protection For prolonged or repeated skin contact use suitable protective gloves.

Other Use personal protective equipment as required.

Respiratory protection In case of insufficient ventilation, wear suitable respiratory equipment.

Thermal hazards Wear appropriate thermal protective clothing, when necessary.

General hygiene considerations

When using, do not eat, drink or smoke. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely

wash work clothing and protective equipment to remove contaminants.

## 9. Physical and chemical properties

**Appearance** 

Physical state Solid. Solid. Form

Color Not available. Odor Not available. Odor threshold Not available Ha Not available.

320.9 °F (160.5 °C) Melting point/freezing point Not available.

Initial boiling point and boiling

range

Flash point Not available. Not available. **Evaporation rate** Flammability (solid, gas) Not available.

Upper/lower flammability or explosive limits

Flammability limit - lower

(%)

Not available.

Flammability limit - upper

(%)

Not available.

Not available. Explosive limit - lower (%) Explosive limit - upper (%) Not available.

0 kPa at 25 °C Vapor pressure < 0 kPa at 25 °C

> Not available. Not available.

Relative density Solubility(ies)

Vapor density

Solubility (water) Not available. **Partition coefficient** Not available.

(n-octanol/water)

Not available. **Auto-ignition temperature** Not available. **Decomposition temperature** Not available. **Viscosity** 

Material name: Methylarsonic acid

SDS US 14270 Version #: 01 Issue date: 05-01-2014

Other information

C-H5-As-O3 Molecular formula Molecular weight 139.97 g/mol

## 10. Stability and reactivity

Reactivity The product is stable and non-reactive under normal conditions of use, storage and transport.

**Chemical stability** Material is stable under normal conditions. Possibility of hazardous Hazardous polymerization does not occur.

reactions

Conditions to avoid Contact with incompatible materials.

Incompatible materials Strong oxidizing agents.

Hazardous decomposition No hazardous decomposition products are known.

products

# 11. Toxicological information

Information on likely routes of exposure

Ingestion Toxic if swallowed. Inhalation Toxic by inhalation.

Skin contact No adverse effects due to skin contact are expected. Eye contact Direct contact with eyes may cause temporary irritation. Direct contact with eyes may cause temporary irritation.

Symptoms related to the physical, chemical and toxicological characteristics

Information on toxicological effects

**Acute toxicity** Toxic by inhalation. Toxic if swallowed.

**Product Species Test Results** 

Methylarsonic acid (CAS 124-58-3)

Acute Oral

LD50 Mouse 185 mg/kg Rabbit 47 mg/kg 961 mg/kg

Rat

Other

LD50 Mouse 316 mg/kg

Skin corrosion/irritation Prolonged skin contact may cause temporary irritation. Direct contact with eyes may cause temporary irritation. Serious eye damage/eye

irritation

Respiratory or skin sensitization

Respiratory sensitization Not available.

Skin sensitization This product is not expected to cause skin sensitization.

Germ cell mutagenicity No data available to indicate product or any components present at greater than 0.1% are

mutagenic or genotoxic.

May cause cancer. Carcinogenicity

IARC Monographs. Overall Evaluation of Carcinogenicity

Methylarsonic acid (CAS 124-58-3) 2B Possibly carcinogenic to humans.

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

Reproductive toxicity This product is not expected to cause reproductive or developmental effects.

Specific target organ toxicity -

single exposure

Not classified.

Specific target organ toxicity -

repeated exposure

Not classified

**Aspiration hazard** Not available.

Chronic effects Prolonged inhalation may be harmful. Prolonged exposure may cause chronic effects.

Material name: Methylarsonic acid

<sup>\*</sup> Estimates for product may be based on additional component data not shown.

## 12. Ecological information

Very toxic to aquatic life with long lasting effects. Accumulation in aquatic organisms is expected. **Ecotoxicity** 

No data is available on the degradability of this product. Persistence and degradability

No data available. Bioaccumulative potential Mobility in soil No data available.

Other adverse effects No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation

potential, endocrine disruption, global warming potential) are expected from this component.

# 13. Disposal considerations

Collect and reclaim or dispose in sealed containers at licensed waste disposal site. This material **Disposal instructions** 

and its container must be disposed of as hazardous waste. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose of contents/container in accordance with local/regional/national/international

regulations.

Local disposal regulations Dispose in accordance with all applicable regulations.

Hazardous waste code The waste code should be assigned in discussion between the user, the producer and the waste

disposal company.

Waste from residues / unused

products

Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see:

Disposal instructions).

Contaminated packaging Empty containers should be taken to an approved waste handling site for recycling or disposal.

Since emptied containers may retain product residue, follow label warnings even after container is

emptied.

## 14. Transport information

DOT

UN1557 UN number

**UN proper shipping name** Arsenic compounds, solid, n.o.s. inorganic, including arsenates, n.o.s.; arsenites, n.o.s.; arsenic

sulfides, n.o.s.; and organic compounds of arsenic, n.o.s.

Transport hazard class(es)

6.1(PGIII)

Subsidiary risk Label(s) 6.1 Packing group

Special precautions for user Read safety instructions, SDS and emergency procedures before handling.

IB8, IP3, T1, TP33 Special provisions

Packaging exceptions 153 Packaging non bulk 213 Packaging bulk 240

IATA

UN1557 **UN number** 

Arsenic compound, solid, n.o.s. inorganic, including: Arsenates, n.o.s.; Arsenites, n.o.s.; and **UN proper shipping name** 

Arsenic sulphides, n.o.s.

Transport hazard class(es)

6.1(PGIII) Class

Subsidiary risk Ш Packing group **Environmental hazards** Nο ERG Code

Special precautions for user Read safety instructions, SDS and emergency procedures before handling.

Other information

Allowed. Passenger and cargo

aircraft

Cargo aircraft only

Allowed.

**IMDG** 

UN1557 **UN** number

**UN proper shipping name** ARSENIC COMPOUND, SOLID, N.O.S. inorganic, including: Arsenates, n.o.s.; Arsenites, n.o.s.;

and Arsenic sulphides, n.o.s.

Transport hazard class(es)

6.1(PGIII) Class

Subsidiary risk Ш Packing group

**Environmental hazards** 

Marine pollutant No.

Material name: Methylarsonic acid

SDS US

EmS F-A, S-A

Special precautions for user Read safety instructions, SDS and emergency procedures before handling.

Transport in bulk according to Annex II of MARPOL 73/78 and

Not applicable.

the IBC Code

DOT



IATA; IMDG



## 15. Regulatory information

**US federal regulations**This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication

Standard, 29 CFR 1910.1200.

One or more components are not listed on TSCA.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

**CERCLA Hazardous Substance List (40 CFR 302.4)** 

Not listed.

SARA 304 Emergency release notification

Not regulated.

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories Immediate Hazard - Yes

Delayed Hazard - Yes Fire Hazard - No Pressure Hazard - No Reactivity Hazard - No

SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 Hazardous Yes

chemical

SARA 313 (TRI reporting)

Chemical name	CAS number	% by wt.
Methylarsonic acid	124-58-3	100

# Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Not regulated.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

Clean Water Act (CWA) Priority pollutant
Section 112(r) (40 CFR Toxic pollutant

68.130)

Material name: Methylarsonic acid

Safe Drinking Water Act 0 mg/l (SDWA) 0.010 mg/l

### **US** state regulations

### **US. Massachusetts RTK - Substance List**

Not regulated.

## US. New Jersey Worker and Community Right-to-Know Act

Methylarsonic acid (CAS 124-58-3) 500 LBS

## US. Pennsylvania RTK - Hazardous Substances

Not regulated.

### **US. Rhode Island RTK**

Methylarsonic acid (CAS 124-58-3)

### **US. California Proposition 65**

California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins.

#### International Inventories

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Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	No
Canada	Domestic Substances List (DSL)	No
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	No
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	Yes
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	No
Korea	Existing Chemicals List (ECL)	Yes
New Zealand	New Zealand Inventory	No
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	No

<sup>\*</sup>A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s) A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

Toxic Substances Control Act (TSCA) Inventory

# 16. Other information, including date of preparation or last revision

**Issue date** 05-01-2014

Version # 01

United States & Puerto Rico

NFPA ratings Health: 3

Flammability: 0 Instability: 0

Material name: Methylarsonic acid

SDS US

No

#### Disclaimer

The above information is believed to be correct on the date it was last revised and must not be considered all inclusive. The information has been obtained only by a search of available literature and is only a guide for handling the chemicals. OSHA regulations require that if other hazards become evident, an upgraded SDS must be made available to the employee within three months. RESPONSIBILITY for updates lies with the employer and not with CHEM SERVICE, Inc.

Persons not specifically and properly trained should not handle this chemical or its container. This product is furnished FOR LABORATORY USE ONLY! Our products may NOT BE USED as drugs, cosmetics, agricultural or pesticide products, food additives or as household chemicals.

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