

1. Identification

Product identifier	Deadline® M-Ps™	
Other means of identification		
SDS number	305	
Product registration number	26650	
Recommended use	Molluscicide	
Recommended restrictions	Keep away from dogs!	
Manufacturer/Importer/Supplier/Distributor information		
Manufacturer		
Company name	AMVAC Chemical Corporation	
Address	4695 MacArthur Court Suite 1200 Newport Beach, CA 92660	
Telephone	AMVAC Chemical Corp	949-260-1200
	AMVAC Chemical Corp	949-260-6270(FAX)
Website	www.amvac.com	
E-mail	CustServ@amvac.com	
Emergency phone number	Medical	888-681-4261
	CHEMTREC® (USA+Canada)	800-424-9300
	Product Use	888-462-6822
	CHEMTREC® (Outside USA)	+1-703-527-3887
Supplier	Not available.	

2. Hazard identification

Physical hazards	Not classified.
Health hazards	Not classified.
Environmental hazards	Not classified.
Label elements	
Hazard symbol	None.
Signal word	None.
Hazard statement	Not available.
Precautionary statement	
Prevention	Wash hands thoroughly after handling.
Response	If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
Storage	Store away from incompatible materials.
Disposal	Dispose of contents/container in accordance with local/regional/national/international regulations.
Other hazards	None known.
Supplemental information	This is a pesticide product registered in Canada under the Pest Control Products Act and is subject to certain labeling requirements. These requirements differ from the classification criteria and hazard information required for GHS compliant safety data sheets (SDS), and for workplace labels of non-pesticide chemicals. The hazard information required on the pesticide label is reproduced in section 15. The pesticide label also includes other important information, including directions for use.

3. Composition/information on ingredients

Mixtures

Chemical name	Common name and synonyms	CAS number	%
Metaldehyde		108-62-3	4
Other components		Mixture	96

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 if you feel unwell.
Skin contact	Take off contaminated clothing and wash before reuse. Wash off immediately with plenty of water. If skin irritation occurs: Get medical advice/attention. Wash contaminated clothing before reuse.
Eye contact	Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if irritation develops and persists.
Ingestion	Get medical attention if symptoms occur. Rinse mouth. Drink 1 or 2 glasses of water. Do not induce vomiting without advice from poison control center. If ingestion of a large amount does occur, call a poison control center immediately. Never give anything by mouth to a victim who is unconscious or is having convulsions.
Most important symptoms/effects, acute and delayed	Based on animal toxicity information for Metaldehyde, it is anticipated that this material would be harmful upon ingestion and that direct contact may elicit mild eye and skin irritation. Overexposure to Metaldehyde may cause excessive salivation, vomiting, nausea, acetonuria (odor of acetone on breath), convulsions, increased body temperature, depression of medullary respiratory and vasomotor control centers and coma. May be fatal. [Note: Because of the low amounts of Metaldehyde in the product, it is unlikely the victim can be exposed to sufficient quantities of Metaldehyde to have coma or death induced.] Overexposure may aggravate preexisting conditions associated with the kidney, liver, and brain.
Indication of immediate medical attention and special treatment needed	According to manufacturer of Metaldehyde Technical communication , gastric lavage with a 2.5% solution of sodium bicarbonate - powdered charcoal and prevention of acidosis by sodium bicarbonate may be needed. Administration of Diazepam or Clonidine 20 minutes after ingestion of 1000 mg/kg of Metaldehyde by mice delayed the onset of symptoms and reduced mortality. This is equivalent to 0.6 lb of product ingested for a 10 kg child. Therefore, Diazepam and Clonidine may be appropriate antidotes to reduce the symptomatology of Metaldehyde ingestion. For acute inhalation overexposure, the patient should be monitored as respiratory failure may occur 24 to 48 hours after exposure.

General information Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. In the case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

5. Fire-fighting measures

Suitable extinguishing media	Water fog. Foam. Dry chemical powder. Carbon dioxide (CO ₂).
Unsuitable extinguishing media	None known.
Specific hazards arising from the chemical	This is a combustible solid that will support fire if it is preheated (NFPA rating = 1). During fire, gases hazardous to health may be formed. Nitrogen oxides (NO _x). Carbon dioxide (CO ₂). Hydrogen chloride.
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	In the event of fire, cool tanks with water spray. Water runoff can cause environmental damage.
Specific methods	Cool containers exposed to flames with water until well after the fire is out.
General fire hazards	No unusual fire or explosion hazards noted.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures	Keep unnecessary personnel away. Wear appropriate personal protective equipment. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ventilate closed spaces before entering them. For personal protection, see section 8 of the SDS.
Methods and materials for containment and cleaning up	Wear appropriate protective equipment and clothing during clean-up. Shovel up, sweep up or vacuum up the material and place in a container for salvage or disposal.
Environmental precautions	Avoid release to the environment.

7. Handling and storage

Precautions for safe handling

Keep out of the reach of children. Keep away from food, drink and animal feedstuffs. Avoid breathing dust. Avoid contact with skin. Avoid contact with eyes. Wear appropriate personal protective equipment recommended in section 8. Wash thoroughly after handling. Wash contaminated clothing before reuse.

Conditions for safe storage, including any incompatibilities

CAUTION Keep container tightly closed. Store in a cool, dry place out of direct sunlight. Store in a well-ventilated place. Keep out of the reach of children. Use care in handling/storage.

8. Exposure controls/personal protection

Occupational exposure limits

US. ACGIH Threshold Limit Values

Material	Type	Value
Metaldehyde	TWA	0.5 mg/m3

Canada. Alberta OELs (Occupational Health & Safety Code, Schedule 1, Table 2)

Material	Type	Value
Metaldehyde	TWA	0.5 mg/m3

Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended)

Material	Type	Value
Metaldehyde	TWA	0.5 mg/m3

Canada. Manitoba OELs (Reg. 217/2006, The Workplace Safety And Health Act)

Material	Type	Value
Metaldehyde	TWA	0.5 mg/m3

Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents)

Material	Type	Value
Metaldehyde	TWA	0.5 mg/m3

Canada. Quebec OELs. (Ministry of Labor - Regulation respecting occupational health and safety)

Material	Type	Value
Metaldehyde	TWA	0.5 mg/m3

Biological limit values

No biological exposure limits noted for the ingredient(s).

Exposure guidelines

Dust exposure limit.

Appropriate engineering controls

General ventilation normally adequate.

Individual protection measures, such as personal protective equipment

Eye/face protection

Not normally needed. If contact is likely, safety glasses with side shields are recommended.

Skin protection

Hand protection

To prevent skin contact use suitable protective gloves. Wear chemical resistant gloves (preferably nitrile). Not normally needed.

Other

Avoid contact with the skin. Wear suitable protective clothing. Wear protective gloves.

Respiratory protection

No personal respiratory protective equipment normally required. In case of insufficient ventilation, wear suitable respiratory equipment.

Thermal hazards

Not applicable.

General hygiene considerations

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.

Form

Liquid. Pellets.

Color

Red, blue or buff.

Odor

Aldehyde odor

Odor threshold	Not available.
pH	Not available.
Melting point/freezing point	Not available.
Initial boiling point and boiling range	Not available.
Flash point	Not available.
Evaporation rate	Not available.
Flammability (solid, gas)	Not available.
Upper/lower flammability or explosive limits	
Flammability limit - lower (%)	Not available.
Flammability limit - upper (%)	Not available.
Explosive limit - lower (%)	Not available.
Explosive limit - upper (%)	Not available.
Vapor pressure	1.90E+00 mm Hg @ 24°C (active ingredient).
Vapor density	6.06 (air = 1).
Relative density	Not available.
Solubility(ies)	
Solubility (water)	0.2 g/l @ 17°C for active ingredient.
Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
Viscosity	Not available.
Other information	
Bulk density	24 - 45 lb/ft ³
Specific gravity	0.4 - 0.72

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 reactions	No dangerous reaction known under conditions of normal use. Hazardous polymerization does not occur.
Conditions to avoid	Avoid conditions which create dust. Heat, flames and sparks. Contact with incompatible materials.
Incompatible materials	Strong oxidizing agents.
Hazardous decomposition products	No hazardous decomposition products are known. This product may emit hazardous fumes of hydrogen chloride, carbon oxides, and unidentified organic compounds when it is heated excessively or burned. WEAR SELF-CONTAINED BREATHING APPARATUS when these conditions are present. Acetaldehyde can be formed by decomposition of Metaldehyde. Decomposition by burning may result in carbon monoxide and other toxic fumes and vapors of unknown composition.

11. Toxicological information

Information on likely routes of exposure

Inhalation	Prolonged inhalation may be harmful.
Skin contact	Slight skin irritant.
Eye contact	Causes mild eye irritation.
Ingestion	Expected to be a low ingestion hazard.

Symptoms related to the physical, chemical and toxicological characteristics	Based on animal toxicity information for Metaldehyde, it is anticipated that this material would be harmful upon ingestion and that direct contact may elicit mild eye and skin irritation. Overexposure to Metaldehyde may cause excessive salivation, vomiting, nausea, acetonuria (odor of acetone on breath), convulsions, increased body temperature, depression of medullary respiratory and vasomotor control centers and coma. May be fatal. [Note: Because of the low amounts of Metaldehyde in the product, it is unlikely the victim can be exposed to sufficient quantities of Metaldehyde to have coma or death induced.]
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Information on toxicological effects

Acute toxicity Causes mild eye irritation. Causes slight skin irritation.

Product	Species	Test Results
Metaldehyde		
Acute		
Dermal		
LD50	Rabbit	> 5050 mg/kg (EPA Tox Cat IV).
Inhalation		
LC50	Rat	> 2.48 mg/l, 4 hours (EPA Tox Cat IV).
Oral		
LD50	Rat	> 5000 mg/kg (EPA Tox Cat IV).

* Estimates for product may be based on additional component data not shown.

Skin corrosion/irritation Causes slight skin irritation.

Serious eye damage/eye irritation Causes mild eye irritation.

Respiratory or skin sensitization

Respiratory sensitization Not a respiratory sensitizer.

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.

Carcinogenicity Not classifiable as to carcinogenicity to humans. Acetaldehyde, a decomposition product of Metaldehyde, has been listed as carcinogenic in the IARC monographs and by the NTP. Acetaldehyde is present at less than 0.01% in the product. None of the components found in appreciable quantities has been found to be carcinogenic by IARC, NTP, or OSHA.

Reproductive toxicity No evidence of reproductive toxicity has been observed. No evidence of teratogenicity in laboratory animals.

Specific target organ toxicity - single exposure Not classified.

Specific target organ toxicity - repeated exposure Not classified.

Aspiration hazard Not an aspiration hazard.

Chronic effects Prolonged inhalation may be harmful. Overexposure may aggravate preexisting conditions associated with the kidney, liver, and brain.

12. Ecological information

Ecotoxicity No information is available about the potential of this material to produce adverse environmental effects. This product may be fatal to dogs, other pests, and wild animals if eaten. May be toxic to water inhabitants. Do not contaminate water bodies.

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

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

Disposal instructions Contract with a disposal operator licensed by the Law on Disposal and Cleaning. Collect and reclaim or dispose in sealed containers at licensed waste disposal site according to all applicable regulations. Do not allow this material to drain into sewers/water supplies. Dispose of contents/container in accordance with all applicable local/regional/national/international regulations. Dispose in accordance with all applicable regulations. Dispose of contents/container (in accordance with related regulations). When your own wastewater treatment plant is not available, collect entire waste and then charge to a licensed industrial waste management professional with manifests for industrial waste.

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 all applicable 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 methods/information).

Contaminated packaging Empty containers should be taken to an approved waste handling site for recycling or disposal according to all applicable regulations. Since emptied containers may retain product residue, follow label warnings even after container is emptied.

14. Transport information

TDG

Not regulated as dangerous goods.

IATA

Not regulated as dangerous goods.

IMDG

Not regulated as dangerous goods.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not established.

15. Regulatory information

Canadian regulations

CANADIAN REGULATIONS: This product is registered under the Pest Control Product Act of Canada. It is a violation of Canadian Law to use this product in any manner inconsistent with its labeling. Read and follow all label directions. This product has been classified according to the hazard criteria of the CPR and the SDS contains all the information required by the CPR.

This chemical is a pest control product registered [or regulated] 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. The following is the hazard information required on the pest control product label.

PCP: 26650

CAUTION POISON
Keep Out of Reach Of Children.
Warning: Contains the allergen wheat.

Symbols Required:
None known.

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

"There are Canada-specific environmental requirements for handling, use, and disposal of this pest control product that are indicated on the label.

Controlled Drugs and Substances Act

Not regulated.

Export Control List (CEPA 1999, Schedule 3)

Not listed.

Greenhouse Gases

Not listed.

Precursor Control Regulations

Not regulated.

International regulations

The product is classified and labelled in accordance with EC directives or respective national laws. This Safety Data Sheet complies with the requirements of Regulation (EC) No 1907/2006. The product does not need to be labelled in accordance with EC directives or respective national laws.

Stockholm Convention

Not applicable.

Rotterdam Convention

Not applicable.

Kyoto protocol

Not applicable.

Montreal Protocol

Not applicable.

Basel Convention

Not applicable.

International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
Canada	Domestic Substances List (DSL)	No
Canada	Non-Domestic Substances List (NDSL)	No
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	No

*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).

16. Other information**Issue date** Jul-13-2016**Revision date** Jul-28-2020**Version #** 2.0**References** IARC: International Agency for Research on Cancer**Disclaimer** This information is provided for the limited guidance to the user. While AMVAC believes that the information is, as of the date hereof, reliable, it is the user's responsibility to determine the suitability of the information for its purposes. The user is advised not to construe the information as absolutely complete since additional information may be necessary or desirable when particular, exceptional, or variable conditions or circumstances exist (like combinations with other materials), or because of applicable regulations. No express or implied warranty of merchantability or fitness for a particular purpose or otherwise is made hereunder with respect to the information or the product to which the information relates.

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Revision information This document has undergone significant changes and should be reviewed in its entirety.