

Hydro-Zone, Inc.
17800 Telegraph Road, Romulus, MI 48174 (734)247-4488
Emergency Telephone No.: 800-535-5053

MATERIAL SAFETY DATA SHEET

NFPA Hazard Rating:
Health – 1, Flammability – 1, Reactivity - 0

I. GENERAL INFORMATION -----

Code, Trade Name: MO1525, Molybdenum Buffer
Chemical Name: Acetic Acid/Sodium Acetate in Water
Chemical Family: Organic Acid/Salt in Water

IX. ENVIRONMENTAL PROTECTION -----

Spill Response: Eliminate ignition source, cover with sand or vermiculite and scoop up and containerize for proper disposal.

Waste Disposal: Comply with all local, state and federal regulations.

II. HAZARDOUS INGREDIENTS -----

Acetic Acid, Glacial, CAS# 64-19-7 < 50% V/V
TLV/PEL: 10 ppm(TWA) TXDS: orl-rat LD50: 3310 mg/kg

Sodium Acetate, CAS #127-09-3 < 15% W/V
TLV/PEL: Not Established TXDS: orl-rat LD50: 3530 mg/kg

Carcinogenicity: None of the above are listed (IARC).

The above information is to be used only as a guide, and does not profess to be all inclusive. HydroZone shall not be held liable for any damage resulting from the handling or contact with the above product.

III. HEALTH HAZARD DATA -----

Can burn skin and eyes on contact. Vapors can irritate and burn mucous membranes, nasal and respiratory passages. Harmful if swallowed.
Routes of Entry: Ingestion, Inhalation.

N/A = Not Available
Issue Date: 5/06
Revised:

First Aid:

Eyes: Flush with water for at least 15 min; get immediate medical assistance.
Skin: Remove contaminated clothing and wash with soap and water.

Inhalation: Remove to fresh air & give artificial respiration if breathing has stopped.

Ingestion: Do not induce vomiting. Give milk or egg whites beaten in water.

GET MEDICAL ASSISTANCE FOR ALL CASES OF OVEREXPOSURE!

IV. PHYSICAL DATA -----

Boiling Point: N/A Specific Gravity: N/A
Vapor Density: Heavier than air
Water Solubility: Miscible
Appearance & Odor: Clear, colorless liquid with acetic acid odor.

V. FIRE & EXPLOSION HAZARD DATA -----

Flash Point: Greater than 100 deg F
Extinguishing Media: dry chemical, CO2, "alcohol" foam.
Special Procedures: Wear self contained breathing apparatus and protective clothing.
Unusual Fire & Explosion Hazards:
Vapor heavier than air and may travel to an ignition source.

VI. REACTIVITY DATA -----

Conditions To Avoid: strong oxidizers

Hazardous Combustion & Decomposition Products: Toxic Fumes, COx

VII. SPECIAL PROTECTION -----

Provide adequate general and local exhaust ventilation.
Protect eyes and skin with safety goggles and gloves.
Do not get in eyes, on skin or clothing.
Wear self contained breathing apparatus in high vapor areas.
Do not breathe vapors.

VIII. HANDLING AND STORAGE PRECAUTIONS -----

Keep container tightly closed.
Store in cool, dry, well ventilated area.
Keep away from ignition source.
Wash thoroughly after handling.

DOT - Not Regulated

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MATERIAL SAFETY DATA SHEET

NFPA Hazard Rating:
Health – 1, Flammability – 0, Reactivity - 0

I. GENERAL INFORMATION -----

Code, Trade Name: MO1546, Molybdenum Titrating Solution
Chemical Name: Citric Acid in Water
Chemical Family: Organic Acid in Water

Spill Response: Absorb with sand or vermiculite and scoop up and containerize for proper disposal.

II. HAZARDOUS INGREDIENTS -----

Citric Acid, CAS #77-92-9 < 0.3% W/V
TLV: Not Established TXDS: orl-rat LD50: 11.7 g/kg
Carcinogenicity: Not listed (IARC).

Waste Disposal: Comply with all local, state and federal regulations.

III. HEALTH HAZARD DATA -----

May be harmful if swallowed or inhaled. May irritate skin, nasal and respiratory passages. Irritating to eyes on contact.
Routes of Entry: Ingestion.

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First Aid:

Eyes: Flush with water for at least 15 min; get immediate medical assistance.
Skin: Remove contaminated clothing and wash with soap and water.

N/A = Not Available
Issue Date: 5/06
Revised:

Inhalation: Remove to fresh air & give artificial respiration if breathing has stopped.

Ingestion: If conscious, give 2 glasses of water, get medical assistance.

GET MEDICAL ASSISTANCE FOR ALL CASES OF OVEREXPOSURE!

IV. PHYSICAL DATA -----

Boiling Point: N/A Specific Gravity: N/A
Vapor Density: N/A
Water Solubility: Miscible
Appearance & Odor: Clear, colorless liquid

V. FIRE & EXPLOSION HAZARD DATA -----

Flash Point: Nonflammable
Extinguishing Media: Dry chemical

Special Procedures: Wear self contained breathing apparatus and protective clothing if necessary.

Unusual Fire & Explosion Hazards: None indicated.

VI. REACTIVITY DATA -----

Conditions To Avoid: None indicated

Hazardous Combustion & Decomposition Products: COx

VII. SPECIAL PROTECTION -----

Provide adequate general and local exhaust ventilation.
Protect eyes and skin with safety goggles and gloves.
Do not get in eyes, on skin or clothing.
Wear self contained breathing apparatus in high vapor areas.
Do not breathe vapors or mist.

VIII. HANDLING AND STORAGE PRECAUTIONS -----

Keep container tightly closed.
Store in cool, dry, well ventilated area.
Keep away from ignition source, acids, oxidizers.
Wash thoroughly after handling.
Empty containers may be hazardous due to retained residue.

DOT - Not Regulated

IX. ENVIRONMENTAL PROTECTION -----

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NFPA Hazard Rating:
Health – 1, Flammability – 3, Reactivity - 0

I. GENERAL INFORMATION -----
Code, Trade Name: MO1589, Molybdenum Indicator Powder
Chemical Name: Diphenylcarbazone/Bromphenol
Blue/Methanol
Chemical Family: Aliphatic Alcohol Organic Dye Solution

Spill Response: Eliminate ignition source, cover with sand or vermiculite and scoop up and containerize for proper disposal.

Waste Disposal: Comply with all local, state and federal regulations.

II. HAZARDOUS INGREDIENTS -----

Diphenylcarbazone, CAS #538-62-5 0.5% W/V
TLV/PEL: Not Established TXDS: N/A

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Carcinogenicity: None of the above listed (IARC).

III. HEALTH HAZARD DATA -----

Toxic by ingestion!
High vapor levels cause eye and respiratory system irritation.
Contact may injure eyes and cause skin irritation.
Routes of Entry: Ingestion, Inhalation, Skin Contact.

N/A = Not Available
Issue Date: 5/06
Revised:

First Aid:

Eyes: Flush with water for at least 15 min; get immediate medical assistance.
Skin: Wash with soap and water.
Inhalation: Move to fresh air & give artificial respiration if breathing has stopped.
Ingestion: Induce vomiting if conscious.

GET MEDICAL ASSISTANCE FOR ALL CASES OF OVEREXPOSURE!

IV. PHYSICAL DATA -----

Boiling Point: N/A Specific Gravity: N/A
Vapor Density: heavier than air
Water Solubility: Miscible
Appearance & Odor: Reddish liquid with alcohol odor.

V. FIRE & EXPLOSION HAZARD DATA -----

Flash Point: 52 deg F (tcc), methyl alc.
Extinguishing Media: dry chemical, CO2, "alcohol" foam.
Special Procedures: Wear self contained breathing apparatus.
Unusual Fire & Explosion Hazards: Fire & explosion hazard.
Vapor heavier than air and may travel to an ignition source.

VI. REACTIVITY DATA -----

Conditions To Avoid: heat, sparks, flame, acids, halogens, and strong oxidizers.

Hazardous Combustion & Decomposition Products: COx

VII. SPECIAL PROTECTION -----

Provide adequate general and local exhaust ventilation.
Protect eyes and skin with safety goggles and gloves.
Do not get in eyes, on skin or clothing.
Wear self contained breathing apparatus in high vapor areas.
Do not breathe vapors or mist.

VIII. HANDLING AND STORAGE PRECAUTIONS -----

Keep container tightly closed.
Store in cool, dry, well ventilated area.
Keep away from ignition source.
Wash thoroughly after handling.
Empty containers may be hazardous due to retained residue.

DOT – Not regulated

IX. ENVIRONMENTAL PROTECTION -----

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NFPA Hazard Rating:
Health – 1, Flammability – 3, Reactivity - 0

I. GENERAL INFORMATION -----

Code, Trade Name: MO1591, Molybdenum Indicator Solvent
Chemical Name: Isopropanol & Methanol
Chemical Family: Aliphatic Alcohols

IX. ENVIRONMENTAL PROTECTION -----

Spill Response: Eliminate ignition source, cover with sand or vermiculite and scoop up and containerize for proper disposal.

II. HAZARDOUS INGREDIENTS -----

* Methyl Alcohol, CAS #67-56-1 60% V/V
TLV/PEL: 200 ppm(TWA) TXDS: orl-hmn LDLo: 143 mg/kg
* Iso-propyl Alcohol, CAS #67-63-0 40% V/V
TLV/PEL: 400 ppm(TWA) TXDS: orl-hmn LDLo: 3570 mg/kg

Waste Disposal: Comply with all local, state and federal regulations.

* Toxic chemical or chemicals subject to the reporting requirements of Section 313, SARA Title III.

Carcinogenicity: None of the above listed (IARC).

III. HEALTH HAZARD DATA -----

Ingestion causes nausea, intoxication, and CNS depression.
High vapor levels cause eye and respiratory system irritation.
Contact may injure eyes and cause skin irritation.
Routes of Entry; Ingestion, Inhalation, Skin Contact.

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First Aid:

Eyes: Flush with water for at least 15 min; get immediate medical assistance.
Skin: Wash with soap and water.
Inhalation: Move to fresh air & give artificial respiration if breathing has stopped.
Ingestion: Induce vomiting if conscious.

N/A = Not Available
Issue Date: 5/06
Revised:

GET MEDICAL ASSISTANCE FOR ALL CASES OF OVEREXPOSURE!

IV. PHYSICAL DATA -----

Boiling Point: N/A Specific Gravity: 0.775
Vapor Density: heavier than air
Water Solubility: Miscible
Appearance & Odor: Colorless liquid with alcohol odor.

V. FIRE & EXPLOSION HAZARD DATA -----

Flash Point: N/A
Extinguishing Media: dry chemical, CO2, "alcohol" foam.

Special Procedures: Wear self contained breathing apparatus.

Unusual Fire & Explosion Hazards: Fire & explosion hazard.
Vapor heavier than air and may travel to an ignition source.

VI. REACTIVITY DATA -----

Conditions To Avoid: heat, sparks, flame, acids, halogens, and strong oxidizers.

Hazardous Combustion & Decomposition Products: COx

VII. SPECIAL PROTECTION -----

Provide adequate general and local exhaust ventilation.
Protect eyes and skin with safety goggles and gloves.
Do not get in eyes, on skin or clothing.
Wear self contained breathing apparatus in high vapor areas.
Do not breathe vapors or mist.

VIII. HANDLING AND STORAGE PRECAUTIONS -----

Keep container tightly closed.
Store in cool, dry, well ventilated area.
Keep away from ignition source.
Wash thoroughly after handling.
Empty containers may be hazardous due to retained residue.

DOT - Flammable Liquid, N.O.S., UN1993 (II)
(contains Isopropanol & Methanol)