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MSDS Information for:

Cat. # 1016

Methylamp[™] Whole Cell Bisulfite Modification Kit

A Material Safety Data Sheet (MSDS) for the product as a whole is not required, as it is a kit consisting of individual components.

The following components are defined as hazardous (See MSDS page)

W1 (Digestion powder)

W4 (DNA modification powder)

W6 (Balance buffer)

The following components are defined as non-hazardous and do not require MSDS. The products do not contain any hazardous components above 1% or any carcinogens above 0.1% as defined in 29 CFR 1910. 1200, the OSHA Hazard Communication Standard.

W2 (Digestion solution)

W3 (Cell collection buffer)

W4 (DNA modification powder)

W5 (DNA modification buffer)

W6 (Balance buffer)

W7 (DNA binding buffer)

W8 (modified DNA elution)

P-spin M Column

P-collection tube

Instructions

Material Safety Data Sheet

Section 1. Identification

| | |
|--------------|--|
| Product Name | <i>FitAmp</i> [™] General Tissue Section DNA Isolation Kit |
| Product No. | P-1003 |
| Supplier | Epigentek Group Inc 110 Bi County Blvd. Ste. 122 Farmingdale, NY 11735 |

In Case of Emergency 631-755-0888

Section 2. Composition, Information on Ingredients

Ingredient Name

DNA digestion Powder
Cas# 39450-01-6

Section 3. Hazards Identification

Classification of the substance or mixture: GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

Skin irritation (Category 2), H315

Eye irritation (Category 2A), H319

Respiratory sensitization (Category 1), H334

Specific target organ toxicity - single exposure (Category 3),

Respiratory system, H335

Section 4. First Aid Measures

| | |
|---------------------|---|
| Inhalation | Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention. |
| Ingestion | Give large amounts of water to drink. Never give anything by mouth to an unconscious person. Get medical attention. |
| Skin Contact | Immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention if symptoms occur. |
| Eye Contact | Immediately flush eyes with plenty of water for at least 15 minutes, lifting upper and lower eyelids occasionally. Get medical attention if irritation persists. |

Section 5. Fire Fight Measures

Extinguishing media

Suitable extinguishing media : Water spray. Alcohol-resistant foam. Carbon dioxide. Dry chemical.

Unsuitable extinguishing media : None known.

Special hazards arising from the substance or mixture

Fire hazard : Not flammable

Hazardous decomposition products in case of fire

Carbon monoxide. Carbon dioxide.

Advice for firefighters

Firefighting instructions : Exercise caution when fighting any chemical fire. Avoid fire-fighting water entering the environment.

Protection during firefighting : As in any fire, wear self-contained breathing apparatus and full protective gear.

Section 6. Accident Release Measures

Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

Emergency procedures : Evacuate unnecessary personnel. Avoid breathing dust. Avoid contact with skin, eyes and clothing.

For emergency responders

Protective equipment: Wear respiratory protection. Wear suitable protective clothing and gloves.

Emergency procedures: Ensure adequate ventilation. Avoid dust formation. Avoid breathing dust. Avoid contact with eyes, skin and clothing.

Environmental precautions

Notify authorities if large amounts of the product enters sewers or public waters.

Methods and material for containment and cleaning up

Methods for cleaning up: Minimise generation of dust. Sweep or shovel spills into appropriate container for disposal.

Section 7. Handling and Storage

Precautions for safe handling

Precautions for safe handling: Provide appropriate exhaust ventilation at places where dust is formed. Use only outdoors or in a well-ventilated area. Avoid dust formation. Avoid breathing dust. Avoid contact with skin, eyes and clothing.

Hygiene measures: Handle in accordance with good industrial hygiene and safety practice. Do not eat, drink or smoke when using this product. Take off contaminated clothing and wash before reuse. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.

Conditions for safe storage, including any incompatibilities

Storage conditions: Store locked up. Keep only in the original container in a cool well ventilated place. Keep

container closed when not in use. Protect from moisture.

Incompatible materials: Strong oxidizing agents.

Storage temperature: -20 °C

Specific end use(s)

Laboratory use.

Section 8. Exposure Control and Personal Protection

Control parameters

No additional information available

Exposure controls

Appropriate engineering controls:

Provide appropriate exhaust ventilation at places where dust is formed.

Personal protective equipment:

Avoid all unnecessary exposure.

Hand protection:

Wear protective gloves. Standard EN 374 - Protective gloves against chemicals. Nitrile rubber. Material thickness: 0.11 mm. Breakthrough time :

480 minutes. The exact breakthrough time has to be found out by the manufacturer of the protective gloves and has to be observed. Gloves should be removed and replaced if there are any signs of degradation or breakthrough

Eye protection:

Wear safety glasses with side shields. Standard EN 166 - Personal eye-protection

Skin and body protection:

Long sleeved protective clothing

Respiratory protection:

Wear suitable respiratory equipment. Nuisance dust exposure: Half mask with a particle filter P1 (EN 143). Higher level exposure: Respirator with ABEK-P2 cartridge (EN 143)

Thermal hazard protection:

Not required for normal conditions of use.

Other information:

Do not eat, drink or smoke during use. Handle in accordance with good industrial hygiene and safety procedures.

Section 9. Physical and Chemical Properties

Physical state : Solid
Appearance : Powder. lyophilised.
Colour : No data available
Odour : No data available
Odour threshold : No data available
pH : No data available
Relative evaporation rate (butylacetate=1) : No data available
Melting point : No data available
Freezing point : No data available
Boiling point : Not applicable.
Flash point : No data available
Auto-ignition temperature : No data available
Decomposition temperature : No data available
Flammability (solid, gas) : No data available
Vapour pressure : No data available
Relative vapour density at 20 °C : No data available
Relative density : No data available
Solubility : No data available
Log Pow : No data available
Viscosity, kinematic : No data available
Viscosity, dynamic : No data available
Explosive properties : No data available
Oxidising properties : No data available
Explosive limits : No data available

Section 10. Stability and Reactivity

Reactivity

Stable under recommended handling and storage conditions (see section 7).

. Chemical stability

Stable under recommended handling and storage conditions (see section 7).

Possibility of hazardous reactions

None known.

Conditions to avoid

Extremely high or low temperatures.

Incompatible materials

Strong oxidizing agents. Moisture.

Hazardous decomposition products

Carbon monoxide. Carbon dioxide.

Section 11. Toxicological Information

Acute toxicity : Not classified

Additional information : Based on available data, the classification criteria are not met

Skin corrosion/irritation : Causes skin irritation.

Serious eye damage/irritation : Causes serious eye irritation.

Respiratory or skin sensitisation : May cause allergy or asthma symptoms or breathing difficulties if inhaled.

Germ cell mutagenicity : Not classified

Based on available data, the classification criteria are not met

Carcinogenicity : Not classified

Additional information : Based on available data, the classification criteria are not met

Reproductive toxicity : Not classified

Additional information : Based on available data, the classification criteria are not met

Specific target organ toxicity (single exposure) : May cause respiratory irritation.

Specific target organ toxicity (repeated

exposure)

: Not classified

Additional information : Based on available data, the classification criteria are not met

Aspiration hazard : Not classified

Additional information : Based on available data, the classification criteria are not met

Potential adverse human health effects and

symptoms

: Causes serious eye irritation. Causes skin irritation. May cause allergy or asthma symptoms or breathing difficulties if inhaled. Dust from this product may cause respiratory irritation. Ingestion may cause irritation of the gastrointestinal tract.

Section 12. Ecological Information

No information available.

Section 13. Disposal Considerations

Waste disposal recommendations : Dispose in a safe manner in accordance with local/national regulations. Empty containers should be taken to an approved waste handling site for recycling or disposal.

Section 14. Transport Information

No information available

Section 15. Regulatory Information

US FEDERAL: Listed on the TSCA inventory.

Section 16. Other Information

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no way shall the company be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if the company has been advised of the possibility of such damages.

Material Safety Data Sheet

Section 1. Identification

Product Name
Product No.

Methylamp™ Whole Cell Bisulfite Modification Kit
P-1016

Supplier Epigentek Group Inc
110 Bi County Blvd. Ste 122
Farmingdale, NY 11735
In Case of Emergency 631-755-0888

Section 2. Composition, Information on Ingredients

Ingredient Name
W6 balance buffer
Cas# 1310-73-2

Section 3. Hazards Identification

Emergency Overview

Causes severe irritation and burns. Harmful if swallowed. Avoid breathing vapor or dust. Use with adequate ventilation. Avoid contact with eyes, skin, and clothes. Wash hands thoroughly after handling. Keep container closed.

Potential Health Effects

Inhalation: Severe irritant. Effects from inhalation of mist vary from mild irritation to serious damage of the upper respiratory tract, depending on severity of exposure. Symptoms may include sneezing, sore throat, or runny nose. Severe pneumonitis may occur.

Ingestion: Corrosive! Swallowing may cause severe burns of mouth, throat, and stomach. Severe scarring of tissue and death may result. Symptoms may include bleeding, vomiting, diarrhea, and decrease of blood pressure. Damage may appear days after exposure.

Skin Contact: Corrosive! Contact with skin can cause irritation or severe burns and scarring with greater exposures.

Eye Contact: Corrosive! Causes irritation of eyes, and with greater exposures it can cause burns that may result in permanent impairment of vision, even blindness.

Chronic Exposure: Prolonged contact with dilute solutions or dust has a destructive effect upon tissue.

Section 4. First Aid Measures

Inhalation: Quickly move victim to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen supply. Call a physician.

Ingestion: DO NOT INDUCE VOMITING! Give large quantities of water or milk if available. Never give anything by mouth to an unconscious person. Get medical attention immediately.

Skin Contact: Immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Call a physician, immediately. Wash clothing before reuse.

Eye Contact: Immediately flush eyes with plenty of water for at least 15 minutes, lifting lower and upper eyelids occasionally. Get medical attention immediately.

Note to Physician:

Perform endoscopy in all cases of suspected sodium hydroxide ingestion. In cases of severe esophageal corrosion, the use of therapeutic doses of steroids should be considered. General supportive measures with continual monitoring of gas exchange, acid-base balance, electrolytes, and fluid intake are also required.

Section 5. Fire Fighting Measures

Fire: Not considered to be a fire hazard. Hot or molten material can react violently with water. Can react with certain metals, such as aluminum, to generate flammable hydrogen gas.

Explosion: May cause fire and explosions when in contact with incompatible materials.

Extinguishing

Media: Use any appropriate means suitable for extinguishing surrounding fire. Adding water to caustic solution generates large amounts of heat.

Special

Information: In the event of a fire, wear full protective clothing and NIOSH-approved self-contained breathing apparatus.

Section 6. Accidental Release Measures

Ventilate area of leak or spill. Keep unnecessary and unprotected people away from area of spill. Absorb spill with inert material, then place in a chemical waste container. Neutralize with a weak acid.

Section 7. Handling and Storage

Keep in a tightly closed container. Protect from physical damage. Store in a cool, dry, ventilated area away from sources of heat, moisture, and incompatibilities. Wash hands thoroughly after handling.

Section 8. Exposure Controls/Personal Protection

Respiratory

Protection: NIOSH/MSHA-approved respirator

Skin Protection: Wear impervious protective clothing, including boots, gloves, lab coat, apron or coveralls, as appropriate, to prevent skin contact.

Eye Protection: Use chemical safety goggles. Maintain eye wash fountain and quick-drench facilities in work area.

Section 9. Physical and Chemical Properties

Appearance: Clear, colorless solution.

Odor: Odorless.

Solubility: Completely miscible with water.

pH: 14.0

% Volatiles: No information found.

Boiling Point: Information not available

Melting Point: Not applicable

Vapor Density: No information found.

Vapor Pressure: Information not available.

Evaporation

Rate: No information found.

Section 10. Stability and Reactivity

Stability: Stable under ordinary conditions of use and storage.

Hazardous Decomposition: Not established.

Hazardous Polymerization: Will not occur.

Materials to Avoid: Acids, flammable liquids, organic halogens, metals, nitrocompounds.
Conditions to Avoid: Heat, incompatibles.

Section 11. Toxicological Information

Irritation Data: Skin, rabbit: 500 mg/24H severe; eye rabbit: 50 ug/24H severe.
Carcinogen: Not considered to be carcinogenic by ACGIH and IARC

Section 12. Ecological Information

Environmental Fate: No information found.
Environmental Toxicity: No information found.

Section 13. Disposal Considerations

Whatever cannot be saved for recovery or recycling should be managed in an appropriate and approved waste facility. Although not a listed RCRA hazardous waste, this material may exhibit one or more characteristics of a hazardous waste and require appropriate analysis to determine specific disposal requirements. Processing, use, or contamination of this product may change the waste management options. State and local disposal regulations may differ from federal disposal regulations. Dispose of container and unused contents in accordance with federal, state and local requirements.

Section 14. Transport Information

Information not available.

Section 15. Regulatory Information

OSHA Hazard Communication Evaluation

Meets criteria for hazardous material, as defined by 29 CFR 1910.1200

Section 16. Other Information

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Material Safety Data Sheet

Section 1. Identification

| | |
|-----------------------------|---|
| Product Name | Methylap™ Whole Cell Bisulfite Modification Kit |
| Product No. | P-1016 |
| Supplier | Epigentek Group Inc 110 Bi County Blvd. Ste 122 Farmingdale, NY 11735 |
| In Case of Emergency | 631-755-0888 |

Section 2. Composition, Information on Ingredients

Ingredient Name

W4 DNA Modification Ingredient 1

Cas# 7681-57-4

Section 3. Hazards Identification

Emergency Overview

Harmful if swallowed. Contact with acids liberates toxic gas.

Irritating to eyes and respiratory system. Moisture sensitive. Air sensitive.

Potential Health Effects

| | |
|--------------------|--|
| Eye: | Cause eye irritation. |
| Skin: | May cause skin irritation. |
| Ingestion: | Harmful if swallowed. May cause irritation of the digestive tract. |
| Inhalation: | Causes respiratory tract irritation. |
| Chronic: | Not available. |

Section 4. First Aid Measures

| | |
|--------------------|---|
| Eye: | Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower lids. Seek medical attention. |
| Skin: | Flush skin with plenty of soap and water for at least 15 minutes while removing contaminated clothing and shoes. |
| Ingestion: | Get medical aid. Rinse mouth out with water. |
| Inhalation: | Quickly move victim from exposure to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen supply. |

Section 5. Fire Fighting Measures

General

Information: As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. Substance is noncombustible.

Extinguishing

Media: Substance is noncombustible; use agent most appropriate to extinguish surrounding fire.

Autoignition

Temperature: Not applicable.

Flash Point: Not available

NFPA Rating: Health 1; Flammability 0; instability 0.

Explosion Limits Not available.

Section 6. Accident Release Measures

General

Information: Use proper personal protective equipment as indicated in Section 8.

Spills/Leaks: Sweep up then place into a suitable container for disposal. Avoid generating dusty conditions.

Section 7. Handling and Storage

Handling: Wash hands thoroughly after handling. Use with adequate ventilation. Minimize dust generation and accumulation. Avoid contact with skin and eyes. Keep container tightly closed. Avoid breathing dust.

Storage: Store in a cool, dry place. Store in a tightly closed container.

Section 8. Exposure Control, Personal Protection

Engineering

Controls: Use adequate general or local exhaust ventilation to keep airborne concentrations below the permissible exposure limits.

Eye: Wear safety glasses and chemical goggles if splashing is possible.

Skin: Wear appropriate protective gloves to prevent skin exposure.

Clothing: Wear appropriate protective clothing to minimize contact with skin.

Respirators: Following the OSHA respirator regulations found in 29CFR 1910.134 or European Standard EN 149.

Section 9. Physical and Chemical Properties

| | |
|-----------------------------------|---------------------|
| Physical State: | Solid |
| Appearance: | White |
| Odor: | Sulfur dioxide odor |
| pH: | Acidic in solution |
| Vapor Pressure: | Not applicable |
| Viscosity: | Not applicable |
| Vapor Density: | Not applicable |
| Boiling Point: | Not applicable |
| Freeze/Melting Point: | Not applicable |
| Decomposition Temperature: | Not applicable |
| Solubility: | Soluble |
| Specific Gravity/Density: | 1.48 |

Section 10. Stability and Reactivity

Chemical Stability: Stable. However, may decompose if heated. Oxidizes when exposure to air. Moisture sensitive.

Conditions to Avoid: Incompatible materials, exposure to air, acids, exposure to moist air or water, temperatures above 125°C.

Incompatibilities with

Other Materials: Strong oxidizing agents, acids, sodium nitrate.

Hazardous

Decomposition Products: Oxides of sulfur

Hazardous

Polymerization: Has not been reported.

Section 11. Toxicological Information

RTECS#: CAS# 7681-57-4: UX8225000

LD50/LC50: CAS# 7681-57-4: Dermal, guinea pig: LD50 > 1 g/kg; Oral, rat: LD50 = 1130-1900 mg/kg

Carcinogenicity: CAS# 7681-57-4. ACS - ACGIH: A4 - Not Classifiable as a Human Carcinogen
See actual entry in RTECS for complete information.

Section 12. Ecological Information

No information available.

Section 13. Disposal Considerations

Dispose of in a manner consistent with federal, state, and local regulations.

Section 14. Transport Information

No information available

Section 15. Regulatory Information

| | |
|-----------------------------------|--|
| US FEDERAL: | Listed on the TSCA inventory. |
| International Regulations: | European Labeling in Accordance with EC Directives |
| Hazard Symbols: | XN |

Section 16. Other Information

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