



Epigentek Group Inc  
110 Bi County Blvd. Ste 122  
Farmingdale, NY 11735  
Phone: 631-755-0888  
Fax: 718-484-3956  
www.epigentek.com

*MSDS Information for:*

**BisulFlash™ DNA Bisulfite Conversion Easy Kit**  
[Cat. # 1054]

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)

**BisulFlash Conversion Mix:** 8 ml  
**Desulfonation Buffer:** 0.5 ml

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.

Component	50 Reactions Cat # P-1054-050	Storage Upon Receipt
DNA Binding Solution	20 ml	RT
Elution Buffer	2 ml	RT
Spin Column*	50	RT
Collection Tube	50	RT
User Guide	1	RT

## Material Safety Data Sheet

### Section 1. Identification

**Product Name** BisulFlash™ DNA Bisulfite Conversion Easy Kit  
**Product No.** P-1054  
**Supplier** Epigentek Group Inc  
**In Case of Emergency** 631-755-0888

### Section 2. Composition, Information on Ingredients

**Ingredient Name**  
**Desulfonation Buffer**

### 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

*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

<b>Product Name</b>	BisulFlash™ DNA Bisulfite Conversion Easy Kit
<b>Product No.</b>	P-1054
<b>Supplier</b>	Epigentek Group Inc
<b>In Case of Emergency</b>	631-755-0888

## Section 2. Composition, Information on Ingredients

Ingredient Name  
**BisulFlash Conversion Mix**  
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 and 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

*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.*