



## MATERIAL SAFETY DATA SHEET (MSDS 040/94/EEC) Fetal Cell Detection Kit – Fixative Reagent (Fixol)

### 1. IDENTIFICATION OF THE PREPARATION AND OF THE COMPANY

#### 1.1 Identification of the Preparation:

Fixol: Fixing Reagent for the Fetal Cell Detection Kit also known as the Kleihauer Kit

#### 1.2 Company Identification:

Guest Medical, Unit A6 Larkfield Trading Estate,  
New Hythe Lane, Larkfield, Aylesford, Kent, ME20 6SW

**Telephone Number:** 01622 791 895  
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**Contact name:** Roger Wakeford-Brown, Scientific Director

### 2. COMPOSITION / INFORMATION ON HAZARDOUS INGREDIENTS

- 2.1 **Chemical Name:** Fixative Reagent. Contains methanol in a diluted form.  
All other chemicals are non-hazardous.
- 2.2 **Synonym:** Methanol
- 2.3 **Chemical Family:** Alcohol
- 2.4 **Formula:** CH<sub>3</sub>.OH
- 2.5 **CAS Number:** 67-56-1
- 2.6 **EINECS Number:** 2006596

### 3. HAZARDS IDENTIFICATION

**Hazard:** Flammable Reagent, possible slight irritant  
The methanol is present in considerably diluted form.

#### 3.1 Health Effects of Solution:

Effect on Skin: Mild irritant to skin after lengthy exposure  
Effect on Eyes: Possible eye irritant  
Effect on Ingestion: Toxic  
Effect on inhalation: Toxic only after lengthy exposure

### 4. FIRST AID MEASURES

Eye Contact: Irrigate thoroughly with water for 10 minutes

Skin Contact: Drench with copious volumes of water

Ingestion: Remove from exposure, keep warm. Wash out mouth thoroughly with water. SEEK MEDICAL ADVICE. Do not induce vomiting

Inhalation: Remove from exposure, rest and keep warm. In severe cases obtain medical advice

## 5. FIRE FIGHTING MEASURES

### 5.1 Special Fire or Explosion Hazards:

Flammable

### 5.2 Suitable extinguishing Media:

Water spray, dry powder or vaporising liquids

### 5.3 Other Recommendations:

None

## 6. ACCIDENTAL RELEASE MEASURES

Shut off all sources of ignition. Wear appropriate protective clothing. If local regulations permit mop up with copious volumes of water and run to waste.

## 7. HANDLING AND STORAGE

### 7.1 Recommended Storage Conditions:

Store reagent at room temperature and away from any sources of ignition

### 7.2 Recommended Handling Precautions:

Use gloves (rubber or latex) when using  
Do not use near a source of ignition

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

### 8.1 Respiratory Protection:

Not required

### 8.2 Ventilation:

Not required

### 8.3 Eye Protection:

Not required

### 8.4 Skin Protection:

Wear gloves at all times

## 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Clear
Odour:	Slightly sweet
pH:	8.85 – 9.30
Solubility:	Fluid reagent containing water
Ignition temperature	464°C
Explosion limits	Lower 7.3%
	Upper 37%

## 10. STABILITY AND REACTIVITY

### 10.1 Conditions to Avoid:

Storage close to a source of ignition

### 10.2 Materials to Avoid:

Acid halides, alkali metals, alkaline earth metals, oxidising agents, hydrides, zinc Diethyl, halogen compounds, chloroform  
The possibility of a reaction with other substances cannot be excluded

## 11. TOXICOLOGICAL INFORMATION

Each bottle contain 100mls eluting fluid

Route of entry:

Inhalation: Small volume unlikely to present any problems

Ingestion: Toxic

Skin and Eye Contact: Possible slight irritation of eyes and mucous membranes

After the absorption of large quantities: nausea, vomiting, headache, inebriation, impaired vision (irreversible damage of the optical nerve)

Systemic effect: acidosis, drop in blood pressure, agitation, spasms, narcosis, coma

### Toxicological Data:

Acute Toxicity: LD50 5628mg/kg oral, rat, LC50 83mg/l inhalation, rat  
(results given for pure methanol)

Carcinogenicity: No evidence of carcinogenic properties

## 12. ECOLOGICAL INFORMATION

No environmental hazard anticipated.

## 13. DISPOSAL INFORMATION

Run to waste with copious volumes of water providing local regulations permit

## 14. TRANSPORT INFORMATION

No special information

## 15. REGULATORY INFORMATION

Label for Supply: Toxic, Flammable

Risk Phrases: R10, R25, R36/38

Safety Phrases: S16, S24/25, S45

Regulatory References: None

## 16 OTHER INFORMATION

THIS KIT IS SUPPLIED IN 100ml BOTTLES

THIS REAGENT PRESENTS A FLAMMABLE RISK

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