

# SP300 DIFF-3 STAIN KIT

## Material Safety Data Sheet

This product is comprised of 4 components each of which have separate Safety Data Sheets following to form this MSDS.

Diff-3 Fixative	- Anhydrous Methanol 100%
Diff-3 solution B	- Oxidised Methylene blue in phosphate buffer 100%
Diff-3 solution A	- Eosin dyes in phosphate buffer 100%
Diff-3 Rinse concentrate	- Phosphate buffer concentrate less than 100%

According to 91/155/EC

### SP300F Diff-3 fixative

#### 1 Identification of substance

Product details: Anhydrous methanol 100% Stage 1 blood smear fixative

##### Manufacturer/Supplier:

GCC Diagnostics / Gainland Chemical Company, Factory Road, Sandycroft, Deeside, Flintshire, UK, CH5 2QJ.  
Tel: 01244 53 63 26. Fax: 01244 53 12 54.  
Emergency Phone: 01244 53 63 26  
Web Site: [www.gccdiagnostics.com](http://www.gccdiagnostics.com).

Informing department: Product safety department.

Emergency information:

During normal hours the Health, Safety and Environmental Department.

#### 2 Composition/Data on components

Chemical characterization: Designation:  
CAS# 67-56-1

Methanol

#### 3 Hazards identification:

Information pertaining to particular dangers for man and environment

H225	Highly flammable liquid and vapour.
H332	Harmful if inhaled
H312	Harmful in contact with skin
H302	Harmful if swallowed.
H320+H315	Irritating to eyes and skin.

#### 4 First aid measures

After inhalation:

Supply fresh air. If required, provide artificial respiration. Keep patient warm. Consult doctor if symptoms persist. Seek immediate medical advice.

After skin contact Instantly wash with water and soap and rinse thoroughly. Seek immediate medical advice.

After eye contact Rinse opened eye for several minutes under running water. Then consult doctor.

After swallowing Seek immediate medical advice.

#### 5 Fire fighting measures

Suitable extinguishing agents CO<sub>2</sub>, extinguishing powder or water jet. Fight larger fires with water jet or alcohol-resistant foam.

Special hazards caused by the material, its products of combustion or flue gases: Can be released in case of fire: Carbon monoxide and carbon dioxide

Protective equipment:

Wear suitable skin and eye protection when in use. Do not breathe vapour. Use in a well ventilated area with respirator or in an efficient fume hood.

## 6 Accidental release measures

Person-related safety precautions: Wear protective equipment. Keep unprotected persons away. Ensure adequate ventilation. Keep away from ignition sources. Measures for environmental protection: Do not allow material to be released to the environment .

Measures for cleaning/collecting: Absorb with cloths or liquid-binding material (sand, mica- vermiculite ,diatomite, acid binders, universal binders, sawdust). Ensure adequate ventilation. Keep away from ignition sources. Wash area to public sewer with water.

Additional information:

See Section 7 for information on safe handling

See section 8 for information on personal protection equipment. See Section 13 for information on disposal.

## 7 Handling and storage

### Handling

Information for safe handling: Keep containers tightly sealed. Store in cool, dry place in tightly closed containers. Ensure good ventilation/exhaustion at the workplace.

Information about protection against explosions and fires:

Keep ignition sources away - Do not smoke. Protect against electrostatic charges. Fumes can combine with air to form an explosive mixture.

### Storage

Requirements to be met by storerooms and containers: Store in cool location away from sources of ignition.

Information about storage in one common storage facility: Do not store together with oxidizing agents.

Further information about storage conditions: Keep container tightly sealed. Store in cool, dry conditions in well sealed containers.

## 8 Exposure controls and personal protection

Additional information about design of technical systems: Properly operating chemical fume hood designed for hazardous chemicals and having an average face velocity of at least 100 feet per minute.

Components with critical values that require monitoring at the workplace:

Ethyl alcohol

	ppm
ACGIH TLV	1000, A4 Belgium TWA 1000 Denmark TWA 1000
Finland TWA	1000; 1250-STEL
France TWA	1000; 5000-STEL
Germany TWA	1000
Hungary TWA	1000; 3000-STEL
Ireland TWA	1000
Netherlands TWA	500
Poland TWA	1000
Russia TWA	1000-STEL
Sweden TWA	1000
Switzerland TWA	1000
United Kingdom TWA	1000 OSHA PEL 1000

Methyl alcohol ppm

ACGIH TLV	200; 250-STEL, A4 (skin)
Belgium TWA	200; 250-STEL, (skin)
Denmark TWA	200(skin)
Finland TWA	200; 250-STEL (skin)
France TWA	200; 1000-STEL
Germany TWA	200

Hungary TWA 50; 100-STEEL Ireland TWA200; 250-STEEL (skin)  
Netherlands TWA 200 (skin)  
Poland TWA 100  
Russia TWA 200; 5 mg/m<sup>3</sup>-STEEL (skin)  
Sweden TWA 200; 250-STEEL (skin)  
Switzerland TWA 200; 400-STEEL (skin)  
United Kingdom TWA 200; 250-STEEL (skin) OSHA PEL 200

Additional information: No data

### Personal protective equipment

General protective and hygienic measures The usual precautionary measures should be adhered to in handling the chemicals. Keep away from foodstuffs, beverages and food. Instantly remove any soiled and impregnated garments. Wash hands during breaks and at the end of the work.

Breathing equipment: Use breathing protection with high concentrations.

Protection of hands: Impervious gloves

Eye protection: Safety glasses

Face protection: Vapour/particle facemask

Body protection: Protective work clothing.

## 9 Physical and chemical properties

Form: Liquid

Colour: Clear

Smell: Alcohol-like

Value/Range Unit Method

Change in condition

Melting point/Melting range: N/A

Boiling point/Boiling range: 67.4° C

Sublimation temperature / start: Not determined

Flash point: 12 ° C

Ignition temperature: Not determined

Decomposition temperature: Not determined

Danger of explosion:

Product is not explosive. However, formation of explosive air/steam mixtures is possible

Critical values for explosion:

Lower: Not determined

Upper: Not determined

Steam pressure: Not determined

Density at 20 ° C 0.90 g/cm<sup>3</sup>

Solubility in / Miscibility with Water: Fully miscible

## 10 Stability and reactivity

Thermal decomposition / conditions to be avoided:  
No decomposition if used and stored according to specifications.

Materials to be avoided:

Oxidizing agents Acid chlorides  
Acid anhydrides Alkali metals

Dangerous reactions: Reacts with oxidizing agents

Dangerous products of decomposition: Carbon monoxide / carbon dioxide and chlorine compounds .

## 11 Toxicological information

Toxic in large amounts.

### Primary irritant effect:

On the skin: Irritant for skin and mucous membranes.

On the eye: Irritant effect.

Sensitization: No sensitizing effect known.

### Additional toxicological information:

To the best of our knowledge the acute and chronic toxicity of this substance is not fully known. ACGIH A4: Not classifiable as a human carcinogen: Inadequate data on which to classify the agent in terms of it's carcinogenicity in humans and/or animals.

## 12 Ecological information

General notes:

Do not allow material to be released to the environment without proper governmental permits.

## 13 Disposal considerations

Recommendation

In the quantities supplied and in normal usage. Disposal to public sewer diluting greatly with water is recommended. Consult state, local or national regulations for proper disposal. Hand over to disposers of hazardous waste.

Packagings:

Recommendation: Rinse with water to drain and recycle as PE.

Recommended cleaning agent: Water and surfactant.

## 14 Transport information

Land transport ADR/RID and GGVS/GGVE (cross-border/domestic) Air – IATA. Sea – IMO

Proper shipping name: Flammable liquid, NOS UN 1230 Class 3/6.1 Pk Grp II , FP 12 C

## 15 Regulatory information

Designation according to EC guidelines:

Code letter and hazard designation of product: F Flammable T Toxic

#### Hazard Phrases

H225 Highly flammable liquid and vapour.  
H332 Harmful if inhaled  
H312 Harmful in contact with skin  
H302 Harmful if swallowed.  
H320+H315 Irritating to eyes and skin.

#### Precautionary phrases:

P210 Keep away from sources of ignition - No smoking.  
P281 Wear suitable protective equipment as required.



#### National regulation

##### Information about limitation of use:

For use only by technically qualified individuals. Employment restrictions concerning young persons must be observed.

### 16 Other information

Employers should use this information only as a supplement to other information gathered by them, and should make independent judgement of suitability of this information to ensure proper use and protect the health and safety of employees. This information is furnished without warranty, and any use of the product not in conformance with this Material Safety Data Sheet, or in combination with any other product or process, is the responsibility of the user.

Department issuing data specification sheet: Health, Safety and Environmental Department.

### 1 Identification of substance

#### Diff-3 Solution A

Buffered Eosin solution, for use in Stage 2 eosinophilic stain in DIFF-3 procedure.

CAS: N/A EC No: N/A

Produced and supplied by Gainland Chemical Co( GCC Diagnostics).Factory Rd.Sandycroft.  
Deeside. Flintshire. UK CH5 2QJ 01244536326 Fx 01244531254 email Gainland@btconnect.com

### 2 Composition Information

Hazardous components details:  
Essentially non-hazardous

### 3 Hazards identification

No real risk in normal usage.  
Environment: No real risk in the quantities supplied in this kit product.

### 4 First aid measures

EYES - Irritation possible and discolouration from the dyes.  
If in contact flood eyes with eye bath for 5-10 minutes, opening upper and lower eye-lids. Seek medical attention for all eye injuries from chemicals.  
SKIN - Irritation possible in sensitive individuals and discolouration from the dyes and phenol. If irritation or other symptoms persist, seek medical attention.  
INGESTION - Maybe harmful if ingested. If ingested wash out mouth with running water and seek emergency medical advice on what treatment to give.  
INHALATION - No real risk in normal usage.

### 5 Fire fighting

Extinguishing Media - Use water spray, fog, or alcohol resistant foam.  
Special Hazards - Although this reagent contains a small amount of glycols < 30% It is combustible but not classified Flammable.

## 6 Accidental release measures

Person-related safety precautions: Wear protective equipment. Keep unprotected persons away. Ensure adequate ventilation. Keep away from ignition sources. Measures for environmental protection: Do not allow material to be released to the environment .

Measures for cleaning/collecting: Absorb with cloths or liquid-binding material (sand, mica- vermiculite, diatomite, acid binders, universal binders, sawdust). Ensure adequate ventilation. Wash area to public sewer with water.

Additional information:

See Section 7 for information on safe handling

See section 8 for information on personal protection equipment.

See Section 13 for information on disposal.

## 7 Handling and storage

### Handling

Information for safe handling: Keep containers tightly sealed. Store in cool, dry place.

Information about protection against explosions and fires: Not flammable.

**Storage:** Requirements to be met by storerooms and containers: Store at room temperature, out of direct sunlight.

Information about storage in one common storage facility: None

Further information about storage conditions: Keep container tightly sealed. Store in cool, dry conditions in well sealed containers. Store in a locked cabinet or with access restricted to technical experts or their assistants.

## 8 Exposure controls and personal protection

Additional information about design of technical systems: Properly operating chemical fume hood designed for hazardous chemicals and having an average face velocity of at least 100 feet per minute.

Components with critical values that require monitoring at the workplace: None

Additional information: No data

Personal protective equipment:

General protective and hygienic measures The usual precautionary measures should be adhered to in handling chemicals. Keep away from foodstuffs, beverages and food. Instantly remove any soiled and impregnated garments. Wash hands during breaks and at the end of the work. Store protective clothing separately. Avoid contact with the eyes and skin.

Breathing equipment: Use breathing protection with high concentrations.

Protection of hands: Impervious gloves

Eye protection: Safety glasses

Face protection Face Mask

Body protection: Protective work clothing.

## 9 Physical and chemical properties

Form: Liquid

Colour: red

Odour: Odourless

pH: 6.70 - 6.80

Melting point/Melting range: N/A

Boiling point/Boiling range: N/A

Sublimation temperature / start: Not determined

Flash point: N/A

Inflammability (solid, gaseous) Not Flammable

Ignition temperature: N/A

Danger of explosion: Product is not explosive.

Solubility in / Miscibility with Water: Fully soluble.

## 10 Stability and reactivity

Avoid sources of ignition – product is not flammable but is combustible.

Thermal decomposition / conditions to be avoided: No decomposition if used and stored according to specifications.

Materials to be avoided: Alkali metals

Dangerous reactions: No dangerous reactions known.  
Dangerous products of decomposition: Carbon oxides.

## 11 Toxicological information

None – essentially non toxic

## 12 Ecological information

No data available – product is considered non-toxic in the kit quantities supplied

## 13 Disposal considerations

Product: Recommendation - Consult state, local or national regulations for proper disposal. Small quantities on a lab scale maybe disposed of to the public sewer diluting greatly with water. Hand over larger amounts to licensed disposers of hazardous waste.

Uncleaned packagings:

Recommendation: If still full dispose of through a waste disposal contractor if empty, rinse with water and dispose of as shown below.

Cleaned packaging : Recycled as Polyethylene (PE)

## 14 Transport information

Land transport ADR/RID and GGVS/GGVE (cross-border/domestic) Air Transport IATA. Sea Transport IMDG:

Not regulated for transport.

Designation according to EC guidelines:

H305+H313+H320 May be harmful if swallowed, enters airways or by skin contact .Keep container tightly closed.  
P262 Do not get in eyes, skin, clothing. IF SWALLOWED - rinse mouth with water, seek urgent medical attention. IF INHALED - move to clear air zone. IF ON SKIN or in EYES - rinse with soap and water and apply eye bath.  
P314 Get medical attention if you feel unwell.



## 1 Identification of substance

### Diff-3 Solution B

Buffered polychromed methylene blue solution, for use in Stage 3 basophilic stain in DIFF-3 procedure.

CAS: N/A EC No: N/A

Produced and supplied by Gainland Chemical Co( GCC Diagnostics).Factory Rd.Sandycroft.  
Deeside. Flintshire. UK CH5 2QJ 01244536326 Fx 01244531254 email Gainland@btconnect.com

## 2 Composition Information

Hazardous components details:  
Essentially non-hazardous

## 3 Hazards identification

No real risk in normal usage.

Environment: No real risk in the quantities supplied in this kit product.

#### 4 First aid measures

EYES - Irritation possible and discolouration from the dyes.

If in contact flood eyes with eye bath for 5-10 minutes, opening upper and lower eye-lids. Seek medical attention for all eye injuries from chemicals.

SKIN - Irritation possible in sensitive individuals and discolouration from the dyes and phenol. If irritation or other symptoms persist, seek medical attention.

INGESTION - Maybe harmful if ingested. If ingested wash out mouth with running water and seek emergency medical advice on what treatment to give.

INHALATION - No real risk in normal usage.

#### 5 Fire fighting

Extinguishing Media - Use water spray, fog, or alcohol resistant foam.

Special Hazards - Although this reagent contains a small amount of glycols < 30% It is combustible but not classified Flammable.

#### 6 Accidental release measures

Person-related safety precautions: Wear protective equipment. Keep unprotected persons away. Ensure adequate ventilation. Keep away from ignition sources. Measures for environmental protection: Do not allow material to be released to the environment .

Measures for cleaning/collecting: Absorb with cloths or liquid-binding material (sand, mica- vermiculite, diatomite, acid binders, universal binders, sawdust). Ensure adequate ventilation. Wash area to public sewer with water.

Additional information:

See Section 7 for information on safe handling

See section 8 for information on personal protection equipment. See Section 13 for information on disposal.

#### 7 Handling and storage

Handling

Information for safe handling: Keep containers tightly sealed. Store in cool, dry place.

Information about protection against explosions and fires: Not flammable.

Storage: Requirements to be met by storerooms and containers: Store at room temperature, out of direct sunlight.

Information about storage in one common storage facility: None

Further information about storage conditions: Keep container tightly sealed. Store in cool, dry conditions in well sealed containers. Store in a locked cabinet or with access restricted to technical experts or their assistants.

#### 8 Exposure controls and personal protection

Additional information about design of technical systems: Properly operating chemical fume hood designed for hazardous chemicals and having an average face velocity of at least 100 feet per minute.

Components with critical values that require monitoring at the workplace: None

Additional information: No data

Personal protective equipment:

General protective and hygienic measures The usual precautionary measures should be adhered to in handling chemicals. Keep away from foodstuffs, beverages and food. Instantly remove any soiled and impregnated garments. Wash hands during breaks and at the end of the work. Store protective clothing separately. Avoid contact with the eyes and skin.

Breathing equipment: Use breathing protection with high concentrations.

Protection of hands: Impervious gloves

Eye protection: Safety glasses

Face protection: Dust Mask

Body protection: Protective work clothing.



## 9 Physical and chemical properties

Form: Liquid  
Colour: Blue/purple  
Odour: Odourless  
pH: 6.70 - 6.80  
Melting point/Melting range: N/A  
Boiling point/Boiling range: N/A  
Sublimation temperature / start: Not determined  
Flash point: N/A  
Inflammability (solid, gaseous) Not Flammable  
Ignition temperature: N/A  
Danger of explosion: Product is not explosive.  
Solubility in / Miscibility with Water: Fully soluble.

## 10 Stability and reactivity

Avoid sources of ignition – product is not flammable but is combustible.  
Thermal decomposition / conditions to be avoided: No decomposition if used and stored according to specifications.

Materials to be avoided: Alkali metals

Dangerous reactions: No dangerous reactions known.  
Dangerous products of decomposition: Carbon oxides.

## 11 Toxicological information

None – essentially non toxic

## 12 Ecological information

No data available – product is considered non-toxic in the kit quantities supplied

## 13 Disposal considerations

Product:

Recommendation - Consult state, local or national regulations for proper disposal. Small quantities on a lab scale maybe disposed of to the public sewer diluting greatly with water. Hand over larger amounts to licensed disposers of hazardous waste.

Uncleaned packagings:

Recommendation: If still full dispose of through a waste disposal contractor if empty, rinse with water and dispose of as shown below.

Cleaned packaging : Recycled as Polyethylene (PE)

## 14 Transport information

Land transport ADR/RID and GGVS/GGVE (cross-border/domestic) Air Transport IATA, Sea Transport IMDG:

Not regulated for transport

Designation according to EC guidelines:

H305+H313+H320 May be harmful if swallowed, enters airways or by skin contact .Keep container tightly closed.  
P262 Do not get in eyes, skin, clothing. IF SWALLOWED - rinse mouth with water, seek urgent medical attention. IF INHALED - move to clear air zone. IF ON SKIN or in EYES - rinse with soap and water and apply eye bath.  
P314 Get medical attention if you feel unwell.



National regulations: Information about limitation of use: For use only by technically qualified individuals. Employment restrictions concerning young persons must be observed.

## 1 Identification of substance

### Buffer Concentrate pH 6.80

Produced and supplied by: GCC Diagnostics (Gainland Chemical Company) Factory Road, Sandycroft, Deeside, Flintshire, UK Tel: 0044 1244 536326 Web Site: [www.gccdiagnostics.com](http://www.gccdiagnostics.com)

Informing department: Product safety department.  
Emergency information: The Health, Safety and Environmental Control Dept.  
Tel: 0044 1244 536326

## 2 Composition/Data on components

Chemical characterization: Sodium and Potassium phosphate salts, preservative (4-chloroacetamide), Balance - water.  
Identification number(s): none.

## 3 Hazards identification

Hazard designation: None.

## 4 First aid measures

After skin contact, wash with water and soap and rinse thoroughly. Seek immediate medical advice. After eye contact, rinse opened eye for several minutes under running water. After swallowing, seek medical advice if you feel unwell.

## 5 Fire fighting measures

Dangerous substances released in case of fire: Carbon monoxide (CO)

## 6 Accidental release measures

Rinse to drain. No environmental risk.  
Additional information:  
See Section 7 for information on safe handling  
See section 8 for information on personal protection equipment.  
See Section 13 for information on disposal.

## 7 Handling and storage

Handling Information for safe handling: Keep containers tightly sealed. To avoid bacterial/fungal contamination, store at room temperature or below. No special requirements.

## 8 Exposure controls and personal protection

No real Health & Safety risk in normal use.  
Personal protective equipment General protective and hygienic measures The usual precautionary measures should be adhered to in handling the chemicals. Keep away from foodstuffs, beverages and food. Instantly remove Any soiled and impregnated garments. Wash hands during breaks and at the end of the work.  
Protection of hands/body : Impervious gloves/normal eye protection(safety glasses) Other body protection not essential.

## 9 Physical and chemical properties

Form: Liquid  
Colour: none ( water white)  
Smell: None  
Boiling point/Boiling range: 96-100C  
Sublimation temperature / start: None  
Flash point: None  
Inflammability (solid, gaseous) Not flammable  
Ignition temperature: None  
Decomposition temperature: Not determined  
Danger of explosion: No risk.  
Density at 20 ° C 1.05  
Solubility in / Miscibility with  
Water: Fully miscible

## 10 Stability and reactivity

Stable with other compounds. Dangerous products of decomposition: Carbon monoxide/dioxide

## 11 Toxicological information

Very minor irritant effect possible for skin and mucous membranes. on the eye: Minor irritant effect possible.

Sensitization: No sensitizing effect known. .

IARC-3: Not classifiable as to carcinogenicity to humans.

## 12 Ecological information

General notes: No real risk to environment in the quantities involved in normal use.

## 13 Disposal considerations

Product: Run waste to Public Sewer.

Uncleaned packagings: Recommendation: Normal disposal. Not restricted.

Recommended cleaning agent: Water, if necessary with cleaning agent.

## 14 Transport information

Not Classified under any regulation.

## 15 Regulatory information

Designation according to EC guidelines: Not Restricted.

National regulations Information about limitation of use: For use only by technically qualified individuals.

Employment restrictions concerning young persons must be observed.

## 16 Other information

Employers should use this information only as a supplement to other information gathered by them, and should make independent judgement of suitability of this information to ensure proper use and protect the health and safety of employees. This information is furnished without warranty, and any use of the product not in conformance with this Material Safety Data Sheet, or in combination with any other product or process, is the responsibility of the user.

National regulations: Information about limitation of use: For use only by technically qualified individuals.

Employment restrictions concerning young persons must be observed.

Revised July 2015

## **GCC Diagnostics**

**(Gainland Chemical Co) Factory Road. Sandycroft. Deeside. Flintshire. United Kingdom. Tel: 01244 53 63 26 Fax: 01244 53 12 54**

**E-mail: [gainland@btconnect.com](mailto:gainland@btconnect.com) Website: [www.gccdiagnostics.com](http://www.gccdiagnostics.com)**