

# S0390 - Giemsa Stain

## Material Safety Data Sheet

According to 91/155/EC

### SECTION 1: Identification of the substance/mixture and of the company/undertaking

#### 1.1 Product identifiers

Product name : Giemsa Stain Solution

Product Number : S0390

REACH No. : A registration number is not available for this substance as the substance or its uses are exempted from registration, the annual tonnage does not require a registration or the registration is envisaged for a later registration deadline.

CAS-No. : 51811-82-6

#### 1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses : Laboratory chemicals, Manufacture of substances

#### 1.3 Details of the supplier of the safety data sheet

Company : Gainland Chemical Company  
Factory Road  
Sandycroft  
Deeside  
Flintshire  
CH5 2QJ  
UNITED KINGDOM

Telephone : +44 (0)1244 536326

Fax : +44 (0)1244 531254

E-mail address : gainland@btconnect.com

#### 1.4 Emergency telephone number

Emergency Phone # : +44 (0)1244536326

### **SECTION 2: Hazards identification**

#### 2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008:

Flammable liquids (Category 2), H225

Acute toxicity, Oral (Category 3), H301

Acute toxicity, Inhalation (Category 3), H331

Acute toxicity, Dermal (Category 3), H311

Specific target organ toxicity - single exposure (Category 1), H370

For the full text of the H-Statements mentioned in this Section, see Section 16.

Classification according to EU Directives 67/548/EEC or 1999/45/EC

F Highly flammable R11

T Toxic R23/24/25, R39/23/24/25

For the full text of the R-phrases mentioned in this Section, see Section 16.

#### 2.2 Label elements

Labelling according Regulation (EC) No 1272/200

Labelling according Regulation (EC) No 1272/2008  
Pictogram

Signal word **Danger**



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### Hazard statement(s)

H225 Highly flammable liquid and vapour.  
H301 + H311 + H331 Toxic if swallowed, in contact with skin or if inhaled  
H370 Causes damage to organs.

### Precautionary statement(s)

P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking.  
P260 Do not breathe dust/ fume/ gas/ mist/ vapours/ spray.  
P280 Wear protective gloves/ protective clothing.  
P301 + P310 IF SWALLOWED: Immediately call a POISON CENTRE or doctor/physician.  
P311 Call a POISON CENTRE or doctor/ physician.

Supplemental Hazard Statements: none

According to European Directive 67/548/EEC as amended.

Hazard symbol(s): F Highly flammable  
T Toxic

### R-phrase(s)

R11 Highly flammable.  
R23/24/25 Toxic by inhalation, in contact with skin and if swallowed.  
R39/23/24/25 Toxic: danger of very serious irreversible effects through inhalation, in contact with skin and if swallowed.

### S-phrase(s)

S16 Keep away from sources of ignition - No smoking.  
S36/37 Wear suitable protective clothing and gloves.  
S45 In case of accident or if you feel unwell, seek medical advice immediately (show label where possible).

### 2.3 Other hazards - none

## SECTION 3: Composition/information on ingredients

### 3.2 Mixtures

Chemical characterization : Natural product  
Synonyms : Azure eosin methylene blue  
Giemsa solution

Hazardous ingredients according to Regulation (EC) No 1272/2008

Methanol:

<u>Component</u>	<u>Classification</u>	<u>Concentration</u>
CAS-No: 67-56-1	Flam. Liq. 2; Acute Tox. 3;	50 - 100%
EC-No: 200-659-6	STOT SE 1; H225, H301 + H311 + H331 + H370	
Index-No: 603-001-00-X		
Registration number: 01-2119433307-44-XXXX		

Hazardous ingredients according to Directive 1999/45/EC

Methanol:

<u>Component</u>	<u>Classification</u>	<u>Concentration</u>
CAS-No: 67-56-1	F, T, R11 - R23/24/25 - R39/23/24/25	50 - 100%
EC-No: 200-659-6		
Index-No: 603-001-00-X		
Registration number: 01-2119433307-44-XXXX		

For the full text of the H-Statements and R-Phrases mentioned in this Section, see Section 16.

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### **SECTION 4: First aid measures**

#### **4.1 Description of first aid measures**

##### **General advice**

Consult a physician. Show this safety data sheet to the doctor in attendance.

##### **If inhaled**

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

##### **In case of skin contact**

Wash off with soap and plenty of water. Take victim immediately to hospital. Consult a physician.

##### **In case of eye contact**

Flush eyes with water as a precaution.

##### **If swallowed**

Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

#### **4.2 Most important symptoms and effects, both acute and delayed**

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

#### **4.3 Indication of any immediate medical attention and special treatment needed**

No data available

### **SECTION 5: Firefighting measures**

#### **5.1 Extinguishing media**

Suitable extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

#### **5.2 Special hazards arising from the substance or mixture**

Carbon oxides

#### **5.3 Advice for firefighters**

Wear self contained breathing apparatus for fire fighting if necessary.

#### **5.4 Further information**

Use water spray to cool unopened containers.

### **SECTION 6: Accidental release measures**

#### **6.1 Personal precautions, protective equipment and emergency procedures**

Wear respiratory protection. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapours accumulating to form explosive concentrations.

Vapours can accumulate in low areas.

For personal protection see section 8.

#### **6.2 Environmental precautions**

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

#### **6.3 Methods and materials for containment and cleaning up**

Contain spillage, and then collect with an electrically protected vacuum cleaner or by wet-brushing and place in container for disposal according to local regulations (see section 13).

#### **6.4 Reference to other sections**

For disposal see section 13.

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### **SECTION 7: Handling and storage**

#### **7.1 Precautions for safe handling**

Avoid contact with skin and eyes. Avoid inhalation of vapour or mist.

Keep away from sources of ignition - No smoking. Take measures to prevent the build up of electrostatic charge.

For precautions see section 2.2.

#### **7.2 Conditions for safe storage, including any incompatibilities**

Store in cool place. Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

#### **7.3 Specific end use(s)**

A part from the uses mentioned in section 1.2, no other specific uses are stipulated.

### **SECTION 8: Exposure controls/personal protection**

#### **8.1 Control parameters**

Components with workplace control parameters:

Component	CAS-No.	Value	Control parameters	Basis
Methanol	67-56-1	STEL	250 ppm	UK. EH40 WEL - Workplace Exposure Limits
			333 mg/m <sup>3</sup>	

Notes: Can be absorbed through skin. The assigned substances are those for which there are concerns that dermal absorption will lead to systemic toxicity

TWA	200 ppm	UK. EH40 WEL - Workplace Exposure Limits
	266 mg/m <sup>3</sup>	

Notes: Can be absorbed through skin. The assigned substances are those for which there are concerns that dermal absorption will lead to systemic toxicity.

TWA	200 ppm	Europe. Indicative occupational exposure limit values
	260 mg/m <sup>3</sup>	

Notes: Identifies the possibility of significant uptake through the skin indicative

#### **8.2 Exposure controls**

##### **Appropriate engineering controls**

Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product.

##### **Personal protective equipment**

Eye/face protection: Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin protection: Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

The selected protective gloves need to satisfy the specifications of EU Directive 89/686/EEC and the standard EN374 derived from it.

##### Full contact

Material: butyl-rubber

Minimum layer thickness: 0.3 mm

Break through time: 480 min

##### Splash contact

Material: Nitrile rubber

Minimum layer thickness: 0.4 mm

Break through time: 30 min

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### Body Protection

Complete suit protecting against chemicals, Flame retardant antistatic protective clothing, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

### Respiratory protection

Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

### Control of environmental exposure

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

Form:	Liquid
Odour:	Characteristic
Colour:	Purple blue in the mixture. Clear and colourless in its separate and pure form.
Melting point/Melting range:	-97.8 ° C
Boiling point/Boiling range:	64.7 ° C
Sublimation temperature / start:	Not determined
Flash point:	11 ° C
Inflammability (solid, gaseous):	Flammable.
Ignition temperature:	385 ° C
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:	6.7 Vol %
Upper:	36 Vol %
Steam pressure at 20 ° C:	129 hPa
Density at 20 ° C:	0.79 g/cm <sup>3</sup>
Solubility in / Miscibility with water:	Fully miscible

## SECTION 10: Stability and reactivity

### 10.1 Reactivity

no data available

### 10.2 Chemical stability

Stable under recommended storage conditions.

### 10.3 Possibility of hazardous reactions

no data available

### 10.4 Conditions to avoid

Heat, flames and sparks. Extremes of temperature and direct sunlight.

### 10.5 Incompatible materials

Acids, Acid chlorides, Acid anhydrides, Oxidizing agents, Alkali metals, Reducing agents

### 10.6 Hazardous decomposition products

Other decomposition products - no data available

In the event of fire: see section 5

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### SECTION 11: Toxicological information

#### 11.1 Information on toxicological effects

Acute toxicity

LDLO Oral - Human - 143 mg/kg (Methanol)

Remarks: Lungs, Thorax, or Respiration:Dyspnea. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhoea.

LD50 Oral - rat - 1,187 - 2,769 mg/kg (Methanol)

no data available (Methanol)

LC50 Inhalation - rat - 4 h - 128.2 mg/l (Methanol)

LC50 Inhalation - rat - 6 h - 87.6 mg/l (Methanol)

LD50 Dermal - rabbit - 17,100 mg/kg (Methanol)

Skin corrosion/irritation

Skin - rabbit Result: No skin irritation

Serious eye damage/eye irritation

Eyes - rabbit (Methanol) Result: No eye irritation

Respiratory or skin sensitisation

Maximisation Test - guinea pig (Methanol) Result: Does not cause skin sensitisation.  
(OECD Test Guideline 406)

Germ cell mutagenicity

Ames test (Methanol)

S. Typhimurium Result: negative

in vitro assay (Methanol)

fibroblast

Result: negative

Mutation in mammalian somatic cells.

Mutation in mammalian somatic cells.

Mutagenicity (in vivo mammalian bone-marrow cytogenetic test, chromosomal analysis) (Methanol)

mouse - male and female

Result: negative

Carcinogenicity

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

Reproductive toxicity

Damage to fetus not classifiable (Methanol)

Fertility classification not possible from current data. (Methanol)

Specific target organ toxicity - single exposure

Causes damage to organs. (Methanol)

Specific target organ toxicity - repeated exposure

The substance or mixture is not classified as specific target organ toxicant, repeated exposure.

Aspiration hazard

No aspiration toxicity classification (Methanol)

Additional Information

RTECS: Not available

Methyl alcohol may be fatal or cause blindness if swallowed. (Methanol)

Effects due to ingestion may include:, Headache, Dizziness, Drowsiness, metabolic acidosis, Coma, Seizures. (Methanol)

Symptoms may be delayed., Damage of the Liver, Kidney (Methanol)

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### **SECTION 12: Ecological information**

#### **12.1 Toxicity**

Toxicity to fish: mortality LC50 - Lepomis macrochirus (Bluegill) - 15,400.0 mg/l - 96 h (Methanol)  
NOEC - Oryzias latipes - 7,900 mg/l - 200 h (Methanol)

Toxicity to daphnia and other aquatic invertebrates: EC50 - Daphnia magna (Water flea) - > 10,000.00 mg/l - 48 h (Methanol)

Toxicity to algae: Growth inhibition EC50 - Scenedesmus capricornutum (fresh water algae) - 22,000.0 mg/l - 96 h (Methanol)

#### **12.2 Persistence and degradability**

Biodegradability: Aerobic - Exposure time 5 d (Methanol)  
Result: 72 % - rapidly biodegradable

Biochemical Oxygen Demand (BOD): 600 - 1,120 mg/g (Methanol)

Chemical Oxygen Demand (COD): 1,420 mg/g (Methanol)

Theoretical oxygen demand: 1,500 mg/g (Methanol)

#### **12.3 Bioaccumulative potential**

Bioaccumulation: Cyprinus carpio (Carp) - 72 d at 20 °C - 5 mg/l (Methanol)  
Bioconcentration factor (BCF): 1.0

#### **12.4 Mobility in soil**

Will not adsorb on soil. (Methanol)

#### **12.5 Results of PBT and vPvB assessment**

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

#### **12.6 Other adverse effects**

Additional ecological information: Avoid release to the environment.

Stability in water at 19 °C 83 - 91 % - 72 h (Methanol)

Remarks: Hydrolyses on contact with water. Hydrolyses readily.

### **SECTION 13: Disposal considerations**

#### **13.1 Waste treatment methods**

##### **Product**

Burn in a chemical incinerator equipped with an afterburner and scrubber but exert extra care in igniting as this material is highly flammable. Offer surplus and non-recyclable solutions to a licensed disposal Company.

##### **Contaminated packaging**

Dispose of as unused product.

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## Material Safety Data Sheet

### **SECTION 14: Transport information**

#### **14.1 UN number**

ADR/RID: 1992                      IMDG: 1992                      IATA: 1992

#### **14.2 UN proper shipping name**

ADR/RID:        METHANOL, SOLUTION

IMDG:            METHANOL, SOLUTION

IATA:            Methanol, SOLUTION

#### **14.3 Transport hazard class(es)**

ADR/RID: 3 (6.1)                      IMDG: 3 (6.1)                      IATA: 3 (6.1)

#### **14.4 Packaging group**

ADR/RID: II                              IMDG: II                              IATA: II

#### **14.5 Environmental hazards**

ADR/RID: no                              IMDG Marine pollutant: no                      IATA: no

#### **14.6 Special precautions for user**

No data available

### **SECTION 15: Regulatory information**

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

#### **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**

no data available

#### **15.2 Chemical Safety Assessment**

For this product a chemical safety assessment was not carried out.

### **SECTION 16: Other information**

Full text of H-Statements referred to under sections 2 and 3.

Acute Tox.	Acute toxicity
Flam. Liq.	Flammable liquids
H225	Highly flammable liquid and vapour.
H301	Toxic if swallowed.
H301 + H311 + H331	Toxic if swallowed, in contact with skin or if inhaled
H311	Toxic in contact with skin.
H331	Toxic if inhaled.
H370	Causes damage to organs.

Full text of R-phrases referred to under sections 2 and 3

F Highly flammable

T Toxic

R11 Highly flammable.

#### Disclaimer

This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials

or in any process. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However,

no warranty guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy themselves as

to the suitability of such information for his own particular use.