



# **GIEMSA'S STAIN SOLUTION**

# MATERIAL SAFETY DATA SHEET SDS/MSDS

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

1.1 Product identifiers

Product name : Giemsa'S Stain Solution

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

Identified uses : Laboratory chemicals, Industrial & for professional use only.

1.3 Details of the supplier of the safety data sheet

Company : Central Drug House (P) Ltd

7/28 Vardaan House New Delhi -110002

INDIA

Telephone : +91 11 49404040

Email : <a href="mailto:care@cdhfinechemical.com">care@cdhfinechemical.com</a>

1.4 Emergency telephone number

Emergency Phone # : +91 11 49404040 (9:00am - 6:00 pm) [Office hours]

## **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.

## 2.2 Label elements

Labelling according Regulation (EC) No 1272/2008

Pictogram

CH502 CH506 CH508

Signal word Danger

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 CENTER/doctor.

P311 Call a POISON CENTER /doctor.

Supplemental Hazard

Statements

none

## 2.3 Other hazards - none

## **SECTION 3: Composition/information on ingredients**

#### 3.1 Mixtures

Synonyms : Azure eosin methylene blue

Giemsasolution

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

Component Classification Concentration

Methanol

CAS-No. 67-56-1 Flam. Liq. 2; Acute Tox. 3; <= 100 %

EC-No. 200-659-6 STOT SE 1; H225, H301, Index-No. 603-001-00-X H331, H311, H370

Concentration limits:

>= 10 %: STOT SE 1, H370; 3 - < 10 %: STOT SE 2, H371;

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

#### **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 firefighting 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.

## **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.

Storage class (TRGS 510): Flammable Liquids

## 7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

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

## 8.1 Control parameters

## 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.

# **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 (US) or type ABEK (EN 14387) respirator cartridges as a backup to enginee 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 a) Appearance b) Odour No data available Odour Threshold No data available c) No data available d) На Melting point/freezing No data available e) point Initial boiling point and No data available boiling range 11 °C - closed cup g) Flash point h) Evaporation rate No data available i) Flammability (solid, gas) No data available Upper/lower No data available j) flammability or explosive limits k) Vapour pressure No data available Vapour density No data available I) m) Relative density No data available

octanol/water

o) Partition coefficient: n-

n) Water solubility

p) Auto-ignition No data available temperature

No data available

No data available

q) Decomposition No data available temperature

r) Viscosity No data available
s) Explosive properties No data available
t) Oxidizing properties No data available

# 9.2 Other safety information

No data available

# **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

Hazardous decomposition products formed under fire conditions. - Carbon oxides

Other decomposition products - No data available

In the event of fire: see section 5

## **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)

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(Methanol) 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)

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.

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

Mouse - male and female

Result: negative

## Carcinogenicity

Carcinogenicity- Rat- Inhalation(Methanol)

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

Effects due to ingestion may include:, Headache, Dizziness, Drowsiness, metabolic acidosis, Coma, Seizures., Methyl alcohol may be fatal or cause blindness if swallowed.(Methanol)

## **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

1,420 mg/g(Methanol)

Demand (COD)

Theoretical oxygen 1,500 mg/g(Methanol)

demand

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 °C83 - 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 b highly flammable. Offer surplus and non-recyclable solutions to a licensed disposal company.

## Contaminated packaging

Dispose of as unused product.

## **SECTION 14: Transport information**

14.1 UN number

ADR/RID: 1230 IMDG: 1230 IATA: 1230

14.2 UN proper shipping name

ADR/RID: METHANOL, SOLUTION IMDG: METHANOL, SOLUTION METHANOL, SOLUTION 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**

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

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.

H225 Highly flammable liquid and vapour.

H301 Toxic if swallowed.

H301 + H311 + Toxic if swallowed, in contact with skin or if inhaled

H331

H311 Toxic in contact with skin.

H331 Toxic if inhaled.

H370 Causes damage to organs. H371 May cause damage to organs.

#### **Further information**

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Central Drug House (P) Ltd and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product. See www.cdhfinechemical.com for additional terms and conditions of sale.