

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006



GIEMSA STAINING KIT

Version 1.0

Revision Date 09-10-2012

Print Date 05-13-2013

1. Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

Commercial Product Name : GIEMSA STAINING KIT
Mat.-No./ Genisys-No. : 05279224001

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

Recommended restrictions on use : For professional users only.

1.3 Details of the supplier of the safety data sheet

Company : Ventana Medical Systems
1910 E. Innovation Park Drive
85755 Tucson AZ

E-mail address :
Telephone : 1-800-227-2155 or 520-877-2155
Telefax :
Responsible Department :
In case of emergencies: : CHEMTREC 1-800-424-9300 (U.S. or
Canada)
1-703-527-3887
(International)

2. Hazards identification

2.1 Classification of the substance or mixture

Classification (REGULATION (EC) No 1272/2008)

| | |
|--|---|
| Flammable liquids, Category 2 | H225: Highly flammable liquid and vapour. |
| Acute toxicity, Category 3 | H301: Toxic if swallowed. |
| Acute toxicity, Category 3 | H331: Toxic if inhaled. |
| Acute toxicity, Category 3 | H311: Toxic in contact with skin. |
| Specific target organ toxicity - single exposure, Category 1 | H370: Causes damage to organs. |

Classification (67/548/EEC, 1999/45/EC)

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

2.2 Label elements

Labelling (REGULATION (EC) No 1272/2008)

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Hazard pictograms

:



Signal word

: Danger

Hazard statements

: 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 statements

: **Prevention:**

P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
P233 Keep container tightly closed.
P240 Ground/bond container and receiving equipment.
P241 Use explosion-proof electrical/ ventilating/ lighting/ equipment.
P242 Use only non-sparking tools.
P243 Take precautionary measures against static discharge.
P260 Do not breathe dust/ fume/ gas/ mist/ vapours/ spray.
P264 Wash skin thoroughly after handling.
P270 Do not eat, drink or smoke when using this product.
P271 Use only outdoors or in a well-ventilated area.
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.

Response:

P301 + P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor/ physician.
P303 + P361 + P353 IF ON SKIN (or hair): Remove/ Take off immediately all contaminated clothing. Rinse skin with water/ shower.
P304 + P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P307 + P311 IF exposed: Call a POISON CENTER or doctor/ physician.
P322 Specific measures (see supplemental first aid instructions on this label).
P330 Rinse mouth.
P361 Remove/ Take off immediately all contaminated clothing.
P363 Wash contaminated clothing before reuse.
P370 + P378 In case of fire: Use dry sand, dry chemical or alcohol-resistant foam for extinction.

Storage:

P403 + P233 Store in a well-ventilated place. Keep container tightly closed.

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P403 + P235

P405

Disposal:

P501

Store in a well-ventilated place. Keep cool.

Store locked up.

Dispose of contents/ container to an approved waste disposal plant.

2.3 Other hazards

No information available.

3. Composition/information on ingredients

3.2 Mixtures

Giemsa Stain

Classification (REGULATION (EC) No 1272/2008)

Flammable liquids, Category 2

Acute toxicity, Category 3

Acute toxicity, Category 3

Acute toxicity, Category 3

Specific target organ toxicity - single exposure, Category 1

H225: Highly flammable liquid and vapour.

H301: Toxic if swallowed.

H331: Toxic if inhaled.

H311: Toxic in contact with skin.

H370: Causes damage to organs.

Classification (67/548/EEC, 1999/45/EC)

Flammable

Toxic

R10: Flammable.

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

Hazardous components

| Chemical Name | CAS-No. EC-No. Registration number | Classification (67/548/EEC) | Classification (REGULATION (EC) No 1272/2008) | Concentration [%] |
|---------------|---|---|---|----------------------|
| methanol | 67-56-1 200-659-6 | F; R11 T; R23/24/25- R39/23/24/25 | Flam. Liq. 2; H225 Acute Tox. 3; H301 Acute Tox. 3; H331 Acute Tox. 3; H311 STOT SE 1; H370 | >= 50 - <= 100 |

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

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

4. First aid measures

4.1 Description of first aid measures

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- | | |
|-------------------------|--|
| General advice | : Move out of dangerous area. Consult a physician. Show this safety data sheet to the doctor in attendance. Do not leave the victim unattended. |
| If inhaled | : Move to fresh air. : If unconscious place in recovery position and seek medical advice. If symptoms persist, call a physician. |
| In case of skin contact | : If on skin, rinse well with water. If on clothes, remove clothes. |
| In case of eye contact | : Immediately flush eye(s) with plenty of water. Remove contact lenses. Protect unharmed eye. Keep eye wide open while rinsing. If eye irritation persists, consult a specialist. |
| If swallowed | : Keep respiratory tract clear. Do not give milk or alcoholic beverages. Never give anything by mouth to an unconscious person. If symptoms persist, call a physician. Take victim immediately to hospital. Rinse mouth with water. |

4.2 Most important symptoms and effects, both acute and delayed

- | | |
|----------|-----------------------------|
| Symptoms | : No information available. |
|----------|-----------------------------|

4.3 Indication of any immediate medical attention and special treatment needed

- | | |
|-----------|--|
| Treatment | : The first aid procedure should be established in consultation with the doctor responsible for industrial medicine. |
|-----------|--|

5. Firefighting measures

5.1 Extinguishing media

- | | |
|------------------------------|---|
| Suitable extinguishing media | : Alcohol-resistant foam Carbon dioxide (CO ₂) Dry chemical |
|------------------------------|---|

- | | |
|--------------------------------|-------------------------|
| Unsuitable extinguishing media | : High volume water jet |
|--------------------------------|-------------------------|

5.2 Special hazards arising from the substance or mixture

- | | |
|--------------------------------------|---|
| Specific hazards during firefighting | : Do not allow run-off from fire fighting to enter drains or water courses. |
|--------------------------------------|---|

5.3 Advice for firefighters

- | | |
|---|---|
| Special protective equipment for firefighters | : Wear self contained breathing apparatus for fire fighting if necessary. |
|---|---|

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Further information : Collect contaminated fire extinguishing water separately. This must not be discharged into drains.
Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.
For safety reasons in case of fire, cans should be stored separately in closed containments.
Use a water spray to cool fully closed containers.

6. Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions : Use personal protective equipment.
Ensure adequate ventilation.
Remove all sources of ignition.
Evacuate personnel to safe areas.
Refer to protective measures listed in sections 7 and 8.
Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas.

6.2 Environmental precautions

Environmental precautions : Prevent product from entering drains.
Prevent further leakage or spillage if safe to do so.
Local authorities should be advised if significant spillages cannot be contained.

6.3 Methods and materials for containment and cleaning up

Methods for cleaning up : Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13).

6.4 Reference to other sections

Treat recovered material as described in the section "Disposal considerations".

7. Handling and storage

7.1 Precautions for safe handling

Advice on safe handling : Avoid formation of aerosol.
Do not breathe vapours/dust.
Avoid exposure - obtain special instructions before use.
Avoid contact with skin and eyes.
For personal protection see section 8.
Smoking, eating and drinking should be prohibited in the application area.
Take precautionary measures against static discharges.
Provide sufficient air exchange and/or exhaust in work rooms.
Open drum carefully as content may be under pressure.
Dispose of rinse water in accordance with local and national

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regulations.

Advice on protection against fire and explosion : Do not spray on a naked flame or any incandescent material.
Take necessary action to avoid static electricity discharge (which might cause ignition of organic vapours).
Use only explosion-proof equipment.
Keep away from open flames, hot surfaces and sources of ignition.

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers : No smoking.
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.
Observe label precautions.
Electrical installations / working materials must comply with the technological safety standards.

Further information on storage conditions : See label or package insert

Other data : No decomposition if stored and applied as directed.

7.3 Specific end use(s)

Specific use(s) : Laboratory chemicals

8. Exposure controls/personal protection

Exposure Guidelines

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Components with workplace control parameters

| Components | CAS-No. | Value | Control parameters | Source |
|------------|---------|-------|----------------------------------|---|
| methanol | 67-56-1 | TWA | 200 ppm | USA. ACGIH Threshold Limit Values (TLV) |
| | | TWA | 200 ppm | USA. ACGIH Threshold Limit Values (TLV) |
| | | STEL | 250 ppm | USA. ACGIH Threshold Limit Values (TLV) |
| | | STEL | 250 ppm | USA. ACGIH Threshold Limit Values (TLV) |
| | | TWA | 200 ppm 260 mg/m ³ | USA. NIOSH Recommended Exposure Limits |
| | | TWA | 200 ppm 260 mg/m ³ | USA. NIOSH Recommended Exposure Limits |

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| | | | | |
|--|--|------|----------------------|---|
| | | ST | 250 ppm 325 mg/m3 | USA. NIOSH Recommended Exposure Limits |
| | | ST | 250 ppm 325 mg/m3 | USA. NIOSH Recommended Exposure Limits |
| | | TWA | 200 ppm 260 mg/m3 | USA. Occupational Exposure Limits (OSHA) - Table Z-1 Limits for Air Contaminants |
| | | TWA | 200 ppm 260 mg/m3 | USA. Occupational Exposure Limits (OSHA) - Table Z-1 Limits for Air Contaminants |
| | | TWA | 200 ppm 260 mg/m3 | USA. OSHA - TABLE Z-1 Limits for Air Contaminants - 1910.1000 |
| | | TWA | 200 ppm 260 mg/m3 | USA. OSHA - TABLE Z-1 Limits for Air Contaminants - 1910.1000 |
| | | STEL | 250 ppm 325 mg/m3 | USA. OSHA - TABLE Z-1 Limits for Air Contaminants - 1910.1000 |
| | | STEL | 250 ppm 325 mg/m3 | USA. OSHA - TABLE Z-1 Limits for Air Contaminants - 1910.1000 |

Personal protective equipment

- Eye protection : Eye wash bottle with pure water
Tightly fitting safety goggles
- Hand protection : Protective gloves
- Skin and body protection : impervious clothing
Choose body protection according to the amount and
concentration of the dangerous substance at the work place.
- Respiratory protection : In the case of vapour formation use a respirator with an
approved filter.
- Hygiene measures : Avoid contact with skin, eyes and clothing.
When using do not eat or drink.
When using do not smoke.
Wash hands before breaks and immediately after handling the

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product.

9. Physical and chemical properties

9.1 Information on basic physical and chemical properties

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Appearance : liquid

Colour : blue

Odour : alcohol-like

pH : neutral

Melting point/range : no data available

Boiling point/boiling range : no data available

Flash point : 21 °C

Lower explosion limit : no data available

Upper explosion limit : no data available

Vapour pressure : no data available

Water solubility : completely miscible

Partition coefficient: n-octanol/water : no data available

Ignition temperature : no data available

Thermal decomposition : no data available

Viscosity, dynamic : no data available

Oxidizing properties : The substance or mixture is not classified as oxidizing.

9.2 Other information

Giemsa Stain

Conductivity : no data available

Oxidising potential : no data available

Surface tension : no data available

10. Stability and reactivity

10.1 Reactivity

No dangerous reaction known under conditions of normal use.

10.2 Chemical stability

Stable under normal conditions.

10.3 Possibility of hazardous reactions

Hazardous reactions : Reacts with the following substances:
Acids

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Alkali metals
Oxidizing agents
Reducing agents

: Further information: No decomposition if stored and applied as directed.

: Vapours may form explosive mixture with air.

10.4 Conditions to avoid

Conditions to avoid : Heat, flames and sparks.

10.5 Incompatible materials

Materials to avoid : no data available

10.6 Hazardous decomposition products

Hazardous decomposition products : Carbon oxides

11. Toxicological information

11.1 Information on toxicological effects

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Components:

methanol :

Acute oral toxicity : Acute toxicity estimate: 100 mg/kg, Expert judgement

: LD50 Oral: 7,300 mg/kg, mouse

: LD50 Oral: 5,600 mg/kg, rat

Acute inhalation toxicity : Acute toxicity estimate: 3 mg/l, vapour, Expert judgement

: LC50: 85.26 mg/l, 4 h, rat,

: LC50: 64000 ppm, 4 h, rat,

Acute dermal toxicity : Acute toxicity estimate: 300 mg/kg, Expert judgement

: LD50 Dermal: 15,800 mg/kg, rabbit

Acute toxicity (other routes of administration) : no data available

Skin corrosion/irritation : The product may be absorbed through the skin., May irritate skin.

Serious eye damage/eye irritation : Contact with eyes may cause irritation.

Respiratory or skin sensitization : guinea pig, Did not cause sensitization on laboratory animals.

Germ cell mutagenicity

Genotoxicity in vitro : Ames test, Result: negative

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| | |
|--------------------------|--|
| Genotoxicity in vivo | : Result: negative |
| STOT - single exposure | : Assessment: Causes damage to organs. |
| STOT - repeated exposure | : Assessment: The substance or mixture is not classified as specific target organ toxicant, repeated exposure. |
| Aspiration toxicity | : No aspiration toxicity classification |
| Further information | : Solvents may degrease the skin. |

12. Ecological information

12.1 Toxicity

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Components:

methanol :

| | |
|---|---|
| Toxicity to fish | : LC50: 15,400 mg/l, 96 h, Lepomis macrochirus (Bluegill sunfish) |
| | : LC50: 8,000 mg/l, 48 h, Oncorhynchus mykiss (rainbow trout) |
| | : LC50: > 10,000 mg/l, Leuciscus idus (Golden orfe) |
| Toxicity to daphnia and other aquatic invertebrates | : EC50: > 10,000 mg/l, 48 h, Daphnia magna (Water flea) |
| Toxicity to algae | : 8,000 mg/l, 8 d, Scenedesmus quadricauda (Green algae) |
| Toxicity to bacteria | : 6,600 mg/l, 16 h, Bacteria |

Ecotoxicology Assessment

Toxicity Data on Soil : Not expected to adsorb on soil.

Other organisms relevant to the environment : no data available

12.2 Persistence and degradability

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Components:

methanol :

Biodegradability : 99 %, Result: Readily biodegradable., Exposure time: 30 d, OECD Test Guideline 301

12.3 Bioaccumulative potential

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Components:

methanol :

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Bioaccumulation : Does not bioaccumulate.

12.4 Mobility in soil

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Components:

methanol :

Mobility : no data available

Distribution among : no data available

environmental compartments

Environmental fate and : no data available

pathways

Physico-chemical : no data available

removability

12.5 Results of PBT and vPvB assessment

Giemsa Stain

Components:

methanol :

Assessment : This substance is not considered to be persistent, bioaccumulating nor toxic (PBT)., This substance is not considered to be very persistent nor very bioaccumulating (vPvB).

12.6 Other adverse effects

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Components:

methanol :

Biochemical Oxygen : 600 - 1,120 mg/g, Biochemical oxygen demand, 5 d
Demand (BOD)

Dissolved organic carbon : no data available
(DOC)

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

Adsorbed organic bound : no data available
halogens (AOX)

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13. Disposal considerations

13.1 Waste treatment methods

- | | |
|------------------------|---|
| Product | : Do not contaminate ponds, waterways or ditches with chemical or used container. Send to a licensed waste management company. Can be disposed as waste water, when in compliance with local regulations. |
| Contaminated packaging | : Empty remaining contents. Dispose of as unused product. Do not re-use empty containers. Do not burn, or use a cutting torch on, the empty drum. |

14. Transport information

14.1 UN number

- | | |
|------|--------|
| DOT | : 1230 |
| IMDG | : 1230 |
| IATA | : 1230 |

14.2 Proper shipping name

- | | |
|------|------------|
| DOT | : Methanol |
| IMDG | : Methanol |
| IATA | : Methanol |

14.3 Transport hazard class

- | | |
|------|-----|
| DOT | : 3 |
| IMDG | : 3 |
| IATA | : 3 |

14.4 Packing group

- | | |
|--|------------------------------|
| DOT | |
| Packaging group | : II |
| Labels | : 3 (6.1) |
| Tunnel restriction code | : packed, Transport in tanks |
| IMDG | |
| Packaging group | : II |
| Labels | : 3 (6.1) |
| EmS Number | : F-E, S-D |
| IATA_C | |
| Packing instruction (cargo aircraft) | : 364 |
| Packaging group | : II |
| Labels | : 3 (6.1) |
| IATA_P | |
| Packing instruction (passenger aircraft) | : 352 |
| Packaging group | : II |
| Labels | : 3 (6.1) |

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14.5 Environmental hazards

DOT

Environmentally hazardous : no

IMDG

Marine Pollutant : no

IATA

Environmentally hazardous : no

14.6 Special precautions for user

no data available

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Remarks : not applicable

15. Regulatory information

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

Giemsa Stain

REGULATORY INFORMATION

OSHA Hazards : Flammable liquid

WHMIS Classification : B2 Flammable liquid
Flammable liquid

This product has been classified according to the hazard criteria of the CPR and the MSDS contains all of the information required by the CPR.

CERCLA Reportable Quantity

| | | |
|------------|-------------------|----------|
| Components | : <u>methanol</u> | 5000 lbs |
| | <u>methanol</u> | 5000 lbs |

SARA 302 Reportable Quantity

Product : This material does not contain any components with a SARA 302 RQ.

SARA 311/312 Hazards : Fire Hazard

EPCRA - Emergency Planning and Community Right-to-Know Act

SARA 302 : SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 304 : This material does not contain any components with a section 304 EHS RQ.

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Components : methanol

Clean Air Act

Ozone-Depletion Potential : This product neither contains, nor was manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A + B).

The following chemical(s) are listed as HAP under the U.S. Clean Air Act, Section 12 (40 CFR 61):

methanol 70 %

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 112(r) for Accidental Release Prevention (40 CFR 68.130, Subpart F).

The following chemical(s) are listed under the U.S. Clean Air Act Section 111 SOCMII Intermediate or Final VOC's (40 CFR 60.489):

methanol 70 %

Clean Water Act

This product does not contain any Hazardous Substances listed under the U.S. CleanWater Act, Section 311, Table 116.4A.

This product does not contain any Hazardous Chemicals listed under the U.S. CleanWater Act, Section 311, Table 117.3.

US State Regulations

Massachusetts Right To Know

Components : methanol 70 - 90 %

Pennsylvania Right To Know

Components : methanol 70 - 90 %
water 10 - 30 %

New Jersey Right To Know

Components : methanol 70 - 90 %
water 10 - 30 %

California Prop 65 Components : This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

15.2 Chemical Safety Assessment

A Chemical Safety Assessment is not required for this substance when it is used in the specified applications.

16. Other information

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

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

Further information

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The 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, unless specified in the text.