Infosafe No™ 3CHCX	Issue Date :June 2021	RE-ISSUED by ABS

Product Name **GIEMSA STAIN**

Classified as hazardous

1. Identification

GHS Product Identifier GIEMSA STAIN

Company Name AUSTRALIAN BIOSTAIN Pty Ltd

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Recommended use of the chemical and restrictions on use Staining of blood smears.

Other Names

Name	Product Code
GEIMSA STAIN	GMSA

Other Information Australian Biostain Pty Ltd does not warrant that this product is suitable for any use or purpose. The user must ascertain the suitability of the product before use or application intended purpose. Preliminary testing of the product before use or application is recommended. Any reliance or purported reliance upon Australian Biostain Pty Ltd with respect to any skill or judgement or advice in relation to the suitability of this product of any purpose is disclaimed. Except to the extent prohibited at law, any condition implied by any statute as to the merchantable quality of this product or fitness for any purpose is hereby excluded. This product is not sold by description. Where the provisions of Part V, Division 2 of the Trade Practices Act apply, the liability of Australian Biostain Pty Ltd is limited to the replacement of supply of equivalent goods or payment of the cost of replacing the goods or acquiring equivalent goods.

2. Hazard Identification

GHS classification of the substance/mixture
Acute Toxicity - Dermal: Category 3
Flammable Liquids: Category 2
Acute Toxicity - Inhalation: Category 3
Acute Toxicity - Oral: Category 3
Specific target organ toxicity - Single Exposure Category 1, Eyes

Signal Word (s) DANGER

Hazard Statement (s)
H225 Highly flammable liquid and vapour.
H301 Toxic if swallowed.
H311 Toxic in contact with skin.
H331 Toxic if inhaled.
H370 Causes damage to organs, eyes.

Pictogram (s) Flame, Health hazard, Skull and crossbones

Precautionary statement – 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.
P261 Avoid breathing dust/fume/gas/mist/vapours/spray.
P264 Wash 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.
Precautionary statement – Response	Swallowed P301+P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. P330 Rinse mouth. Skin P303+P361+P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. P312 Call a POISON CENTER or doctor/physician if you feel unwell. P361 Remove/Take off immediately all contaminated clothing. P363 Wash contaminated clothing before reuse. Inhaled P304+P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. P311 Call a POISON CENTER or doctor/physician. Fire P370+P378 In case of fire: Use foam, dry chemical, carbon dioaxide or water spray for extinction.
Precautionary statement – Storage	P403+P233+P235 Store in a well-ventilated place. Keep container tightly closed. Keep cool. P405 Store locked up.
Precautionary statement – Disposal	P501 Dispose of contents/container to an approved waste disposal plant.

3. Composition/information on ingredients

Ingredients	Name	CAS	Proportion
	Glycerol	56-81-5	<70 %
	Methyl Alcohol	67-56-1	<70 %
	Giemsa Stain	51811-82-5	<5 %

4. First-aid measures

Inhalation	If inhaled, remove from contaminated area to fresh air immediately, avoid becoming a casualty. Make patient comfortable, keep warm and at rest until fully recovered. If breathing is difficult (or develops a bluish skin discolouration), supply oxygen by a qualified person. Apply artificial respiration with a respiratory medical device if not breathing. Do not use mouth to mouth resuscitation. Immediately medical attention is required.
Ingestion	Rinse mouth thoroughly with water immediately. DO NOT INDUCE VOMITING. Seek immediate medical advice.
Skin	Wash affected areas with copious quantities of water and soap. Remove contaminated clothing and wash before re-use. If rapid recovery does not occur, obtain medical attention
Eye contact	If contact with the eye(s) occurs, wash with copious amounts of water for approximately 15 minutes holding eyelid(s) open. Take care not to rinse contaminated water into the non-affected eye. Seek medical attention.
First Aid Facilities	Maintain eyewash fountain and safety shower in work area.
Advice to Doctor	Effects may be delayed. Treat symptomatically based on judgement of doctor and individual reactions of the patient. The severity of outcome following methanol ingestion may be more related to the time between ingestion and treatment, rather than the amount ingested. Therefore, there is a need for rapid treatment of any ingestion exposure. Ethanol (contained in alcoholic beverages) can slow the metabolism of methanol, thus reducing the potential for harmful effects.
Other Information	For advice, contact a Poisons Information Centre (Phone eg Australia 13 1126; New Zealand 0800 764 766) or a doctor.

5. Fire-fighting measures

Hazards from Combustion Products	Carbon dioxide, carbon monoxide, formaldehyde and other toxic, irritating chemicals.

Specific Methods	Caution: Use of water spray when fighting fire may be inefficient. Small fire: Use foam, dry chemical, CO2 or water spray. Large fire: Use foam, fog or water spray - Do not use water jets. If safe to do so, move undamaged containers from fire area. Cool containers with flooding quantities of water until well after fire is out. Avoid getting water inside containers.
Specific hazards arising from the chemical	HIGHLY FLAMMABLE: Will be easily ignited by heat, sparks or flame. Vapours will form explosive mixtures with air. Vapours may travel to source of ignition and flash back. Vapours are heavier than air and will collect in low or confined areas (drains, basements, tanks).
Hazchem Code	•3WE
Precautions in connection with Fire	Wear SCBA and fully-encapsulating, gas-tight suit when handling these substances. Structural firefighter's uniform is NOT effective for these materials.

6. Accidental release measures

Spills & Disposal	ELIMINATE all ignition sources (no smoking, flares, sparks or flame) within at least 50m - All equipment used when handling the product must be earthed. Do not touch or walk through spilled material. Stop leak if safe to do so - Prevent entry into waterways, drains or confined areas. Vapour-suppressing foam may be used to control vapours - Water spray may be used to knock down or divert vapour clouds. Absorb with earth, sand or other non-combustible material. Use clean, non-sparking tools to collect absorbed material and place it into loosely-covered metal or plastic containers for later disposal. SEEK EXPERT ADVICE ON HANDLING AND DISPOSAL.
Personal Precautions	Evacuate the area of all non-essential personnel. Avoid inhalation, contact with skin, eyes and clothing.
Personal Protection	Wear protective clothing specified for normal operations (see Section 8)

7. Handling and storage

Precautions for Safe Handling	Avoid contact with eyes. Avoid contact with skin. Avoid breathing dust (or) vapour (or) spray mist. Keep locked up. Keep containers tightly sealed. Protect against physical damage. Avoid use in confined spaces. Ensure good ventilation/exhaustion at the workplace. Work under hood. In case of insufficient ventilation, wear suitable respiratory equipment. Avoid prolonged or repeated exposure. Do not ingest. If ingested, seek medical advice immediately and show the container or the label. Wear suitable protective clothing. Safety glasses. Wash thoroughly after handling. Remove contaminated clothing and wash before reuse. Keep away from heat and ignition sources - Do not smoke. Take precautions against static discharge. All electrical equipment must be flameproofed. Fumes can combine with air to form an explosive mixture. Avoid generation of vapours/aerosols. Containers should be bonded and grounded for transfers to avoid static sparks. Storage and use areas should be No Smoking areas. Use non-sparking type tools and equipment, including explosion proof ventilation. Containers of this material may be hazardous when empty since they retain product residues (vapours, liquid); observe all warnings and precautions listed for the product. Do Not attempt to clean empty containers since residue is difficult to remove. Do not pressurize, cut, weld, braze, solder, drill, grind or expose such containers to heat, sparks, flame, static electricity or other sources of ignition: they may explode and cause injury or death. Do not expose to temperatures above 60 °C.
Conditions for safe storage, including any incompatibilities	Store in a locked cabinet or with access restricted to technical experts or their assistants. Store small containers in suitable flammable liquid storage cabinets when not in use. Larger drums (200L) must be kept in purpose-built stores. Outside or detached storage is preferred. Store in well-sealed, dry containers, in a cool, well-ventilated location, away from any area where the fire hazard may be acute and protected from direct sunlight. Keep away from heat, sparks, open flames and all possible sources of ignition. Protect against physical damage. Separate from incompatibles. Do not store together with oxidizing and acidic materials. Aluminium, magnesium powder. Containers should be bonded and grounded for transfers to avoid static sparks. Storage and use areas should be No Smoking areas. Use non-sparking type tools and

	equipment, including explosion proof ventilation. Containers of this material may be hazardous when empty since they retain product residues (vapours, liquid); observe all warnings and precautions listed for the product. Do Not attempt to clean empty containers since residue is difficult to remove. Do not pressurize, cut, weld, braze, solder, drill, grind or expose such containers to heat, sparks, flame, static electricity or other sources of ignition: they may explode and cause injury or death.
Storage Regulations	Refer Australian Standard AS/NZS 4452:1997 'The storage and handling of toxic substances'. Refer Australian Standard AS 1940-2017 'The storage and handling of flammable and combustible liquids'.
Handling Temperatures	60°C maximum.
Storage Temperatures	Store at room temperature (15 to 25 °C recommended). 60 °C Maximum.

8. Exposure controls/personal protection

Occupational exposure limit values

Name	STEL		TWA		
	mg/m3	ppm	mg/m3	ppm	Footnote
Glycerol			10		As Glycerin mist
Methyl Alcohol	328	250	262	200	

Other Exposure Information

A time weighted average (TWA) has been established for Methyl alcohol [Methanol] (Safe Work Australia) of 262 mg/m³, (200 ppm). The corresponding STEL level is 328 mg/m³, (250 ppm). The STEL (Short Term Exposure Limit) is an exposure value that should not be exceeded for more than 15 minutes and should not be repeated for more than 4 times per day. There should be at least 60 minutes between successive exposures at the STEL. The exposure value at the TWA is the average airborne concentration of a particular substance when calculated over a normal 8 hour working day for a 5 day working week.

Appropriate engineering controls

In industrial situations maintain the concentrations values below the TWA. This may be achieved by process modification, use of local exhaust ventilation, capturing substances at the source, or other methods. These methods should be used in preference to personal protective equipment.

Respiratory Protection

Where ventilation is not adequate, respiratory protection may be required. Avoid breathing vapours or mists. Select and use respirators in accordance with AS 1716 - Respiratory Protective Devices and be selected in accordance with AS 1715 - Selection, Use and Maintenance of Respiratory Protective Devices. When mists or vapours exceed the exposure standards then the use of the following is recommended: Approved respirator with organic vapour and dust/mist filters. Filter capacity and respirator type depends on exposure levels.

Eye Protection

The use of a face shield, chemical goggles or safety glasses with side shield protection as appropriate. Must comply with Australian Standards AS 1337 and be selected and used in accordance with AS 1336.

Hand Protection

Wear gloves of impervious material conforming to AS/NZS 2161: Occupational protective gloves - Selection, use and maintenance. Final choice of appropriate glove type will vary according to individual circumstances. This can include methods of handling, and engineering controls as determined by appropriate risk assessments. Avoid skin contact when removing gloves from hands, do not touch the gloves outer surface. Dispose of gloves as hazardous waste.

Personal Protective Equipment

Personal protective equipment should not solely be relied upon to control risk and should only be used when all other reasonably practicable control measures do not eliminate or sufficiently minimise risk. Guidance in selecting personal protective equipment can be obtained from Australian, Australian/New Zealand or other approved standards.

Body Protection

Flame retardant antistatic protective clothing. Clean clothing or protective clothing should be worn, preferably with an apron. Clothing for protection against chemicals should comply with AS 3765 Clothing for Protection Against Hazardous Chemicals.

Hygiene Measures	Always wash hands before smoking, eating or using the toilet. Wash contaminated clothing and other protective equipment before storing or re-using.

9. Physical and chemical properties

Appearance	Dark blue liquid.
Odour	Characteristic alcohol odour.
Flash Point	26°C (50% methanol)

10. Stability and reactivity

Chemical Stability	Stable under normal use conditons.
Conditions to Avoid	Heat, high temperatures, flames, static discharge, sparks and other ignition sources, confined spaces, moisture and incompatibles.
Incompatible Materials	Oxidising agents, peroxides, acids, acid chlorides, acid anhydrides, alkali metals, ammonia.
Hazardous Decomposition Products	Carbon monoxide, carbon dioxide and formaldehyde.
Possibility of hazardous reactions	Can react vigorously with oxidizers. Violent reaction with alkyl aluminium salts, acetyl bromide, chloroform + sodium methoxide, chromic anhydride, cyanuirc chlorite, lead perchlorate, phosphorous trioxide, nitric acid. Exothermic reaction with sodium hydroxide + chloroform. Incompatible with beryllium dihydride, metals (potassium and magnesium), oxidants (barium perchlorate, bromine, sodium hypochlorite, chlorine, hydrogen peroxide), potassium tert-butoxide, carbon tetrachloride, alkali metals, metals (aluminium, potassium magnesium, zinc), and dichlormethane. Rapid autocatalytic dissolution of aluminium, magnesium or zinc in 9:1 methanol + carbon tetrachloride - sufficiently vigorous to be rated as potentially hazardous. May attack some plastics, rubber, and coatings.
Hazardous Polymerization	Will not occur.

11. Toxicological Information

Toxicology Information	This substance should be treated with great care.
Acute Toxicity - Oral	LDLo (human): 143 mg/kg; (methanol)
Ingestion	Toxic if inhaled. Effects are the same as those described for 'Inhalation'. There is a wide range of individual susceptibility to the toxic effects of methanol (from a fatal dose of 15 mL of 40% methanol, to survival following ingestion of 500 mL of the same solution). In general, 300 to 1000 mg/kg is considered the range of minimum lethal dose for untreated cases of methanol poisoning. Methanol can probably be easily aspirated (breathed) into the lungs) during ingestion or vomiting, based on its physical properties and comparison to related alcohols. Aspiration of methanol could cause a potentially fatal accumulation of fluid in the lungs (pulmonary edema). Ingestion is not a typical route of occupational exposure.
Inhalation	Methanol is toxic if inhaled and can very readily form extremely high vapour concentrations at room temperature. Inhalation is the most common route of occupational exposure. At first, methanol causes mild central nervous system (CNS) depression with symptoms such as nausea, headache, vomiting, dizziness, incoordination and an appearance of drunkenness. A time period with no obvious symptoms follows (typically 8-24 hours, but may last several hours to 2 days). This latent period is then followed by development of metabolic acidosis and severe visual effects. Symptoms such as headache, dizziness, nausea and vomiting, followed in more severe cases by abdominal and muscular pain and difficult periodic breathing have been observed. Coma and death, usually due to respiratory failure, may occur if medical treatment is not received. Visual effects may include reduced reactivity and/or increased sensitivity to light, blurred, double and/or snowy vision, and blindness. Depending on the severity

	of poisoning and the promptness of treatment, survivors may recover completely or may have permanent blindness, vision disturbances and/or nervous system effects.
Skin	Toxic in contact with skin. No human information was located. Methyl alcohol is a defatting agent and may cause skin to become dry and cracked. Skin absorption can occur; symptoms may parallel inhalation exposure.
Eye	H370 Causes damage to organs, eyes.
Respiratory sensitisation	Not classified based on available information.
Skin Sensitisation	Not classified based on available information.
Germ cell mutagenicity	Not classified based on available information.
Carcinogenicity	Not listed in the IARC Monographs. Not classified based on available information.
Reproductive Toxicity	Not classified based on available information.
STOT-single exposure	Not classified based on available information.
STOT-repeated exposure	Not classified based on available information.
Chronic Effects	Marked impairment of vision has been reported (Methanol). Prolonged or repeated skin contact may cause dermatitis. Chronic exposure may cause effects similar to those of acute exposure. Methanol is only very slowly eliminated from the body. Because of this slow elimination, methanol should be regarded as a cumulative poison. Though a single exposure may cause no effect, daily exposures may result in the accumulation of a harmful amount.
Mutagenicity	Not classified based on available information.

12. Ecological information

Ecological Information	No ecology data available for this product.
Environmental Protection	Do not allow to enter waters, waste water, or soil!

13. Disposal considerations

Disposal Considerations	Whatever cannot be saved for recovery or recycling should be disposed of according to relevant local, state and federal government regulations.

14. Transport information

Transport Information	Dangerous Goods of Class 3 Flammable Liquids, are incompatible in a placard load with any of the following: - Class 1, Class 2.1, if both the Class 3 and Class 2.1, dangerous goods are in bulk, Class 2.3, Class 4.2, Class 5, Class 6, if the Class 3 dangerous goods are nitromethane and Class 7.
U.N. Number	1992
UN proper shipping name	FLAMMABLE LIQUID, TOXIC, N.O.S. - (Contains Methanol)
Transport hazard class(es)	3
Sub.Risk	6.1
Hazchem Code	•3WE
Packing Group	II
EPG Number	3A2
IERG Number	16
Environmental Hazards	Harmful to aquatic organisms. Risk of formation of explosive vapours above water surface. When used properly, no impairments in the function of

waste-water-treatment plants are to be expected.

15. Regulatory information

Regulatory Information All the constituents of this product are listed on the Australian Inventory of Chemical Substances (AICS), or exempted. Not listed under WHS Regulation 2011, Schedule 10 - Prohibited carcinogens, restricted carcinogens and restricted hazardous chemicals.

Poisons Schedule S6

16. Other Information

Literature References

'Standard for the Uniform Scheduling of Medicines and Poisons .', Commonwealth of Australia.
National Road Transport Commission, 'Australian Code for the Transport of Dangerous Goods by Road and Rail 7th. Ed.'.
Safe Work Australia, 'National Code of Practice for the Preparation of Safety Data Sheets for Hazardous Chemicals'.
Standards Australia, 'SAA/SNZ HB 76:2010 Dangerous Goods - Initial Emergency Response Guide', Standards Australia/Standards New Zealand.
Safe Work Australia, 'Hazardous Chemical Information System'.
Safe Work Australia, 'National Code of Practice for the Labelling of Safe Work Hazardous Substances'.
Safe Work Australia, 'National Exposure Standards for Atmospheric Contaminants in the Occupational Environment'.

...End Of MSDS...