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

· 1.1 Product identifier

· Trade name: Coomassie Blue Stain

· Article number: 30-39-10 · Registration number Mixture

- · 1.2 Relevant identified uses of the substance or mixture and uses advised against
- · Sector of Use SU24 Scientific research and development
- · Product category PC21 Laboratory chemicals
- · Application of the substance / the mixture Laboratory reagent
- · Uses advised against

Any use involving aerosol formation or vapour or dust release in excess of the assigned workplace exposure limits where workers are exposed without suitable respiratory protective equipment (RPE).

Any use carrying a risk of direct contact with eyes/skin where workers are exposed without adequate personal protective equipment (PPE).

Processes involving the use of incompatible substances - refer to section 10.

Processes involving extreme heat use advised against.

Processes where workers who may be pregnant or breastfeeding could potentially come into direct contact with the undiluted product.

The product is stictly intended for industrial or professional use only.

- · 1.3 Details of the supplier of the safety data sheet
- · Manufacturer/Supplier:

Severn Biotech Ltd.

Unit 2.

Park Lane.

Kidderminster,

Worcestershire.

DY11 6TJ

UK

Tel: 0044 1562 825286 Fax: 0044 1562 825284

email: info@severnbiotech.com

- Further information obtainable from: Product safety department.
- · 1.4 Emergency telephone number:

UK National Poisons Information Service. E-mail: npis.birmingham@nhs.net; Tel: +44 (0)344 892 0111

## **SECTION 2: Hazards identification**

- · 2.1 Classification of the substance or mixture
- · Classification according to Regulation (EC) No 1272/2008



flame

Flam. Liq. 2 H225 Highly flammable liquid and vapour.



skull and crossbones

Acute Tox. 3 H301 Toxic if swallowed.

Acute Tox. 3 H311 Toxic in contact with skin.

Acute Tox. 3 H331 Toxic if inhaled.



health hazard

STOT SE 1 H370 Causes damage to the central nervous system and the visual organs.

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#### · 2.2 Label elements

## · Labelling according to Regulation (EC) No 1272/2008

The product is classified and labelled according to the CLP regulation.

- · Hazard pictograms GHS02, GHS06, GHS08
- · Signal word Danger

#### · Hazard-determining components of labelling:

Methanol

#### · 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 the central nervous system and the visual organs.

#### · Precautionary statements

P102 Keep out of reach of children.

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

P260 Do not breathe mist/vapours/spray.

P270 Do not eat, drink or smoke when using this product.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/doctor.

P302+P352 IF ON SKIN: Wash with plenty of water.

- · 2.3 Other hazards
- · Results of PBT and vPvB assessment
- **PBT:** Not applicable.
- · vPvB: Not applicable.

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

- · 3.2 Chemical characterisation: Mixtures
- · Description: Mixture of substances listed below with nonhazardous additions.

· Dangerous components:				
	Methanol	>25-≤50%		
EINECS: 200-659-6	<ul> <li>♦ Flam. Liq. 2, H225;</li> <li>♦ Acute Tox. 3, H301; Acute Tox. 3, H311;</li> <li>Acute Tox. 3, H331;</li> <li>♦ STOT SE 1, H370</li> </ul>			
		>2.5-≤10%		
EINECS: 200-580-7	🚸 Flam. Liq. 3, H226; 🔗 Skin Corr. 1A, H314			

<sup>·</sup> Additional information: For the wording of the listed hazard phrases refer to section 16.

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

- · 4.1 Description of first aid measures
- · General information:

Immediately remove any clothing soiled by the product.

Remove breathing equipment only after contaminated clothing have been completely removed.

In case of irregular breathing or respiratory arrest provide artificial respiration.

· After inhalation:

DO NOT DELAY!

Supply fresh air; consult doctor in case of complaints.

· After skin contact:

DO NOT DELAY!

Immediately wash with water and soap and rinse thoroughly.

If skin irritation continues, consult a doctor.

· After eye contact:

DO NOT DELAY!

Check for and remove any contact lenses.

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

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#### · After swallowing:

DO NOT DELAY!

Wash mouth out with water

If vomiting occurs spontaneously, keep head below hips to prevent aspiration.

Rinse mouth immediately and then drink plenty of water, induce vomiting, seek medical attention.

Administer 50 ml of pure ethanol in a drinkable concentration. If patients are unwilling or reluctant to do this, explain that it is necessary to preserve/protect their eyesight.

#### · Information for doctor:

Effects may be delayed.

ANTIDOTE: ethanol may inhibit methanol metabolism.

Single large oral doses may result in such adverse effects as:, disturbance of vision, skin irritation

Treatment: Symptomatic treatment (decontamination, vital functions).

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

Headache

Dizziness

Unconsciousness

Nausea

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

No further relevant information available.

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

### · 5.1 Extinguishing media

#### · Suitable extinguishing agents:

CO2, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

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

During heating or in case of fire poisonous gases are produced.

Highly flammable liquid.

Vapours form explosive mixtures with air.

Mixable with water.

Highly volatile.

#### · 5.3 Advice for firefighters

#### · Protective equipment:

Wear self-contained respiratory protective device.

Wear fully protective suit.

Do not inhale explosion gases or combustion gases.

· Additional information Cool endangered receptacles with water spray.

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

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

Ensure adequate ventilation

Keep ignition sources away - no smoking.

Wear protective equipment. Keep unprotected persons away.

Particular danger of slipping on leaked/spilled product.

#### · 6.2 Environmental precautions:

Do not allow to penetrate the ground/soil.

Do not allow product to reach sewage system or any water course in the undiluted form.

## $\cdot$ 6.3 Methods and material for containment and cleaning up:

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Send for recovery or disposal in suitable receptacles.

Ensure adequate ventilation.

#### · 6.4 Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

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See Section 13 for disposal information.

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

#### · 7.1 Precautions for safe handling

Store in cool, dry place in tightly closed receptacles.

Avoid direct contact (skin/eye contact, ingestion and/or inhalation of fume/mist/dust) with the product in the undiluted form.

The product must only be handled by authorised, trained and experienced professionals under strictly controlled conditions.

Welding and other hot work operations in the work area must only be permitted under supervision.

Ensure good ventilation/exhaustion at the workplace.

Open and handle receptacle with care.

Prevent formation of aerosols.

### · Information about fire - and explosion protection:

Fumes can combine with air to form an explosive mixture.

Keep ignition sources away - Do not smoke.

Protect against electrostatic charges.

Keep respiratory protective device available.

Do NOT use compressed air for filling, discharging, or handling.

Use non-sparking handtools.

Flash point: 26 °C

Lower explosion limit: 5.5 vol. % Upper explosion limit: 44 vol. %

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

· Storage:

### · Requirements to be met by storerooms and receptacles:

Prevent any seepage into the ground.

Store in a cool location.

Suitable materials: Glass; Steel; Stainless steel

Unsuitable materials: Aluminium; galvanised iron; Zinc alloys; Magnesium alloys.

Plastics have to be proven for their resistibility.

### · Information about storage in one common storage facility:

Store away from oxidising agents.

Store away from foodstuffs.

#### · Further information about storage conditions:

Store in a bunded area.

Store receptacle in a well ventilated area.

Store under lock and key and out of the reach of children.

Keep container tightly sealed.

Store in cool, dry conditions in well sealed receptacles.

· 7.3 Specific end use(s) No further relevant information available.

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

- · 8.1 Control parameters
- · Additional information about design of technical facilities: No further data; see item 7.

#### · Ingredients with limit values that require monitoring at the workplace:

#### 67-56-1 Methanol

WEL Short-term value: 333 mg/m³, 250 ppm Long-term value: 266 mg/m³, 200 ppm

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#### 64-19-7 Acetic acid

WEL Short-term value: 50 mg/m³, 20 ppm Long-term value: 25 mg/m³, 10 ppm

- · Additional information: The lists valid during the making were used as basis.
- · 8.2 Exposure controls
- · Personal protective equipment:
- · General protective and hygienic measures:

Do not eat, drink, smoke or sniff while working.

Storing food in the working area is prohibited.

A safe system of work must be formulated and followed to ensure that workers who may be pregnant or breastfeeding do not come into direct contact with the product.

A safe system of work must be formulated and followed to ensure safe working with this product. Relevant workers must receive suitable and sufficient training and supervision.

Take note of assigned Workplace Exposure Limits.

Ensure that eyewash stations and safety showers are close to the workstation location.

Depending on the degree of exposure, periodic medical examination is suggested.

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing

Wash hands before breaks and at the end of work.

Store protective clothing separately.

Do not inhale gases / fumes / aerosols.

Avoid contact with the eyes and skin.

- Respiratory protection: Use suitable respiratory protective device in case of insufficient ventilation.
- · Protection of hands:



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

· Material of gloves

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

· Penetration time of glove material

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

· Eye protection:



Tightly sealed goggles

· Body protection:

Solvent resistant protective clothing

Body protection must be chosen depending on product properties, activity and possible exposure.

## **SECTION 9: Physical and chemical properties**

- · 9.1 Information on basic physical and chemical properties
- · General Information
- $\cdot \, \textbf{Appearance:} \,$

Form: Fluid Colour: Blue

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· Odour:	Acidic
· Odour threshold:	Not determined.
· pH-value:	Not determined.
· Change in condition Melting point/freezing point: Initial boiling point and boiling range	Undetermined. : Undetermined.
· Flash point:	26 °C
· Flammability (solid, gas):	Not applicable.
· Ignition temperature:	>200 °C
· Decomposition temperature:	Not determined.
· Auto-ignition temperature:	Product is not self-igniting.
· Explosive properties:	Product is not explosive. However, formation of explosive air/vapour mixtures are possible.
· Explosion limits:	
Lower:	5.5 Vol %
Upper:	44 Vol %
· Vapour pressure:	Not determined.
· Density at 20 °C:	0.9 g/cm <sup>3</sup>
Relative density	Not determined.
· Vapour density	Not determined.
· Evaporation rate	Not determined.
· Solubility in / Miscibility with	
water:	Fully miscible.
· Partition coefficient: n-octanol/water:	Not determined.
· Viscosity:	
Dynamic:	Not determined.
Kinematic:	Not determined.
· 9.2 Other information	NOTE: The physical data presented above are typical values and should not be construed as a specification.

## **SECTION 10: Stability and reactivity**

- 10.1 Reactivity No further relevant information available.
- · 10.2 Chemical stability
- · Thermal decomposition / conditions to be avoided:

The vapour mixes well with air, explosive mixtures are easily formed.

- · 10.3 Possibility of hazardous reactions Reacts violently with oxidants causing fire and explosion hazard.
- 10.4 Conditions to avoid No further relevant information available.
- 10.5 Incompatible materials: Strong oxidising agents.
- · 10.6 Hazardous decomposition products: Carbon monoxide and carbon dioxide
- · Additional information:

Highly flammable liquid.

Vapours form explosive mixtures with air.

Mixable with water.

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## **SECTION 11: Toxicological information**

- · 11.1 Information on toxicological effects
- · Acute toxicity

Toxic if swallowed, in contact with skin or if inhaled.

- · Primary irritant effect:
- · Skin corrosion/irritation Based on available data, the classification criteria are not met.
- · Serious eye damage/irritation Based on available data, the classification criteria are not met.
- · Respiratory or skin sensitisation Based on available data, the classification criteria are not met.
- · Other information (about experimental toxicology):

ROUTES OF EXPOSURE: Methanol can be absorbed into the body by inhalation and through the skin and by ingestion.

· Subacute to chronic toxicity:

EFFECTS OF LONG-TERM OR REPEATED EXPOSURE: Repeated or prolonged contact with skin may cause dermatitis. Methanol may have effects on the central nervous system, resulting in persistent or recurring headaches and impaired vision.

Depending on the degree of exposure, periodic medical examination is suggested.

· Additional toxicological information:

Methanol can be absorbed through the skin producing systemic effects.

Inhalation of vapours is the most common route of entry.

Methanol may cause effects on the central nervous system, resulting in loss of consciousness. Exposure may result in blindness and death. The effects may be delayed. Medical observation is indicated.

Depending on the severity of the exposure and promptness of treatment, the patient may recover completely or may suffer permanent blindness, visual disturbances and/or nervous effects.

Methanol is only slowly eliminated from the body and should be regarded as a cumulative poison. A single exposure may have little effect; however, repeated exposures may result in the accumulation of dangerous levels.

- · CMR effects (carcinogenity, mutagenicity and toxicity for reproduction)
- · Germ cell mutagenicity Based on available data, the classification criteria are not met.
- · Carcinogenicity Based on available data, the classification criteria are not met.
- · Reproductive toxicity Based on available data, the classification criteria are not met.
- · STOT-single exposure

Causes damage to the central nervous system and the visual organs.

- · STOT-repeated exposure Based on available data, the classification criteria are not met.
- · Aspiration hazard Based on available data, the classification criteria are not met.

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

- · 12.1 Toxicity
- · Aquatic toxicity: No further relevant information available.
- 12.2 Persistence and degradability The organic portion of the product is biodegradable.
- 12.3 Bioaccumulative potential Product is not expected to bioaccumulate.
- 12.4 Mobility in soil No further relevant information available.
- · Additional ecological information:
- · General notes:

Water hazard class 2 (German Regulation) (Self-assessment): hazardous for water

Do not allow product to reach ground water, water course or sewage system.

Danger to drinking water if even small quantities leak into the ground.

- · 12.5 Results of PBT and vPvB assessment
- · **PBT:** Not applicable.
- · vPvB: Not applicable.
- · 12.6 Other adverse effects No further relevant information available.

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## **SECTION 13: Disposal considerations**

- · 13.1 Waste treatment methods
- · Recommendation

Recommended Hierarchy of Controls:

- Minimise waste;
- Reuse if not contaminated;
- Recycle, if possible; or
- Safe disposal (if all else fails).

Contact waste processors for recycling information.

Must not be disposed together with household garbage. Do not allow product to reach sewage system. Used, degraded or contaminated product may be classified as hazardous waste. Anyone classifying hazardous waste and determining its fate must be qualified in accordance with state and international legislation.

- · Uncleaned packaging:
- · Recommendation:

Container remains hazardous when empty. Continue to observe all precautions.

Containers, even those that are "empty," may contain residues that can develop flammable and/or hazardous vapours upon heating. Do not cut, drill, grind, weld, or perform similar operations on or near empty containers.

Do not mix with other waste streams.

· Recommended cleansing agents: Water, if necessary together with cleansing agents.

444 YINI NI - 1	ation
14.1 UN-Number ADR, IMDG, IATA	UN1992
14.2 UN proper shipping name	
ADR	1992 FLAMMABLE LIQUID, TOXIC, N.O.S (METHANOL, ACETIC ACID, GLACIAL)
IMDG, IATA	FLAMMABLE LIQUID, TOXIC, N.O.S. (METHANOI ACETIC ACID, GLACIAL)
14.3 Transport hazard class(es)	
ADR	
Class	3 Flammable liquids.
Label	3+6.1
IMDG	
Class	3 Flammable liquids.
Label	3/6.1
IATA	
Class	3 Flammable liquids.

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Label	3 (6.1)
14.4 Packing group ADR, IMDG, IATA	III
14.5 Environmental hazards: Marine pollutant:	No
14.6 Special precautions for user Hazard identification number (Kemler code): EMS Number: Segregation groups Stowage Category	Warning: Flammable liquids. 36 F-E,S-D Acids A
14.7 Transport in bulk according to Annex II o Marpol and the IBC Code	f Not applicable.
Transport/Additional information:	
· ADR · Limited quantities (LQ) · Excepted quantities (EQ) · Transport category	5L Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml 3
Tunnel restriction code	D/E
· IMDG · Limited quantities (LQ) · Excepted quantities (EQ)	5L Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml
UN "Model Regulation":	UN 1992 FLAMMABLE LIQUID, TOXIC, N.O.: (METHANOL, ACETIC ACID, GLACIAL), 3 (6.1), III

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

- · 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
- · Directive 2012/18/EU
- · Named dangerous substances ANNEX I None of the ingredients is listed.
- · Seveso category

H2

P<sub>5</sub>c

- · Qualifying quantity (tonnes) for the application of lower-tier requirements 50 t
- Qualifying quantity (tonnes) for the application of upper-tier requirements 200 t
- 15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

## **SECTION 16: Other information**

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

#### · Relevant phrases

H225 Highly flammable liquid and vapour.

H226 Flammable liquid and vapour.

H301 Toxic if swallowed.

H311 Toxic in contact with skin.

H314 Causes severe skin burns and eye damage.

H331 Toxic if inhaled.

(Contd. on page 10)

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H370 Causes damage to organs.

· Department issuing SDS: Product safety department.

· Abbreviations and acronyms:

ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

PBT: Persistent, Bioaccumulative and Toxic vPvB: very Persistent and very Bioaccumulative Flam. Liq. 2: Flammable liquids – Category 2 Flam. Liq. 3: Flammable liquids – Category 3

Acute Tox. 3: Acute toxicity – Category 3 Skin Corr. 1A: Skin corrosion/irritation – Category 1A

STOT SE 1: Specific target organ toxicity (single exposure) – Category 1

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