

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 06.11.2012

Revision: 04.11.2012

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

- **Product identifier**
- **Trade name:** Azure A (0.08% in 40% IMS)
- **Article number:** 30-43-01
- **Registration number**
Mixture:
 - Ethanol: 01-2119457610-43
 - Methanol: 01-2119433307-44
- **Relevant identified uses of the substance or mixture and uses advised against**
No further relevant information available.
- **Application of the substance / the preparation** Laboratory reagent
- **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.
- **Emergency telephone number:** Tel: 0044 1562 825286 (not 24 hours)

2 Hazards identification

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



GHS02 flame

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

- **Classification according to Directive 67/548/EEC or Directive 1999/45/EC**



F+; Highly flammable

R11: Highly flammable.

- **Information concerning particular hazards for human and environment:**

The product has to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.

- **Classification system:**

The classification is according to the latest editions of the EU-lists, and extended by company and literature data.

- **Label elements**

- **Labelling according to Regulation (EC) No 1272/2008**

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

- **Hazard pictograms** GHS02

- **Signal word** Danger

- **Hazard statements**

H225 Highly flammable liquid and vapour.

- **Precautionary statements**

P101 If medical advice is needed, have product container or label at hand.

P102 Keep out of reach of children.

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



- P103 Read label before use.
 P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
 P280 Wear protective gloves/protective clothing/eye protection/face protection.
 P233 Keep container tightly closed.
 P260 Do not breathe mist/vapours/spray.
 P370+P378 In case of fire: Use for extinction: CO₂, powder or water spray.
 P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

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

3 Composition/information on ingredients

- **Chemical characterization: Substances**
- **CAS No. Description**
64-17-5 Ethanol
- **Identification number(s)**
- **EC number:** 200-578-6
- **Index number:** 603-002-00-5
- **Chemical characterization: Mixtures**
- **Description:** Mixture of substances listed below with nonhazardous additions.

- **Dangerous components:**

CAS: 64-17-5 EINECS: 200-578-6	Ethanol  F R11  Flam. Liq. 2, H225	25-50%
CAS: 67-56-1 EINECS: 200-659-6	Methanol  T R23/24/25-39/23/24/25;  F R11  Flam. Liq. 2, H225;  Acute Tox. 3, H301;  Acute Tox. 3, H311;  Acute Tox. 3, H331;  STOT SE 1, H370	≤ 2.5%

- **Additional information:** For the wording of the listed risk phrases refer to section 16.

4 First aid measures

- **Description of first aid measures**
- **General information:**
Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.
- **After inhalation:**
Supply fresh air. If required, provide artificial respiration. Keep patient warm. Consult doctor if symptoms persist.
In case of unconsciousness place patient stably in side position for transportation.
- **After skin contact:**
DO NOT DELAY!
Immediately rinse with water.
- **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.
- **After swallowing:**
DO NOT DELAY!
Rinse out mouth and then drink plenty of water.

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Do not induce vomiting; call for medical help immediately.

· **Information for doctor:**

Effects may be delayed.

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

Treatment: Symptomatic treatment (decontamination, vital functions).

· **Most important symptoms and effects, both acute and delayed**

Headache

Dizziness

Nausea

Unconsciousness

· **Indication of any immediate medical attention and special treatment needed**

No further relevant information available.

5 Firefighting measures

· **Extinguishing media**

· **Suitable extinguishing agents:**

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

· **Special hazards arising from the substance or mixture**

Highly flammable.

Vapour/air mixtures are explosive.

· **Advice for firefighters**

· **Protective equipment:**

Wear fully protective suit.

Wear self-contained respiratory protective device.

Do not inhale explosion gases or combustion gases.

· **Additional information**

Collect contaminated fire fighting water separately. It must not enter the sewage system.

Be aware of possibility of re-ignition.

This product gives off flammable vapours which may form explosive mixtures with air.

Vapours with a source of ignition can create a flash fire, not a UVCE (Unconfined Vapour Cloud Explosion).

Run off to sewer may cause fire or explosion hazard

Containers may explode in heat of fire. Use water to cool fire-exposed containers and to disperse vapour.

6 Accidental release measures

· **Personal precautions, protective equipment and emergency procedures**

Keep away from ignition sources.

Keep ignition sources away - no smoking.

Wear protective equipment. Keep unprotected persons away.

Eliminate all sources of ignition.

Wear appropriate protective clothing.

Avoid breathing vapours.

Keep unnecessary people away; isolate hazard area and deny entry.

Consider need for evacuation.

Stay up wind and keep out of low areas where vapour may accumulate and ignite.

Stop leak if this can be achieved without risk.

For small spills take up with a non-combustible absorbant.

For large spills, dike or dam for later disposal.

· **Environmental precautions:**

Do not allow to penetrate the ground/soil.

Do not allow to enter sewers/ surface or ground water.

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- **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.
 - SMALL SPILLS: Allow to evaporate if it is safe to do so or contain and absorb using earth, sand or other inert material then transfer into suitable containers for recovery or disposal. Ventilate contaminated area thoroughly.
 - LARGE SPILLS: Dike or dam to contain for later disposal. Contact emergency authorities.
- **Reference to other sections**
 - See Section 7 for information on safe handling.
 - See Section 8 for information on personal protection equipment.
 - See Section 13 for disposal information.

7 Handling and storage

- **Handling:**
- **Precautions for safe handling**
 - Keep away from heat and direct sunlight.
 - Avoid direct contact (skin contact, ingestion and/or inhalation of fume/mist/dust) with the product.
 - Ensure good ventilation/exhaustion at the workplace.
 - Prevent formation of aerosols.
 - Suitable equipment for dealing with fires, spills and leaks must be readily available.
 - Earth all equipment. Use explosion protected electrical equipment and lighting.
 - Do not smoke eat or drink in areas of use and storage.
 - Use closed-system transfers wherever possible.
 - Earth (ground) lines and equipment used during transfer to reduce possibility of static spark initiated fire or explosion
 - Do NOT use compressed air for filling, discharging, or handling.
 - Use non-sparking handtools.
- **Information about fire - and explosion protection:**
 - Keep ignition sources away - Do not smoke.
 - Protect against electrostatic charges.
- **Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:**
 - Store in a cool location.
 - Storage area should be cool, dry, well ventilated, out of direct sunlight and separated from oxidants and strong mineral acids.
 - Store in original containers.
 - Store away from sources of heat or ignition.
 - Storage tanks should have equipotential electrical bonding and be earthed. Storage should be closed.
- Incompatible materials: natural rubber, PVC, methyl-methacrylate plastics, polyamides, zinc, brass, aluminium under certain conditions.
- Compatible materials: Stainless steel, titanium, cast bronze, cast iron, carbon steel, polypropylene, neoprene, nylon, viton, ceramic, carbon, glass.
- **Information about storage in one common storage facility:** Store away from oxidizing agents.
- **Further information about storage conditions:**
 - Store in a cool place. Heat will increase pressure and may lead to the receptacle bursting.
 - Keep container tightly sealed.
 - Store in cool, dry conditions in well sealed receptacles.

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- **Specific end use(s)** No further relevant information available.

8 Exposure controls/personal protection

- **Additional information about design of technical facilities:** No further data; see item 7.

- **Control parameters**

- **Ingredients with limit values that require monitoring at the workplace:**

64-17-5 Ethanol

WEL Long-term value: 1920 mg/m³, 1000 ppm

67-56-1 Methanol

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

- **Additional information:** The lists valid during the making were used as basis.

- **Exposure controls**

- **Personal protective equipment:**

Select PPE appropriate for the operations taking place taking into account the product properties.

- **General protective and hygienic measures:**

Avoid close or long term contact with the skin.

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

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.

Pregnant women should strictly avoid inhalation or skin contact.

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

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.

Keep away from foodstuffs, beverages and feed.

Wash hands before breaks and at the end of work.

Avoid contact with the eyes and skin.

- **Respiratory protection:**

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.

In case of insufficient local exhaust ventilation and/or handling with open equipment: Respiratory air fed breathing apparatus if there is a risk of exposure to high vapour concentrations. If using a half mask: organic vapour cartridge Ax type.

- **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.

Wear gloves with breakthrough times >480 minutes: Nitrile rubber gloves. Butyl rubber gloves.(complying to EN 374-3)

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· **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

9 Physical and chemical properties

· **Information on basic physical and chemical properties**

· **General Information**

· **Appearance:**

· Form:	Fluid
· Colour:	Colourless
· Odour:	Characteristic
· Odour threshold:	Not determined.

· **pH-value:** Not determined.

· **Change in condition**

· Melting point/Melting range:	-23 °C
· Boiling point/Boiling range:	83 °C

· **Flash point:** 27 °C

· **Flammability (solid, gaseous):** Not applicable.

· **Ignition temperature:** >250 °C

· **Decomposition temperature:** Not determined.

· **Self-igniting:** Product is not selfigniting.

· **Danger of explosion:** Not determined.

· **Explosion limits:**

· Lower:	2.5 Vol %
· Upper:	13 Vol %

· **Vapour pressure at 20 °C:** 59 hPa

· Density at 20 °C:	0.95 g/cm ³
· 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.

· **Other information** No further relevant information available.

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10 Stability and reactivity

- **Reactivity**
- **Chemical stability**
- **Thermal decomposition / conditions to be avoided:**
No decomposition if used and stored according to specifications.
- **Possibility of hazardous reactions**
Forms explosive gas mixture with air.
Reacts slowly with calcium hypochlorite, silver oxide and ammonia. This generates fire and explosion hazard.
Reacts violently with strong oxidants such as nitric acid, silver nitrate, mercuric nitrate and magnesium perchlorate. This generates fire and explosion hazard.
- **Conditions to avoid** Aluminium at higher temperatures.
- **Incompatible materials:** Strong acids and oxidising agents
- **Hazardous decomposition products:** Carbon monoxide and carbon dioxide

11 Toxicological information

- **Information on toxicological effects**
- **Acute toxicity:**

LD/LC50 values relevant for classification:		
67-56-1 Methanol		
Oral	LD50	>2000 mg/kg (rat)
Dermal	LD50	>5000 mg/kg (rabbit)
64-17-5 Ethanol		
Oral	LD50	>10000 mg/kg (rat)
Dermal	LD50	>10000 mg/kg (rabbit)
Inhalative	LC50/4 h	>100 mg/l (rat)

- **Primary irritant effect:**
- **on the skin:** No irritant effect.
- **on the eye:** No irritating effect.
- **Sensitization:** No sensitizing effects known.
- **Subacute to chronic toxicity:**
Effects of long-term or repeated exposure: The liquid defats the skin. Repeated or prolonged contact with skin may cause dermatitis. The product may have effects on the upper respiratory tract and central nervous system. This may result in irritation, headache, fatigue and lack of concentration.
Ethanol consumption during pregnancy may adversely affect the unborn child.
Chronic ingestion of ethanol may cause liver cirrhosis.
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:**
The product shows the following dangers according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version:
Harmful
Routes of exposure: The component substances can be absorbed into the body by inhalation of its vapour, by skin absorption and by ingestion.
Inhalation risk: A harmful contamination of the air will be reached rather slowly on evaporation of this product at 20 degs.C.

Effects of short-term exposure: The product is irritating to the eyes. Inhalation of high concentrations of the vapour may cause irritation of the eyes and respiratory tract. The component substances may cause effects on the central nervous system.

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Methanol can be absorbed through the skin producing systemic effects. Inhalation of vapours and skin absorption are the most common routes of entry. The substance 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.

12 Ecological information

- **Toxicity**

- **Aquatic toxicity:**

67-56-1 Methanol	
EC50	>10000 mg/kg (daphnia)
64-17-5 Ethanol	
EC50	454 mg/kg (daphnia)

- **Persistence and degradability** biodegradable

- **Behaviour in environmental systems:**

- **Bioaccumulative potential** Product is not expected to bioaccumulate.

- **Mobility in soil** No further relevant information available.

- **Additional ecological information:**

- **General notes:**

Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

- **Results of PBT and vPvB assessment**

- **PBT:** Not applicable.

- **vPvB:** Not applicable.

- **Other adverse effects** No further relevant information available.

13 Disposal considerations

- **Waste treatment methods**

- **Recommendation**

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.

- **European waste catalogue**

Waste key numbers in accordance with the European Waste catalogue (EWC) are origin-referred defined. Since this product is used in several industries, no waste key can be provided by the supplier.

The waste key number should be determined in arrangement with your waste disposal partner or the responsible authority.

- **Uncleaned packaging:**

- **Recommendation:**

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

Do not mix with other waste streams.

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

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

14 Transport information

· UN-Number	UN1993
· ADR, IMDG, IATA	
· UN proper shipping name	1993 FLAMMABLE LIQUID, N.O.S. (ETHANOL (ETHYL ALCOHOL), METHANOL), special provision 640D
· ADR	
· IMDG	FLAMMABLE LIQUID, N.O.S. (ETHANOL (ETHYL ALCOHOL), METHANOL)
· IATA	FLAMMABLE LIQUID, N.O.S. (ETHANOL, METHANOL)
· Transport hazard class(es)	
· ADR, IMDG, IATA	
	
· Class	3 Flammable liquids.
· Label	3
· Packing group	
· ADR, IMDG, IATA	II
· Environmental hazards:	
· Marine pollutant:	No
· Special precautions for user	Warning: Flammable liquids.
· Danger code (Kemler):	33
· EMS Number:	F-E, <u>S</u> -E
· Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code	Not applicable.
· Transport/Additional information:	
· ADR	
· Limited quantities (LQ)	1L
· Transport category	2
· Tunnel restriction code	D/E
· UN "Model Regulation":	UN1993, FLAMMABLE LIQUID, N.O.S. (ETHANOL (ETHYL ALCOHOL), METHANOL), special provision 640D, 3, II

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15 Regulatory information

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

· **National regulations:**

Class	Share in %
I	3.5
NK	96.5

· **Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

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.

H301 Toxic if swallowed.

H311 Toxic in contact with skin.

H331 Toxic if inhaled.

H370 Causes damage to organs.

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.