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

· 1.1 Product identifier

Trade name: <u>Severn Alco-gel</u>
Article number: 40-7500-01
Registration number

Mixture

- Ethanol: 01-2119457610-43

- · 1.2 Relevant identified uses of the substance or mixture and uses advised against
- · Product category PC21 Laboratory chemicals
- · Application of the substance / the mixture Hand sanitiser/cleaner
- · Uses advised against Processes involving extreme heat use advised against.
- · 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



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



Eye Irrit. 2 H319 Causes serious eye irritation.

- · 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, GHS07
- · Signal word Danger
- · Hazard statements

H225 Highly flammable liquid and vapour.

H319 Causes serious eye irritation.

· 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.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if

present and easy to do. Continue rinsing.

P370+P378 In case of fire: Use to extinguish: CO2, powder or water spray.

P403+P235 Store in a well-ventilated place. Keep cool.

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P501

Dispose of contents/container in accordance with local/regional/national/international regulations.

- · 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: A blend of ethanol and polymer gelling agent with multifunctional additives.

· Dangerous components:				
CAS: 64-17-5	Ethanol	Flam. Liq. 2, H225; (1) Eye Irrit. 2, H319	50-100%	
EINECS: 200-578-6		1 / / / / / / /		

· 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
- · After inhalation: Supply fresh air; consult doctor in case of complaints.
- · After skin contact:

Generally the product does not irritate the skin.

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.

· After swallowing:

DO NOT DELAY!

Rinse out mouth and then drink plenty of water.

Do not induce vomiting; call for medical help immediately.

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

- · Information for doctor: Treat symptomatically and supportively.
- · 4.2 Most important symptoms and effects, both acute and delayed

No further relevant information available.

· 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 Flammable liquid and vapour.
- · 5.3 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

Be aware of possibility of re-ignition.

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

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.

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SECTION 6: Accidental release measures

· 6.1 Personal precautions, protective equipment and emergency procedures

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.

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

· 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.

· 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.

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.

· 6.4 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.

SECTION 7: Handling and storage

· 7.1 Precautions for safe handling

Keep away from heat and direct sunlight.

Do not smoke eat or drink in areas of use and storage.

- · Information about fire and explosion protection: Keep ignition sources away Do not smoke.
- · 7.2 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.

- · Information about storage in one common storage facility: Store away from oxidising 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.

· 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:

64-17-5 Ethanol

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

· DNELs

Ethanol:

WORKERS

Acute / short-term exposure - local effects

Inhalation DN(M)EL

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- DNEL (Derived No Effect Level): 1900 mg/m³

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Long-term exposure - systemic effects

Dermal DN(M)EL

- DNEL (Derived No Effect Level): 343 mg/kg bw/day

Inhalation DN(M)EL

- DNEL (Derived No Effect Level): 950 mg/m³

GENERAL POPULATION

Acute / short-term exposure - local effects

Inhalation DN(M)EL

- DNEL (Derived No Effect Level): 950 mg/m³

Long-term exposure - systemic effects

Dermal DN(M)EL

- DNEL (Derived No Effect Level): 206 mg/kg bw/day

Inhalation DN(M)EL

- DNEL (Derived No Effect Level): 114 mg/m³

Oral DN(M)EL

- DNEL (Derived No Effect Level): 87 mg/kg bw/day

· PNECs

Ethanol:

PNEC aqua (freshwater): 0.96 mg/L PNEC aqua (marine water): 0.79 mg/L PNEC aqua (intermittent releases): 2.75 mg/L

PNEC STP: 580 mg/L

PNEC sediment (freshwater): 3.6 mg/kg sediment dw

PNEC sediment (marine water): 2.9 PNEC soil: 0.63 mg/kg soil dw PNEC oral: 0.72 g/kg food

· 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.

Take note of assigned Workplace Exposure Limits.

Wash hands before breaks and at the end of work.

Do not inhale gases / fumes / aerosols.

- · Respiratory protection: Not necessary if room is well-ventilated.
- · Protection of hands: Not required.
- · Material of gloves The product is intended for use on the skin.
- · Penetration time of glove material Not applicable
- Eye protection: Not required if used for intended purpose. Otherwise wear safety glasses.

SECTION 9: Physical and chemical properties

- · 9.1 Information on basic physical and chemical properties
- · General Information
- · Appearance:

Form: Gel
Colour: Colourless

Odour: Alcohol-like
Odour threshold: Not determined.

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	(Contd. of page
· pH-value:	Not determined.
· Change in condition Melting point/freezing point: Initial boiling point and boiling range	Undetermined. : 80 °C
· Flash point:	16 °C
· Flammability (solid, gas):	Not applicable.
· Ignition temperature:	350 °C
· Decomposition temperature:	Not determined.
· Auto-ignition temperature:	Product is not self-igniting.
· Explosive properties:	Product is not explosive. However, formation of explosive ai vapour mixtures are possible.
· Explosion limits:	
Lower:	2.5 Vol %
Upper:	13.0 Vol %
\cdot Vapour pressure at 20 $^{\circ}\text{C}$:	59 hPa
· Density at 20 °C:	0.9 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.
· 9.2 Other information	NOTE: The physical data presented above are typical values ar 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:

No decomposition if used and stored according to specifications.

· 10.3 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.

- 10.4 Conditions to avoid Aluminium at higher temperatures.
- 10.5 Incompatible materials: Strong acids and oxidising agents
- · 10.6 Hazardous decomposition products: Carbon monoxide and carbon dioxide

SECTION 11: Toxicological information

- · 11.1 Information on toxicological effects
- · Acute toxicity Based on available data, the classification criteria are not met.

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· LD/LC50 values relevant for classification:				
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:
- · Skin corrosion/irritation Based on available data, the classification criteria are not met.
- · Serious eye damage/irritation

Causes serious eye irritation.

- · Respiratory or skin sensitisation Based on available data, the classification criteria are not met.
- · Subacute to chronic toxicity:

Effects of long-term or repeated exposure: Etanol 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.

· Additional toxicological information:

Routes of exposure: The substance can be absorbed into the body by inhalation of its vapour and by ingestion. Inhalation risk: A harmful contamination of the air will be reached rather slowly on evaporation of this substance at 20 degs.C.

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

- · 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 Based on available data, the classification criteria are not met.
- · 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:

64-17-5 Ethanol

EC50 454 mg/kg (daphnia)

- · 12.2 Persistence and degradability 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 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.

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

SECTION 13: Disposal considerations

- · 13.1 Waste treatment methods
- · Recommendation

Recommended Hierarchy of Controls:

- Minimise waste;

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

Contact waste processors for recycling information.

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.

SECTION 14: Transport information	
· 14.1 UN-Number · ADR, IMDG, IATA	UN1170
· 14.2 UN proper shipping name · ADR	1170 ETHANOL SOLUTION (ETHYL ALCOHOL SOLUTION)
· IMDG	ETHANOL SOLUTION (ETHYL ALCOHOL SOLUTION)
·IATA	ETHANOL SOLUTION
· 14.3 Transport hazard class(es)	
· ADR, IMDG, IATA	
· Class · Label	3 Flammable liquids.
· 14.4 Packing group · ADR, IMDG, IATA	II
· 14.5 Environmental hazards: · Marine pollutant:	No
· 14.6 Special precautions for user	Warning: Flammable liquids.
 Hazard identification number (Kemler code): EMS Number:	33 F-E,S-D
· 14.7 Transport in bulk according to Annex II o Marpol and the IBC Code	of Not applicable.
· Transport/Additional information:	
· ADR	1L
· Limited quantities (LQ) · Transport category	1L 2
· Tunnel restriction code	D/E

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• UN "Model Regulation": UN1170, ETHANOL SOLUTION (ETHYL ALCOHOL SOLUTION), 3, II

SECTION 15: Regulatory information

- · 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture No further relevant information available.
- · 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.

H319 Causes serious eye irritation.

· 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)

DNEL: Derived No-Effect Level (REACH)

PNEC: Predicted No-Effect Concentration (REACH)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic vPvB: very Persistent and very Bioaccumulative

Flam. Liq. 2: Flammable liquids – Category 2

Eye Irrit. 2: Serious eye damage/eye irritation – Category 2

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