

SAFETY DATA SHEET

Albert's Stain 1

According to the REACH etc. (Amendment etc.) (EU Exit) Regulations 2019 No. 758, as amended.

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

1.1. Product identifier

Product name Albert's Stain 1
Product number PL.7129, PL.7130, PL.7131

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

Identified uses Laboratory reagent.
Uses advised against No specific uses advised against are identified.

1.3. Details of the supplier of the safety data sheet

Supplier Pro-Lab Diagnostics
3 Bassendale Road
Wirral
Merseyside
CH62 3QL
Tel: 0151 353 1613
Fax: 0151 353 1614
mowen@pro-lab.com

1.4. Emergency telephone number

Emergency telephone +44 (0)151 353 1613 Monday to Friday 9.00 to 17.00
+44 (0)7714 429 646 outside the above hours

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (SI 2019 No. 720)

Physical hazards Not Classified
Health hazards Not Classified
Environmental hazards Not Classified

2.2. Label elements

Hazard statements NC Not Classified
Supplemental label information EUH210 Safety data sheet available on request.

2.3. Other hazards

This product does not contain any substances classified as PBT or vPvB.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

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ethanol		1 - <2.5%
CAS number: 64-17-5	EC number: 200-578-6	
Substance with National workplace exposure limits.		

Classification		
Flam. Liq. 2 - H225		
Eye Irrit. 2 - H319		

acetic acid		1 - <2.5%
CAS number: 64-19-7	EC number: 200-580-7	

Classification		
Flam. Liq. 3 - H226		
Skin Corr. 1A - H314		
Eye Dam. 1 - H318		

The full text for all hazard statements is displayed in Section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

Inhalation	Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing.
Ingestion	Rinse mouth thoroughly with water. Give plenty of water to drink. Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing.
Skin contact	Wash skin thoroughly with soap and water.
Eye contact	Remove any contact lenses and open eyelids wide apart. Continue to rinse.

4.2. Most important symptoms and effects, both acute and delayed

Inhalation	Irritation of nose, throat and airway.
Ingestion	May cause discomfort if swallowed.
Skin contact	Prolonged skin contact may cause redness and irritation.
Eye contact	May cause temporary eye irritation.

4.3. Indication of any immediate medical attention and special treatment needed

Notes for the doctor	The severity of the symptoms described will vary dependent on the concentration and the length of exposure.
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SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media	Extinguish with alcohol-resistant foam, carbon dioxide, dry powder or water fog. Use fire-extinguishing media suitable for the surrounding fire.
Unsuitable extinguishing media	Do not use water jet as an extinguisher, as this will spread the fire.

5.2. Special hazards arising from the substance or mixture

Hazardous combustion products	Thermal decomposition or combustion products may include the following substances: Oxides of carbon. Toxic gases or vapours.
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5.3. Advice for firefighters

Special protective equipment for firefighters Use protective equipment appropriate for surrounding materials.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions Wear protective clothing as described in Section 8 of this safety data sheet.

6.2. Environmental precautions

Environmental precautions Avoid discharge into drains or watercourses or onto the ground.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up Absorb in vermiculite, dry sand or earth and place into containers. Containers with collected spillage must be properly labelled with correct contents and hazard symbol.

6.4. Reference to other sections

Reference to other sections See Section 11 for additional information on health hazards. For waste disposal, see Section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Usage precautions Read and follow manufacturer's recommendations.

Advice on general occupational hygiene Avoid contact with eyes and prolonged skin contact.

7.2. Conditions for safe storage, including any incompatibilities

Storage precautions Store in a cool and well-ventilated place.

7.3. Specific end use(s)

Specific end use(s) The identified uses for this product are detailed in Section 1.2.

SECTION 8: Exposure controls/Personal protection

8.1. Control parameters

Occupational exposure limits

ethanol

Long-term exposure limit (8-hour TWA): WEL 1000 ppm 1920 mg/m³

acetic acid

Long-term exposure limit (8-hour TWA): WEL 10 ppm 25 mg/m³

Short-term exposure limit (15-minute): WEL 20 ppm 50 mg/m³

methanol

Long-term exposure limit (8-hour TWA): WEL 200 ppm 266 mg/m³

Short-term exposure limit (15-minute): WEL 250 ppm 333 mg/m³

Sk

WEL = Workplace Exposure Limit.

Sk = Can be absorbed through the skin.

acetic acid (CAS: 64-19-7)

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DNEL	<p>Workers - Inhalation; Long term local effects: 25 mg/m³</p> <p>Workers - Inhalation; Short term local effects: 25 mg/m³</p> <p>General population - Inhalation; Long term local effects: 25 mg/m³</p> <p>General population - Inhalation; Short term local effects: 25 mg/m³</p>
PNEC	<ul style="list-style-type: none"> - Fresh water; 3.058 mg/l - marine water; 0.306 mg/l - STP; 85 mg/l - Sediment (Freshwater); 11.36 mg/kg - Sediment (Marinewater); 1.136 mg/kg - Soil; 0.47 mg/kg

methanol (CAS: 67-56-1)

DNEL	<p>Workers - Inhalation; Long term systemic effects: 260 mg/m³</p> <p>Workers - Inhalation; Short term systemic effects: 260 mg/m³</p> <p>Workers - Inhalation; Long term local effects: 260 mg/m³</p> <p>Workers - Inhalation; Short term local effects: 260 mg/m³</p> <p>Workers - Dermal; Long term systemic effects: 40 mg/kg/day</p> <p>Workers - Dermal; Short term systemic effects: 40 mg/kg/day</p> <p>General population - Inhalation; Long term systemic effects: 50 mg/m³</p> <p>General population - Inhalation; Short term systemic effects: 50 mg/m³</p> <p>General population - Inhalation; Long term local effects: 50 mg/m³</p> <p>General population - Inhalation; Short term local effects: 50 mg/m³</p> <p>General population - Dermal; Long term systemic effects: 8 mg/kg/day</p> <p>General population - Dermal; Short term systemic effects: 8 mg/kg/day</p> <p>General population - Oral; Long term systemic effects: 8 mg/kg/day</p> <p>General population - Oral; Short term systemic effects: 8 mg/kg/day</p>
PNEC	<ul style="list-style-type: none"> - Fresh water; 20.8 mg/l - Fresh water, Intermittent release; 1540 mg/l - marine water; 2.08 mg/l - STP; 100 mg/l - Sediment (Freshwater); 77 mg/kg - Sediment (Marinewater); 7.7 mg/kg - Soil; 100 mg/kg

8.2. Exposure controls

Eye/face protection	No specific eye protection required during normal use.
Hand protection	The most suitable glove should be chosen in consultation with the glove supplier/manufacturer, who can provide information about the breakthrough time of the glove material.
Hygiene measures	No specific hygiene procedures recommended but good personal hygiene practices should always be observed when working with chemical products.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance	Liquid.
Colour	Green.
Odour	Almost odourless. Characteristic.
Odour threshold	Not determined.
pH	Not determined.

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Melting point	Not relevant.
Initial boiling point and range	Not determined.
Flash point	Not determined.
Evaporation rate	Not determined.
Evaporation factor	Not determined.
Flammability (solid, gas)	Not relevant.
Upper/lower flammability or explosive limits	Not relevant.
Vapour pressure	Not determined.
Vapour density	Not determined.
Relative density	Not determined.
Bulk density	Not determined.
Solubility(ies)	Soluble in water.
Partition coefficient	Not determined.
Auto-ignition temperature	Not relevant.
Decomposition Temperature	Not relevant.
Viscosity	Not determined.
Explosive properties	Not considered to be explosive.
Oxidising properties	The mixture itself has not been tested but none of the ingredient substances meet the criteria for classification as oxidising.

9.2. Other information

Other information No information required.

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity There are no known reactivity hazards associated with this product.

10.2. Chemical stability

Stability Stable at normal ambient temperatures and when used as recommended.

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions Will not polymerise.

10.4. Conditions to avoid

Conditions to avoid Avoid excessive heat for prolonged periods of time.

10.5. Incompatible materials

Materials to avoid No specific material or group of materials is likely to react with the product to produce a hazardous situation.

10.6. Hazardous decomposition products

Hazardous decomposition products None at ambient temperatures. Thermal decomposition or combustion products may include the following substances: Oxides of carbon. Oxides of nitrogen.

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SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity - oral

Notes (oral LD₅₀) Based on available data the classification criteria are not met.

ATE oral (mg/kg) 137,500.0

Acute toxicity - dermal

Notes (dermal LD₅₀) Based on available data the classification criteria are not met.

Acute toxicity - inhalation

Notes (inhalation LC₅₀) Based on available data the classification criteria are not met.

Skin corrosion/irritation

Animal data Based on available data the classification criteria are not met.

Serious eye damage/irritation

Serious eye damage/irritation Based on available data the classification criteria are not met.

Respiratory sensitisation

Respiratory sensitisation Based on available data the classification criteria are not met.

Skin sensitisation

Skin sensitisation Based on available data the classification criteria are not met.

Germ cell mutagenicity

Genotoxicity - in vitro Based on available data the classification criteria are not met.

Genotoxicity - in vivo Based on available data the classification criteria are not met.

Carcinogenicity

Carcinogenicity Based on available data the classification criteria are not met.

Reproductive toxicity

Reproductive toxicity - fertility Based on available data the classification criteria are not met.

Specific target organ toxicity - single exposure

STOT - single exposure Based on available data the classification criteria are not met.

Specific target organ toxicity - repeated exposure

STOT - repeated exposure Based on available data the classification criteria are not met.

Aspiration hazard

Aspiration hazard Not anticipated to present an aspiration hazard, based on chemical structure.

Toxicological information on ingredients.

ethanol

Acute toxicity - oral

Acute toxicity oral (LD₅₀ mg/kg) 10,470.0

Species Rat

Notes (oral LD₅₀) REACH dossier information. Based on available data the classification criteria are not met.

ATE oral (mg/kg) 10,470.0

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Acute toxicity - inhalation

Acute toxicity inhalation (LC₅₀ vapours mg/l) 124.7

Species Rat

Notes (inhalation LC₅₀) REACH dossier information. Based on available data the classification criteria are not met.

ATE inhalation (vapours mg/l) 124.7

Skin corrosion/irritation

Animal data Dose: 0.2 ml, 24 hours, Rabbit Primary dermal irritation index: 0 / 8 REACH dossier information. Not irritating.

Serious eye damage/irritation

Serious eye damage/irritation Dose: 0.1 mL, 21 days, Rabbit Causes eye irritation. REACH dossier information.

Respiratory sensitisation

Respiratory sensitisation Rat: Not sensitising. REACH dossier information. Based on available data the classification criteria are not met.

Skin sensitisation

Skin sensitisation Guinea pig maximization test (GPMT) - Guinea pig: Not sensitising. REACH dossier information. Read across data. Based on available data the classification criteria are not met.

Germ cell mutagenicity

Genotoxicity - in vitro Gene mutation: Negative. REACH dossier information. Based on available data the classification criteria are not met.

Genotoxicity - in vivo Chromosome aberration: Negative. REACH dossier information. Based on available data the classification criteria are not met.

Carcinogenicity

IARC carcinogenicity IARC Group 1 Carcinogenic to humans.

Reproductive toxicity

Reproductive toxicity - fertility Two-generation study - NOEL 15 %, Oral, Mouse P REACH dossier information.

Reproductive toxicity - development Maternal toxicity: - NOEL: 16000 ppm, Inhalation, Rat REACH dossier information.

Specific target organ toxicity - repeated exposure

STOT - repeated exposure LOAEL 4 mL/Kg, Oral, Rat REACH dossier information. Based on available data the classification criteria are not met.

acetic acid

Skin corrosion/irritation

Animal data Dose: 0.5 ml (3.3 - 10%), 4 hours, Rabbit Primary dermal irritation index: 0.5 - 1.1 REACH dossier information. Skin Corr. 1A - H314 Causes severe skin burns and eye damage.

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Serious eye damage/irritation

Serious eye damage/irritation Dose: 0.1 ml, 30 seconds, Rabbit REACH dossier information. Eye Dam. 1 - H318
Causes serious eye damage.

Germ cell mutagenicity

Genotoxicity - in vitro Chromosome aberration: Negative. REACH dossier information.

Reproductive toxicity

Reproductive toxicity - development Developmental toxicity: - NOAEL: 1600 mg/kg/day, Oral, Rat REACH dossier information.

methanol

Acute toxicity - oral

Notes (oral LD₅₀) International Programme on Chemical Safety (IPCS) (1997) Environmental Health Criteria 196: Methanol. Geneva, World Health Organization. Toxic if swallowed.

ATE oral (mg/kg) 100.0

Acute toxicity - dermal

Notes (dermal LD₅₀) Converted acute toxicity point estimate (cATpE) Toxic in contact with skin.

Acute toxicity - inhalation

Notes (inhalation LC₅₀) Converted acute toxicity point estimate (cATpE) Toxic if inhaled.

ATE inhalation (gases ppm) 700.0

ATE inhalation (vapours mg/l) 3.0

Skin corrosion/irritation

Animal data Dose: 2.5cm x 2.5cm, 20 hours, Rabbit Erythema/eschar score: No erythema (0). Oedema score: No oedema (0). REACH dossier information. Based on available data the classification criteria are not met.

Serious eye damage/irritation

Serious eye damage/irritation Dose: 0.05 ml, 24 hours, Rabbit REACH dossier information. Based on available data the classification criteria are not met.

Skin sensitisation

Skin sensitisation Guinea pig maximization test (GPMT) - Guinea pig: Not sensitising. REACH dossier information. Based on available data the classification criteria are not met.

Germ cell mutagenicity

Genotoxicity - in vitro Bacterial reverse mutation test: Negative. REACH dossier information. Based on available data the classification criteria are not met.

Genotoxicity - in vivo Chromosome aberration: Negative. REACH dossier information. Based on available data the classification criteria are not met.

Specific target organ toxicity - single exposure

STOT - single exposure STOT SE 1 - H370

Target organs Eyes Central nervous system

Specific target organ toxicity - repeated exposure

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STOT - repeated exposure LOAEL 2340 mg/kg/day, Oral, Monkey REACH dossier information. Based on available data the classification criteria are not met.

SECTION 12: Ecological information

12.1. Toxicity

Toxicity Not considered toxic to fish.

Ecological information on ingredients.

ethanol

Acute aquatic toxicity

Acute toxicity - fish LC₅₀, 96 hours: 14200 mg/l, Pimephales promelas (Fat-head Minnow)
REACH dossier information.

Acute toxicity - aquatic invertebrates LC₅₀, 48 hours: 5012 mg/l, Ceriodaphnia dubia
REACH dossier information.

Acute toxicity - aquatic plants EC₅₀, 72 hours: 275 mg/l, Chlorella vulgaris
REACH dossier information.

Chronic aquatic toxicity

Chronic toxicity - fish early life stage NOEC, 120 hours: 250 mg/l, Brachydanio rerio (Zebra Fish)

Chronic toxicity - aquatic invertebrates NOEC, 9 days: 9.6 mg/l, Daphnia magna
REACH dossier information.

acetic acid

Acute aquatic toxicity

Acute toxicity - fish NOEC, 96 hours: 1000 mg/l, Oncorhynchus mykiss (Rainbow trout)
LC₅₀, 96 hours: > 1000 mg/l, Oncorhynchus mykiss (Rainbow trout)
REACH dossier information.

Acute toxicity - aquatic invertebrates EC₅₀, 48 hours: > 1000 mg/l, Daphnia magna
REACH dossier information.

Acute toxicity - aquatic plants EC₅₀, 24 hours: 0.08 mg/l, Anabaena flos-aquae
EC₂₀, 24 hours: 2.84 mg/l, Anabaena flos-aquae
EC₁₀, 24 hours: 9.19 mg/l, Anabaena flos-aquae
EC₅₀, 48 hours: 82.07 mg/l, Anabaena flos-aquae
EC₂₀, 48 hours: 31.2 mg/l, Anabaena flos-aquae
EC₁₀, 48 hours: 22.6 mg/l, Anabaena flos-aquae
EC₅₀, 72 hours: 55.22 mg/l, Anabaena flos-aquae
EC₂₀, 72 hours: 21.98 mg/l, Anabaena flos-aquae
EC₁₀, 72 hours: 16.16 mg/l, Anabaena flos-aquae
REACH dossier information.

methanol

Acute aquatic toxicity

Acute toxicity - fish LC₅₀, 96 hours: 15400 mg/l, Lepomis macrochirus (Bluegill)
EC₅₀, 96 hours: 12700 mg/l, Lepomis macrochirus (Bluegill)
REACH dossier information.

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Acute toxicity - aquatic invertebrates	EC ₅₀ , 96 hours: 18260 mg/l, Daphnia magna REACH dossier information.
Acute toxicity - aquatic plants	EC ₅₀ , 96 hours: ~ 22000 mg/l, Pseudokirchneriella subcapitata REACH dossier information.
Acute toxicity - microorganisms	IC ₅₀ , 3 hours: >1000 mg/l, Activated sludge REACH dossier information.

12.2. Persistence and degradability

Persistence and degradability No data available.

Ecological information on ingredients.

ethanol

Biodegradation	Water - Degradation (74%): 10 days REACH dossier information. The substance is readily biodegradable.
Chemical oxygen demand	1.99 g O ₂ /g substance REACH dossier information.

acetic acid

Phototransformation	Water - DT ₅₀ : 26.7 days Calculation method. REACH dossier information.
Biodegradation	Water - Half-life : 2 days Water - Degradation (96%): 20 days REACH dossier information. The substance is readily biodegradable.

methanol

Phototransformation	Water - DT ₅₀ : 17.2 days REACH dossier information.
Biodegradation	Water - Degradation (95%): 20 days Water - Degradation (91%): 15 days Water - Degradation (88%): 10 days Water - Degradation (76%): 5 days REACH dossier information. The substance is readily biodegradable.

12.3. Bioaccumulative potential

Bioaccumulative potential No data available on bioaccumulation.

Partition coefficient Not determined.

Ecological information on ingredients.

ethanol

Partition coefficient	log Pow: - 0.35 REACH dossier information.
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acetic acid

Bioaccumulative potential	BCF: 3.16, Fish QSAR model REACH dossier information.
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Partition coefficient log Pow: -0.17 REACH dossier information.

methanol

Partition coefficient log Pow: -0.77 REACH dossier information.

12.4. Mobility in soil

Mobility The product is soluble in water.

Ecological information on ingredients.

ethanol

Surface tension 24.5 mN/m @ 20°C/68°F REACH dossier information.

acetic acid

Henry's law constant 0.21 Pa m³/mol @ 25°C Calculation method. REACH dossier information.

methanol

Mobility Mobile.

12.5. Results of PBT and vPvB assessment

Results of PBT and vPvB assessment This product does not contain any substances classified as PBT or vPvB.

Ecological information on ingredients.

ethanol

Results of PBT and vPvB assessment This substance is not classified as PBT or vPvB according to current UK criteria.

acetic acid

Results of PBT and vPvB assessment This substance is not classified as PBT or vPvB according to current UK criteria.

methanol

Results of PBT and vPvB assessment This substance is not classified as PBT or vPvB according to current UK criteria.

12.6. Other adverse effects

Other adverse effects Not determined.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

General information Dispose of waste product or used containers in accordance with local regulations

SECTION 14: Transport information

General The product is not covered by international regulations on the transport of dangerous goods (IMDG, IATA, ADR/RID).

14.1. UN number

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Not applicable.

14.2. UN proper shipping name

Not applicable.

14.3. Transport hazard class(es)

No transport warning sign required.

14.4. Packing group

Not applicable.

14.5. Environmental hazards

Environmentally hazardous substance/marine pollutant

No.

14.6. Special precautions for user

Not applicable.

14.7. Transport in bulk according to Annex II of MARPOL and the IBC Code

Transport in bulk according to Not applicable.

Annex II of MARPOL 73/78

and the IBC Code

SECTION 15: Regulatory information

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

National regulations

EH40/2005 Workplace exposure limits.

The REACH etc. (Amendment etc.) (EU Exit) Regulations 2019 No. 758, as amended.

The Chemicals (Health and Safety) and Genetically Modified Organisms (Contained Use)

(Amendment etc.) (EU Exit) Regulations 2019 No. 720, as amended.

15.2. Chemical safety assessment

No chemical safety assessment has been carried out.

SECTION 16: Other information

Abbreviations and acronyms used in the safety data sheet

ATE: Acute Toxicity Estimate.

cATpE: Converted acute toxicity point estimate.

DNEL: Derived No Effect Level.

LD50: Lethal Dose to 50% of a test population (Median Lethal Dose).

LC50: Lethal Concentration to 50 % of a test population.

PNEC: Predicted No Effect Concentration.

BCF: Bioconcentration Factor.

EC₅₀: 50% of maximal Effective Concentration.

NOAEL: No Observed Adverse Effect Level.

NOEC: No Observed Effect Concentration.

Classification abbreviations and acronyms

Eye Dam. = Serious eye damage

Eye Irrit. = Eye irritation

Flam. Liq. = Flammable liquid

Skin Corr. = Skin corrosion

Classification procedures according to SI 2019 No. 720

Not classified.: Calculation method.

Revision comments

Revised regulations.

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Revision date	26/09/2022
Revision	6
Supersedes date	01/06/2017
SDS number	764
Hazard statements in full	H225 Highly flammable liquid and vapour. H226 Flammable liquid and vapour. H314 Causes severe skin burns and eye damage. H318 Causes serious eye damage. H319 Causes serious eye irritation.

The information in this safety data sheet was obtained from current and reliable sources. However, the data is provided without warranty, expressed or implied, regarding its correctness or accuracy. Since the conditions for use, handling, storage and disposal of this product are beyond Pro-Lab Diagnostics control, it is the users responsibility to perform thorough testing of this product when used in combination with any other product. It is suggested that users familiarise themselves with this safety data sheet before handling the product.