

SAFETY DATA SHEET

Albert's Stain 2

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 2
Product number PL.7132, PL.7133, PL.7134

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

Albert's Stain 2

potassium iodide	1 - <2.5%
CAS number: 7681-11-0	EC number: 231-659-4
Classification	
Acute Tox. 4 - H302	
Skin Irrit. 2 - H315	
Eye Irrit. 2 - H319	

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.
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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.
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6.2. Environmental precautions

Albert's Stain 2

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

iodine

Short-term exposure limit (15-minute): WEL 0.1 ppm 1.1 mg/m³

WEL = Workplace Exposure Limit.

iodine (CAS: 7553-56-2)

DNEL	Workers - Inhalation; Long term systemic effects: 0.07 mg/m ³ Workers - Dermal; Long term systemic effects: 0.01 mg/kg/day
PNEC	- Fresh water; 18.13 µg/L - marine water; 60.01 µg/L - STP; 11 mg/l - Sediment (Freshwater); 3.99 mg/kg - Sediment (Marinewater); 20.22 mg/kg - Soil; 5.95 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

Albert's Stain 2

Appearance	Liquid.
Colour	Purple.
Odour	Almost odourless.
Odour threshold	Not determined.
pH	Not determined.
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.

Albert's Stain 2

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.

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) 100,000.0

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.

potassium iodide

Acute toxicity - oral

Albert's Stain 2

Acute toxicity oral (LD₅₀ mg/kg)	1,000.0
Species	Mouse
Notes (oral LD₅₀)	Raw material suppliers' information.
ATE oral (mg/kg)	1,000.0
<u>Skin corrosion/irritation</u>	
Animal data	Dose: 0.5 g, 24 hours, Rabbit Moderately irritating.
<u>Serious eye damage/irritation</u>	
Serious eye damage/irritation	Causes serious eye irritation.
<u>Skin sensitisation</u>	
Skin sensitisation	Patch test - Human: Not sensitising.
<u>Germ cell mutagenicity</u>	
Genotoxicity - in vitro	Gene mutation: Negative.
<u>Reproductive toxicity</u>	
Reproductive toxicity - development	Developmental toxicity: - NOAEL: 1 ppm, Oral, Rat
<u>Specific target organ toxicity - repeated exposure</u>	
STOT - repeated exposure	NOAEL 0.5 mg/kg/day, Oral, Rat

iodine

<u>Acute toxicity - oral</u>	
Acute toxicity oral (LD₅₀ mg/kg)	315.0
Species	Rat
Notes (oral LD₅₀)	Supplier's information. Based on available data the classification criteria are not met.
ATE oral (mg/kg)	315.0
<u>Acute toxicity - dermal</u>	
Acute toxicity dermal (LD₅₀ mg/kg)	1,425.0
Species	Rabbit
Notes (dermal LD₅₀)	REACH dossier information.
ATE dermal (mg/kg)	1,425.0
<u>Acute toxicity - inhalation</u>	
Acute toxicity inhalation (LC₅₀ dust/mist mg/l)	4.588
Species	Rat
Notes (inhalation LC₅₀)	REACH dossier information.

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ATE inhalation (dusts/mists mg/l)	4.588
<u>Skin corrosion/irritation</u>	
Human skin model test	Cell Viability (11%) 15 minutes Irritating. REACH dossier information.
<u>Serious eye damage/irritation</u>	
Serious eye damage/irritation	Irritating to eyes.
<u>Skin sensitisation</u>	
Skin sensitisation	Local Lymph Node Assay (LLNA) - Mouse: Not sensitising. REACH dossier information.
<u>Reproductive toxicity</u>	
Reproductive toxicity - fertility	Screening - NOAEL 10 mg/kg/day, Oral, Rat F1 REACH dossier information.
Reproductive toxicity - development	Developmental toxicity: - NOAEL: 10 mg/kg/day, Oral, Rat REACH dossier information. No evidence of reproductive toxicity in animal studies.
<u>Specific target organ toxicity - single exposure</u>	
STOT - single exposure	May cause respiratory irritation.
<u>Specific target organ toxicity - repeated exposure</u>	
STOT - repeated exposure	NOAEL 3 mg/l, Oral, Rat REACH dossier information.
Target organs	Thymus

SECTION 12: Ecological information

12.1. Toxicity

Toxicity Not considered toxic to fish.

Ecological information on ingredients.

potassium iodide

Acute aquatic toxicity

Acute toxicity - fish	LC ₀ , 96 hours: 100 mg/l, Brachydanio rerio (Zebra Fish) NOEC, 7 days: 100 mg/l, Brachydanio rerio (Zebra Fish) REACH dossier information.
Acute toxicity - aquatic invertebrates	LC ₅₀ , 24 hours: 226 mg/l, dreissena polymorpha (zebra mussel) REACH dossier information.
Acute toxicity - aquatic plants	MIC ₁₀₀ , 10 days: 356.8 mg/l, Dunaliella salina REACH dossier information.
Acute toxicity - microorganisms	MIC ₁₀₀ , 24 hours: 358.3 mg/l, Staphylococcus auerus REACH dossier information.

Chronic aquatic toxicity

Chronic toxicity - fish early life stage	LC ₁₀₀ , 22 days: 166002.8 mg/l, Oncorhynchus mykiss (Rainbow trout) REACH dossier information.
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iodine

Albert's Stain 2

Toxicity	Aquatic Acute 1 - H400 Very toxic to aquatic life.
<u>Acute aquatic toxicity</u>	
LE(C)₅₀	0.1 < L(E)C ₅₀ ≤ 1
M factor (Acute)	1
Acute toxicity - fish	LC ₅₀ , 96 hours: 1.67 mg/l, Oncorhynchus mykiss (Rainbow trout) REACH dossier information.
Acute toxicity - aquatic invertebrates	LC ₅₀ , 48 hours: 0.55 - 0.59 mg/l, Daphnia magna REACH dossier information.
Acute toxicity - aquatic plants	NOEC, 72 hours: 0.025 mg/l, Desmodesmus subspicatus EC ₅₀ , 72 hours: 0.13 mg/l, Desmodesmus subspicatus REACH dossier information.
Acute toxicity - microorganisms	EC ₅₀ , 3 hours: 280 mg/l, Activated sludge EC ₁₀ , 3 hours: 110 mg/l, Activated sludge REACH dossier information.

12.2. Persistence and degradability

Persistence and degradability No data available.

Ecological information on ingredients.

potassium iodide

Biodegradation	Water - Half-life : 720 hours Water - Half-life : 360 hours Water - Degradation (50%): 360 hours Calculation method. REACH dossier information. The substance is readily biodegradable.
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iodine

Phototransformation	Water - DT ₅₀ : 0.14 minutes REACH dossier information.
Stability (hydrolysis)	pH5 - Half-life : ~ 0.005 minutes @ 20°C

12.3. Bioaccumulative potential

Bioaccumulative potential No data available on bioaccumulation.

Partition coefficient Not determined.

Ecological information on ingredients.

potassium iodide

Bioaccumulative potential	BCF: 2.268, Fish Calculation method. REACH dossier information.
Partition coefficient	Pow: 0.11 REACH dossier information.

iodine

Partition coefficient	log Pow: 2.49 REACH dossier information.
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12.4. Mobility in soil

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Mobility The product is soluble in water.

Ecological information on ingredients.

potassium iodide

Adsorption/desorption coefficient Water - Koc: 13.22 @ 25°C Calculation method. REACH dossier information.

Henry's law constant 3.717E-18 Pa m³/mol @ 25°C Calculation method. REACH dossier information.

iodine

Adsorption/desorption coefficient Water - Kd: 0.13 - 7.7 @ 20°C REACH dossier information.

Henry's law constant 0.02961 - 0.03257 Pa m³/mol @ 20°C REACH dossier information.

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.

potassium iodide

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

iodine

Results of PBT and vPvB assessment Substance is inorganic.

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

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.

Albert's Stain 2

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.
LC50: Lethal Concentration to 50 % of a test population.
LD50: Lethal Dose to 50% of a test population (Median Lethal Dose).
BCF: Bioconcentration Factor.
EC₅₀: 50% of maximal Effective Concentration.
NOAEL: No Observed Adverse Effect Level.
NOEC: No Observed Effect Concentration.

Classification abbreviations and acronyms Acute Tox. = Acute toxicity
Eye Irrit. = Eye irritation
Skin Irrit. = Skin irritation

Classification procedures according to SI 2019 No. 720 Not classified.: Calculation method.

Revision date 26/09/2022

Revision 7

Supersedes date 01/10/2017

SDS number 765

Hazard statements in full H302 Harmful if swallowed.
H315 Causes skin irritation.
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.