

**SAFETY DATA SHEET****Albert's Stain 2**

According to Regulation (EC) No 1907/2006, Annex II, 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 (EC 1272/2008)**

**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

<b>potassium iodide</b>	<b>1 - &lt;2.5%</b>
CAS number: 7681-11-0	EC number: 231-659-4
<b>Classification</b>	
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

<b>Inhalation</b>	Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing.
<b>Ingestion</b>	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.
<b>Skin contact</b>	Wash skin thoroughly with soap and water.
<b>Eye contact</b>	Remove any contact lenses and open eyelids wide apart. Continue to rinse.

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

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

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

<b>Notes for the doctor</b>	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

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

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

<b>Hazardous combustion products</b>	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

<b>Special protective equipment for firefighters</b>	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

<b>Personal precautions</b>	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/m<sup>3</sup>

WEL = Workplace Exposure Limit

#### iodine (CAS: 7553-56-2)

**DNEL**                                  Workers - Inhalation; Long term systemic effects: 0.07 mg/m<sup>3</sup>  
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

<b>Appearance</b>	Liquid.
<b>Colour</b>	Purple.
<b>Odour</b>	Almost odourless.
<b>Odour threshold</b>	Not determined.
<b>pH</b>	Not determined.
<b>Melting point</b>	Not relevant.
<b>Initial boiling point and range</b>	Not determined.
<b>Flash point</b>	Not determined.
<b>Evaporation rate</b>	Not determined.
<b>Evaporation factor</b>	Not determined.
<b>Flammability (solid, gas)</b>	Not relevant.
<b>Upper/lower flammability or explosive limits</b>	Not relevant.
<b>Vapour pressure</b>	Not determined.
<b>Vapour density</b>	Not determined.
<b>Relative density</b>	Not determined.
<b>Bulk density</b>	Not determined.
<b>Solubility(ies)</b>	Soluble in water.
<b>Partition coefficient</b>	Not determined.
<b>Auto-ignition temperature</b>	Not relevant.
<b>Decomposition Temperature</b>	Not relevant.
<b>Viscosity</b>	Not determined.
<b>Explosive properties</b>	Not considered to be explosive.
<b>Oxidising properties</b>	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 LD<sub>50</sub>)** Based on available data the classification criteria are not met.

**ATE oral (mg/kg)** 100,000.0

#### Acute toxicity - dermal

**Notes (dermal LD<sub>50</sub>)** Based on available data the classification criteria are not met.

#### Acute toxicity - inhalation

**Notes (inhalation LC<sub>50</sub>)** 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

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<b>Acute toxicity oral (LD<sub>50</sub> mg/kg)</b>	1,000.0
<b>Species</b>	Mouse
<b>Notes (oral LD<sub>50</sub>)</b>	Raw material suppliers' information.
<b>ATE oral (mg/kg)</b>	1,000.0
<b><u>Skin corrosion/irritation</u></b>	
<b>Animal data</b>	Dose: 0.5 g, 24 hours, Rabbit Moderately irritating.
<b><u>Serious eye damage/irritation</u></b>	
<b>Serious eye damage/irritation</b>	Causes serious eye irritation.
<b><u>Skin sensitisation</u></b>	
<b>Skin sensitisation</b>	Patch test - Human: Not sensitising.
<b><u>Germ cell mutagenicity</u></b>	
<b>Genotoxicity - in vitro</b>	Gene mutation: Negative.
<b><u>Reproductive toxicity</u></b>	
<b>Reproductive toxicity - development</b>	Developmental toxicity: - NOAEL: 1 ppm, Oral, Rat
<b><u>Specific target organ toxicity - repeated exposure</u></b>	
<b>STOT - repeated exposure</b>	NOAEL 0.5 mg/kg/day, Oral, Rat

### iodine

<b><u>Acute toxicity - oral</u></b>	
<b>Acute toxicity oral (LD<sub>50</sub> mg/kg)</b>	14,000.0
<b>Species</b>	Rat
<b>Notes (oral LD<sub>50</sub>)</b>	Supplier's information. Based on available data the classification criteria are not met.
<b>ATE oral (mg/kg)</b>	14,000.0
<b><u>Acute toxicity - dermal</u></b>	
<b>Acute toxicity dermal (LD<sub>50</sub> mg/kg)</b>	1,425.0
<b>Species</b>	Rabbit
<b>Notes (dermal LD<sub>50</sub>)</b>	REACH dossier information.
<b>ATE dermal (mg/kg)</b>	1,425.0
<b><u>Acute toxicity - inhalation</u></b>	
<b>Acute toxicity inhalation (LC<sub>50</sub> dust/mist mg/l)</b>	4.588
<b>Species</b>	Rat
<b>Notes (inhalation LC<sub>50</sub>)</b>	REACH dossier information.

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<b>ATE inhalation (dusts/mists mg/l)</b>	4.588
<b><u>Skin corrosion/irritation</u></b>	
<b>Human skin model test</b>	Cell Viability (11%) 15 minutes Irritating. REACH dossier information.
<b><u>Serious eye damage/irritation</u></b>	
<b>Serious eye damage/irritation</b>	Irritating to eyes.
<b><u>Skin sensitisation</u></b>	
<b>Skin sensitisation</b>	Local Lymph Node Assay (LLNA) - Mouse: Not sensitising. REACH dossier information.
<b><u>Reproductive toxicity</u></b>	
<b>Reproductive toxicity - fertility</b>	Screening - NOAEL 10 mg/kg/day, Oral, Rat F1 REACH dossier information.
<b>Reproductive toxicity - development</b>	Developmental toxicity: - NOAEL: 10 mg/kg/day, Oral, Rat REACH dossier information. No evidence of reproductive toxicity in animal studies.
<b><u>Specific target organ toxicity - single exposure</u></b>	
<b>STOT - single exposure</b>	May cause respiratory irritation.
<b><u>Specific target organ toxicity - repeated exposure</u></b>	
<b>STOT - repeated exposure</b>	NOAEL 3 mg/l, Oral, Rat REACH dossier information.
<b>Target organs</b>	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<sub>0</sub>, 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<sub>50</sub>, 24 hours: 226 mg/l, dreissena polymorpha (zebra mussel)  
REACH dossier information.

**Acute toxicity - aquatic  
plants** MIC<sub>100</sub>, 10 days: 356.8 mg/l, Dunaliella salina  
REACH dossier information.

**Acute toxicity -  
microorganisms** MIC<sub>100</sub>, 24 hours: 358.3 mg/l, Staphylococcus auerus  
REACH dossier information.

#### Chronic aquatic toxicity

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

##### iodine

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

<b>Biodegradation</b>	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

<b>Phototransformation</b>	Water - DT <sub>50</sub> : 0.14 minutes REACH dossier information.
<b>Stability (hydrolysis)</b>	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

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

#### iodine

<b>Partition coefficient</b>	log Pow: 2.49 REACH dossier information.
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### 12.4. Mobility in soil



## Albert's Stain 2

**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 m<sup>3</sup>/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 m<sup>3</sup>/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 EU 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

<b>National regulations</b>	EH40/2005 Workplace exposure limits.
<b>EU legislation</b>	Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures (as amended). Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) (as amended).

### 15.2. Chemical safety assessment

No chemical safety assessment has been carried out.

## SECTION 16: Other information

<b>Abbreviations and acronyms used in the safety data sheet</b>	ATE: Acute Toxicity Estimate. LC <sub>50</sub> : Lethal Concentration to 50 % of a test population. LD <sub>50</sub> : Lethal Dose to 50% of a test population (Median Lethal Dose). BCF: Bioconcentration Factor. EC <sub>50</sub> : 50% of maximal Effective Concentration. NOAEL: No Observed Adverse Effect Level. NOEC: No Observed Effect Concentration.
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<b>Classification abbreviations and acronyms</b>	Acute Tox. = Acute toxicity Eye Irrit. = Eye irritation Skin Irrit. = Skin irritation
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<b>Classification procedures according to Regulation (EC) 1272/2008</b>	Not classified.: Calculation method.
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**Revision date** 01/10/2017

**Revision** 6

**Supersedes date** 09/04/2015

**SDS number** 765

<b>Hazard statements in full</b>	H302 Harmful if swallowed. H315 Causes skin irritation. H319 Causes serious eye irritation.
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## Albert's Stain 2

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.