

**ALB2**

Version 1.6	Revision Date: 18.02.2015	Date of last issue: 31.07.2014 Date of first issue: 14.12.2012
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**SECTION 1: Identification of the substance/mixture and of the company/undertaking**

**1.1 Product identifier**

Commercial Product Name : ALB2  
Mat.-No./ Genisys-No. : 03183688122

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

Recommended restrictions on use : For professional users only.

**1.3 Details of the supplier of the safety data sheet**

Company : Roche Diagnostics Deutschland GmbH  
-  
Sandhoferstrasse 116  
68305 Mannheim  
E-mail address : mannheim.umweltschutz@roche.com  
Telephone : +496217590  
Telefax : +496217592890  
Responsible Department : +49(0)621-759-2012+49(0)621-759-4848+49(0)8856-60-2629

**1.4 Emergency telephone number**

In case of emergencies: : Central Works Security +49(0)621-759-2203  
Roche Diagnostics GmbH  
Centre for detoxification: : Mainz +49(0)6131-19240  
Munich +49(0)89-19240

**SECTION 2: Hazards identification**

**2.1 Classification of the substance or mixture**

The product is a kit consisting of individual ingredients. The classification of the ingredients can be obtained from section 3. Section Label elements contains the resulting labelling for the kit.

**2.2 Label elements**

**Labelling (REGULATION (EC) No 1272/2008)**

Not a hazardous substance or mixture.

**Additional Labelling:**

EUH210 Safety data sheet available on request.

**2.3 Other hazards**

See SECTION 3

**SECTION 3: Composition/information on ingredients**

**R1 (A / B)**

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006



**ALB2**

Version  
1.6

Revision Date:  
18.02.2015

Date of last issue: 31.07.2014  
Date of first issue: 14.12.2012

## Classification (REGULATION (EC) No 1272/2008)

Not a hazardous substance or mixture.

## Classification (67/548/EEC, 1999/45/EC)

Not a hazardous substance or mixture.

## Hazardous components

Chemical Name	CAS-No. EC-No. Registration number	Classification (67/548/EEC)	Classification (REGULATION (EC) No 1272/2008)	Concentration (%)
Citric acid monohydrate	5949-29-1 201-069-1	Xi; Xi; R36	Eye Irrit. 2; H319	>= 1 - < 3

For explanation of abbreviations see section 16.

## R2 (C)

## Classification (REGULATION (EC) No 1272/2008)

Not a hazardous substance or mixture.

## Classification (67/548/EEC, 1999/45/EC)

Not a hazardous substance or mixture.

## Hazardous components

Chemical Name	CAS-No. EC-No. Registration number	Classification (67/548/EEC)	Classification (REGULATION (EC) No 1272/2008)	Concentration (%)
Citric acid monohydrate	5949-29-1 201-069-1	Xi; Xi; R36	Eye Irrit. 2; H319	>= 1 - < 3

For explanation of abbreviations see section 16.

## SECTION 4: First aid measures

### 4.1 Description of first aid measures

- General advice : Do not leave the victim unattended.
- If inhaled : Move to fresh air.  
If unconscious place in recovery position and seek medical advice.  
If symptoms persist, call a physician.
- In case of skin contact : If on skin, rinse well with water.
- In case of eye contact : Immediately flush eye(s) with plenty of water.  
Remove contact lenses.  
Protect unharmed eye.  
If eye irritation persists, consult a specialist.
- If swallowed : Keep respiratory tract clear.  
Do not give milk or alcoholic beverages.  
Never give anything by mouth to an unconscious person.  
If symptoms persist, call a physician.

**ALB2**

Version 1.6	Revision Date: 18.02.2015	Date of last issue: 31.07.2014 Date of first issue: 14.12.2012
----------------	------------------------------	-------------------------------------------------------------------

Rinse mouth with water.

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

Symptoms : No information available.

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

Treatment : The first aid procedure should be established in consultation with the doctor responsible for industrial medicine.

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**SECTION 5: Firefighting measures**

**5.1 Extinguishing media**

Suitable extinguishing media : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

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

Specific hazards during fire-fighting : No information available.

**5.3 Advice for firefighters**

Special protective equipment for firefighters : Wear self-contained breathing apparatus for firefighting if necessary.

Further information : Standard procedure for chemical fires.  
Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

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**SECTION 6: Accidental release measures**

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

Personal precautions : Refer to protective measures listed in sections 7 and 8.

**6.2 Environmental precautions**

Environmental precautions : Local authorities should be advised if significant spillages cannot be contained.

**6.3 Methods and material for containment and cleaning up**

Methods for cleaning up : Wipe up with absorbent material (e.g. cloth, fleece).  
Keep in suitable, closed containers for disposal.

**6.4 Reference to other sections**

Treat recovered material as described in the section "Disposal considerations".

**ALB2**

Version  
1.6

Revision Date:  
18.02.2015

Date of last issue: 31.07.2014  
Date of first issue: 14.12.2012

---

## **SECTION 7: Handling and storage**

### **7.1 Precautions for safe handling**

- Advice on safe handling : For personal protection see section 8.  
Smoking, eating and drinking should be prohibited in the application area.
- Advice on protection against fire and explosion : Normal measures for preventive fire protection.
- Hygiene measures : Handle in accordance with good industrial hygiene and safety practice.

### **7.2 Conditions for safe storage, including any incompatibilities**

- Requirements for storage areas and containers : Electrical installations / working materials must comply with the technological safety standards.
- Further information on storage conditions : See label, package insert or internal guidelines
- Advice on common storage : No materials to be especially mentioned.
- Storage class (TRGS 510) : 12, Non Combustible Liquids
- Other data : No decomposition if stored and applied as directed.

### **7.3 Specific end use(s)**

- Specific use(s) : Laboratory chemicals

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## **SECTION 8: Exposure controls/personal protection**

### **8.1 Control parameters**

#### **R1 (A / B)**

Contains no substances with occupational exposure limit values.

#### **R2 (C)**

Contains no substances with occupational exposure limit values.

### **8.2 Exposure controls**

#### **Personal protective equipment**

Eye protection : Safety glasses

Hand protection

Material : Protective gloves

Remarks : The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006



**ALB2**

Version  
1.6

Revision Date:  
18.02.2015

Date of last issue: 31.07.2014  
Date of first issue: 14.12.2012

derived from it. This recommendation is only valid for the product mentioned in the safety data sheet and provided by us and for the application specified by us. Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. Also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion, and the contact time. The suitability for a specific workplace should be discussed with the producers of the protective gloves.

Skin and body protection : Protective suit  
Respiratory protection : No personal respiratory protective equipment normally required.

## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

#### **R1 (A / B)**

Appearance : liquid

Colour : No data available  
Odour : No data available  
Odour Threshold : No data available  
pH : No data available  
Melting point/range : No data available

Boiling point/boiling range : No data available

Flash point : does not flash

Evaporation rate : No data available  
Flammability (solid, gas) : The product is not flammable., Does not sustain combustion.

Upper explosion limit : No data available  
Lower explosion limit : No data available

Vapour pressure : No data available  
Relative vapour density : No data available  
Relative density : No data available  
Density : No data available  
Solubility(ies)  
Water solubility : completely miscible

Partition coefficient: n-octanol/water : No data available  
Ignition temperature : No data available

Auto-ignition temperature : No data available  
Decomposition temperature : No data available  
Viscosity : No data available

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006



**ALB2**

Version  
1.6

Revision Date:  
18.02.2015

Date of last issue: 31.07.2014  
Date of first issue: 14.12.2012

Explosive properties : No data available  
Oxidizing properties : The substance or mixture is not classified as oxidizing.

## **R2 (C)**

Appearance : liquid

Colour : No data available

Odour : No data available

Odour Threshold : No data available

pH : No data available

Melting point/range : No data available

Boiling point/boiling range : No data available

Flash point : does not flash

Evaporation rate : No data available

Flammability (solid, gas) : The product is not flammable., Does not sustain combustion.

Upper explosion limit : No data available

Lower explosion limit : No data available

Vapour pressure : No data available

Relative vapour density : No data available

Relative density : No data available

Density : No data available

Solubility(ies)

Water solubility : completely miscible

Partition coefficient: n-octanol/water : No data available

Ignition temperature : No data available

Auto-ignition temperature : No data available

Decomposition temperature : No data available

Viscosity : No data available

Explosive properties : No data available

Oxidizing properties : The substance or mixture is not classified as oxidizing.

## **9.2 Other information**

### **R1 (A / B)**

No data available

### **R2 (C)**

No data available

**ALB2**

Version  
1.6

Revision Date:  
18.02.2015

Date of last issue: 31.07.2014  
Date of first issue: 14.12.2012

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**SECTION 10: Stability and reactivity**

**10.1 Reactivity**

No dangerous reaction known under conditions of normal use.

**10.2 Chemical stability**

Stable under normal conditions.

**10.3 Possibility of hazardous reactions**

Hazardous reactions : Stable under recommended storage conditions.  
No hazards to be specially mentioned.

**10.4 Conditions to avoid**

Conditions to avoid : No data available

**10.5 Incompatible materials**

Materials to avoid : No data available

**10.6 Hazardous decomposition products**

No data available

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**SECTION 11: Toxicological information**

**11.1 Information on toxicological effects**

***R1 (A / B)***

**Acute toxicity**

Not classified based on available information.

**Components:**

**Citric acid monohydrate:**

Acute oral toxicity : LD50 (Mouse): 5.400 mg/kg

LD50 (Rat): > 6.730 mg/kg

LD50 (Rabbit): > 7.000 mg/kg

**Skin corrosion/irritation**

Not classified based on available information.

**Components:**

**Citric acid monohydrate:**

Remarks: Extremely corrosive and destructive to tissue.

**Serious eye damage/eye irritation**

Not classified based on available information.

**Components:**

**Citric acid monohydrate:**

Result: Irritating to eyes.

Remarks: May cause irreversible eye damage.

**ALB2**

Version  
1.6

Revision Date:  
18.02.2015

Date of last issue: 31.07.2014  
Date of first issue: 14.12.2012

**Respiratory or skin sensitisation**

Skin sensitisation: Not classified based on available information.  
Respiratory sensitisation: Not classified based on available information.

**Components:**

**Citric acid monohydrate:**

Assessment: Did not cause sensitisation on laboratory animals.

**Germ cell mutagenicity**

Not classified based on available information.

**Carcinogenicity**

Not classified based on available information.

**Reproductive toxicity**

Not classified based on available information.

**STOT - single exposure**

Not classified based on available information.

**Components:**

**Citric acid monohydrate:**

Assessment: The substance or mixture is not classified as specific target organ toxicant, single exposure.

**STOT - repeated exposure**

Not classified based on available information.

**Components:**

**Citric acid monohydrate:**

Assessment: The substance or mixture is not classified as specific target organ toxicant, repeated exposure.

**Aspiration toxicity**

Not classified based on available information.

**Components:**

**Citric acid monohydrate:**

No data available

**R2 (C)**

**Acute toxicity**

Not classified based on available information.

**Components:**

**Citric acid monohydrate:**

Acute oral toxicity : LD50 (Mouse): 5.400 mg/kg  
LD50 (Rat): > 6.730 mg/kg  
LD50 (Rabbit): > 7.000 mg/kg

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

The Roche logo is a hexagonal shape with a double border, containing the word "Roche" in a bold, sans-serif font.

**ALB2**

Version  
1.6

Revision Date:  
18.02.2015

Date of last issue: 31.07.2014  
Date of first issue: 14.12.2012

## **Skin corrosion/irritation**

Not classified based on available information.

### **Components:**

#### **Citric acid monohydrate:**

Remarks: Extremely corrosive and destructive to tissue.

## **Serious eye damage/eye irritation**

Not classified based on available information.

### **Components:**

#### **Citric acid monohydrate:**

Result: Irritating to eyes.

Remarks: May cause irreversible eye damage.

## **Respiratory or skin sensitisation**

Skin sensitisation: Not classified based on available information.

Respiratory sensitisation: Not classified based on available information.

### **Components:**

#### **Citric acid monohydrate:**

Assessment: Did not cause sensitisation on laboratory animals.

## **Germ cell mutagenicity**

Not classified based on available information.

## **Carcinogenicity**

Not classified based on available information.

## **Reproductive toxicity**

Not classified based on available information.

## **STOT - single exposure**

Not classified based on available information.

### **Components:**

#### **Citric acid monohydrate:**

Assessment: The substance or mixture is not classified as specific target organ toxicant, single exposure.

## **STOT - repeated exposure**

Not classified based on available information.

### **Components:**

#### **Citric acid monohydrate:**

Assessment: The substance or mixture is not classified as specific target organ toxicant, repeated exposure.

## **Aspiration toxicity**

Not classified based on available information.

### **Components:**

#### **Citric acid monohydrate:**

No data available

**ALB2**

Version  
1.6

Revision Date:  
18.02.2015

Date of last issue: 31.07.2014  
Date of first issue: 14.12.2012

**SECTION 12: Ecological information**

**12.1 Toxicity**

**R1 (A / B)**

**Components:**

**Citric acid monohydrate:**

Toxicity to fish : LC0 (Carassius auratus (goldfish)): 625 mg/l

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): 120 mg/l  
Exposure time: 72 h

Ecotoxicology Assessment  
Toxicity Data on Soil : Not expected to adsorb on soil.

Other organisms relevant to the environment : No data available

**R2 (C)**

**Components:**

**Citric acid monohydrate:**

Toxicity to fish : LC0 (Carassius auratus (goldfish)): 625 mg/l

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): 120 mg/l  
Exposure time: 72 h

Ecotoxicology Assessment  
Toxicity Data on Soil : Not expected to adsorb on soil.

Other organisms relevant to the environment : No data available

**12.2 Persistence and degradability**

**R1 (A / B)**

**Components:**

**Citric acid monohydrate:**

Biodegradability : Remarks: Expected to be ultimately biodegradable

**R2 (C)**

**Components:**

**Citric acid monohydrate:**

Biodegradability : Remarks: Expected to be ultimately biodegradable

**12.3 Bioaccumulative potential**

**R1 (A / B)**

**ALB2**

Version  
1.6

Revision Date:  
18.02.2015

Date of last issue: 31.07.2014  
Date of first issue: 14.12.2012

**Components:**

**Citric acid monohydrate:**

Partition coefficient: n-  
octanol/water : log Pow: 1,72

**R2 (C)**

**Components:**

**Citric acid monohydrate:**

Partition coefficient: n-  
octanol/water : log Pow: 1,72

**12.4 Mobility in soil**

**R1 (A / B)**

No data available

**R2 (C)**

No data available

**12.5 Results of PBT and vPvB assessment**

**R1 (A / B)**

Not relevant

**R2 (C)**

Not relevant

**12.6 Other adverse effects**

**R1 (A / B)**

No data available

**R2 (C)**

No data available

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**SECTION 13: Disposal considerations**

**13.1 Waste treatment methods**

Product : Can be disposed as waste water, when in compliance with local regulations.

Contaminated packaging : Empty containers should be taken to an approved waste handling site for recycling or disposal.  
Do not re-use empty containers.

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**SECTION 14: Transport information**

**14.1 UN number**

Not regulated as a dangerous good

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006



**ALB2**

Version  
1.6

Revision Date:  
18.02.2015

Date of last issue: 31.07.2014  
Date of first issue: 14.12.2012

## 14.2 UN proper shipping name

Not regulated as a dangerous good

## 14.3 Transport hazard class(es)

Not regulated as a dangerous good

## 14.4 Packing group

Not regulated as a dangerous good

## 14.5 Environmental hazards

Not regulated as a dangerous good

## 14.6 Special precautions for user

Remarks : Not dangerous goods in the meaning of ADR/RID, ADNR, IMDG-Code, ICAO/IATA-DGR

## 14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Remarks : Not applicable

## SECTION 15: Regulatory information

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

Seveso II - Directive 2003/105/EC amending Council Directive 96/82/EC on the control of major-accident hazards involving dangerous substances  
Not applicable

Seveso III: Directive 2012/18/EU of the European Parliament and of the Council on the control of major-accident hazards involving dangerous substances.  
Not applicable

Water contaminating class : WGK 1 slightly water endangering  
(Germany)

### **R1 (A / B)**

#### Labelling (REGULATION (EC) No 1272/2008)

Not a hazardous substance or mixture.

#### Additional Labelling:

EUH210 Safety data sheet available on request.

### **R2 (C)**

#### Labelling (REGULATION (EC) No 1272/2008)

Not a hazardous substance or mixture.

#### Additional Labelling:

EUH210 Safety data sheet available on request.

**ALB2**

Version  
1.6

Revision Date:  
18.02.2015

Date of last issue: 31.07.2014  
Date of first issue: 14.12.2012

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**15.2 Chemical Safety Assessment**

A Chemical Safety Assessment is not required for this substance when it is used in the specified applications.

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**SECTION 16: Other information**

**Full text of R-Phrases**

R36 : Irritating to eyes.

**Full text of H-Statements**

H319 : Causes serious eye irritation.

**Full text of other abbreviations**

Eye Irrit. : Eye irritation

**Further information**

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

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