

## Safety data sheet according to 1907/2006/EC, Article 31

Printing date 13.09.2016

Revision: 13.09.2016

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

#### 1.1 Product identifier

**Trade name:** Protein Ark Fastback Ni Advance Resin / HiFlIQ Ni Advance Columns

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

No further relevant information available.

**Application of the substance / the preparation:** Chemical for R&D

**Uses advised against:** No further information available.

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

##### Manufacturer/Supplier:

Protein Ark Ltd

Unit 5A, R-Evolution @ The Advanced Manufacturing Park

Selden Way, Rotherham, S60 5XA, UK

Tel.: +44 (0) 114 224 2257

Email: info@proteinark.com

**Further information obtainable from:** Protein Ark Ltd

#### 1.4 Emergency telephone number:

Protein Ark Ltd

+44 (0) 114 224 2257(during business hours)

### SECTION 2: Hazards identification

#### 2.1 Classification of the substance or mixture:

**Classification according to Regulation (EC) No 1272/2008:**



GHS02 flame

Flam. Liq. 3 H226 Flammable liquid and vapour.



GHS08 health hazard

Resp. Sens. 1 H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.

Carc. 2 H351 Suspected of causing cancer.



GHS07

Skin Sens. 1 H317 May cause an allergic skin reaction.

##### **Additional information:**

Product contains a substance with limited available safety information, and should therefore be handled with care.

#### 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

GHS08

**Signal word:** Danger

(Contd. on page 2)

## Safety data sheet according to 1907/2006/EC, Article 31

Printing date 13.09.2016

Revision: 13.09.2016

Trade name: Protein Ark Fastback Ni Advance Resin / HiFliQ Ni Advance Columns

(Contd. of page 1)

### Hazard-determining components of labelling:

Ni-EDTA-Complex

### Hazard statements:

H226 Flammable liquid and vapour.

H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.

H317 May cause an allergic skin reaction.

H351 Suspected of causing cancer.

### Precautionary statements:

P101 If medical advice is needed, have product container or label at hand.

P102 Keep out of reach of children.

P103 Read label before use.

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

P241 Use explosion-proof electrical/ventilating/lighting/equipment.

P284 [In case of inadequate ventilation] wear respiratory protection.

P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

P405 Store locked up.

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: Mixture of substances listed below with nonhazardous additions.

### Dangerous components:

CAS: 64-17-5	ethanol	10-<20%
EINECS: 200-578-6	 Flam. Liq. 2, H225	
	Ni-EDTA-Complex	1-≤2.5%
	 Resp. Sens. 1, H334; Carc. 2, H351;  Acute Tox. 4, H302; Eye Irrit. 2, H319; Skin Sens. 1, H317	

### Additional information:

Product contains a substance with limited available safety information, and should therefore be handled with care.

## SECTION 4: First aid measures

### 4.1 Description of first aid measures:

#### General information:

Take affected persons out into the fresh air.

Do not leave affected persons unattended.

**After inhalation:** Supply fresh air; consult doctor in case of complaints.

**After skin contact:** Immediately wash with water and soap and rinse thoroughly.

**After eye contact:** Rinse opened eye for several minutes under running water. Then consult a doctor.

**After swallowing:** Call for a doctor immediately.

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

No further relevant information available.

(Contd. on page 3)

**Safety data sheet**  
according to 1907/2006/EC, Article 31

Printing date 13.09.2016

Revision: 13.09.2016

**Trade name: Protein Ark Fastback Ni Advance Resin / HiFliQ Ni Advance Columns**

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

No further relevant information available.

(Contd. of page 2)

**SECTION 5: Firefighting measures**

**5.1 Extinguishing media:**

**Suitable extinguishing agents:**

CO<sub>2</sub>, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

**5.2 Special hazards arising from the substance or mixture:** Can form explosive gas-air mixtures.

**5.3 Advice for firefighters:**

**Protective equipment:** Do not inhale explosion gases or combustion gases.

**SECTION 6: Accidental release measures**

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

Ensure adequate ventilation.

Keep away from ignition sources.

Use respiratory protective device against the effects of fumes/dust/aerosol.

Wear protective clothing.

**6.2 Environmental precautions:** Do not allow to enter sewers/ surface or ground water.

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

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Dispose contaminated material as waste according to item 13.

Ensure adequate ventilation.

**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:**

Ensure good ventilation/exhaustion at the workplace.

Prevent formation of aerosols.

Keep receptacles tightly sealed.

Open and handle receptacle with care.

Work only in fume cupboard.

Use only in well ventilated areas.

Ensure good interior ventilation, especially at floor level. (Fumes are heavier than air).

**Information about fire - and explosion protection:**

Keep ignition sources away - Do not smoke.

Fumes can combine with air to form an explosive mixture.

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

**Storage:**

**Requirements to be met by storerooms and receptacles:** Store only in the original receptacle.

**Information about storage in one common storage facility:** Store away from flammable substances.

**Further information about storage conditions:**

Keep container tightly sealed.

Store receptacle in a well ventilated area.

**7.3 Specific end use(s):** No further relevant information available.

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

**Additional information about design of technical facilities:** No further data; see item 7.

(Contd. on page 4)

**Safety data sheet**  
according to 1907/2006/EC, Article 31

Printing date 13.09.2016

Revision: 13.09.2016

**Trade name: Protein Ark Fastback Ni Advance Resin / HiFliQ Ni Advance Columns**

(Contd. of page 3)

**8.1 Control parameters:**

**Ingredients with limit values that require monitoring at the workplace:**

**64-17-5 ethanol**

WEL Long-term value: 1920 mg/m<sup>3</sup>, 1000 ppm

**8.2 Exposure controls:**

**Personal protective equipment:**

**General protective and hygienic measures:**

The usual precautionary measures are to be adhered to when handling chemicals.

Immediately remove all soiled and contaminated clothing.

Do not inhale gases / fumes / aerosols.

Avoid contact with the eyes and skin.

**Respiratory protection:** Use suitable respiratory protective device in case of insufficient ventilation.

**Protection of hands:** Protective gloves

**Material of gloves:**

Recommended thickness of the material:  $\geq 0.5$  mm

Butyl rubber, BR

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.

**Penetration time of glove material:**

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

**Eye protection:** Safety glasses

**SECTION 9: Physical and chemical properties**

**9.1 Information on basic physical and chemical properties:**

**General Information:**

**Appearance:**

<b>Form:</b>	Suspension
<b>Colour:</b>	According to product specification
<b>Odour:</b>	Characteristic
<b>Odour threshold:</b>	Not determined.

**pH-value:** Not determined.

**Change in condition:**

<b>Melting point/Melting range:</b>	Undetermined.
<b>Boiling point/Boiling range:</b>	Undetermined.

**Flash point:** 23 °C

**Flammability (solid, gaseous):** Not applicable.

**Ignition temperature:** 425 °C

**Decomposition temperature:** Not determined.

**Self-igniting:** Product is not selfigniting.

**Danger of explosion:** Product is not explosive. However, formation of explosive air/vapour mixtures are possible.

**Explosion limits:**

<b>Lower:</b>	3.5 Vol %
<b>Upper:</b>	15.0 Vol %

**Vapour pressure at 20 °C:** 59 hPa

**Density:** Not determined.

(Contd. on page 5)

**Safety data sheet**  
according to 1907/2006/EC, Article 31

Printing date 13.09.2016

Revision: 13.09.2016

**Trade name: Protein Ark Fastback Ni Advance Resin / HiFloQ Ni Advance Columns**

(Contd. of page 4)

<b>Relative density:</b>	Not determined.
<b>Vapour density:</b>	Not determined.
<b>Evaporation rate:</b>	Not determined.
<b>Solubility in / Miscibility with water:</b>	Dispersible.
<b>Partition coefficient (n-octanol/water):</b>	Not determined.
<b>Viscosity:</b>	
<b>Dynamic:</b>	Not determined.
<b>Kinematic:</b>	Not determined.
<b>9.2 Other information:</b>	No further relevant information available.

**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 according to specifications.
- 10.3 Possibility of hazardous reactions:** Forms explosive gas mixture with air.
- 10.4 Conditions to avoid:** No further relevant information available.
- 10.5 Incompatible materials:** No further relevant information available.
- 10.6 Hazardous decomposition products:**  
Flammable gases/vapours  
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.
- Primary irritant effect:**
- Skin corrosion/irritation** Based on available data, the classification criteria are not met.
- Serious eye damage/irritation** Based on available data, the classification criteria are not met.
- Respiratory or skin sensitisation**  
May cause allergy or asthma symptoms or breathing difficulties if inhaled.  
May cause an allergic skin reaction.
- Other information (about experimental toxicology):**  
The toxicological effects have not been tested completely.
- CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction):**
- Germ cell mutagenicity** Based on available data, the classification criteria are not met.
- Carcinogenicity**  
Suspected of causing cancer.
- 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:** No further relevant information available.
- 12.2 Persistence and degradability:** No further relevant information available.
- Other information:** The ecological effects have not been tested completely.
- 12.3 Bioaccumulative potential:** No further relevant information available.
- 12.4 Mobility in soil:** No further relevant information available.

(Contd. on page 6)

**Safety data sheet**  
according to 1907/2006/EC, Article 31

Printing date 13.09.2016

Revision: 13.09.2016

**Trade name: Protein Ark Fastback Ni Advance Resin / HiFliQ Ni Advance Columns**

(Contd. of page 5)

**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:**

Must not be disposed together with household garbage. Do not allow product to reach sewage system.

**European waste catalogue:**

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

**Uncleaned packaging:**

**Recommendation:** Disposal must be made according to official regulations.

**SECTION 14: Transport information**

**14.1 UN-Number:**

ADR, ADN, IMDG, IATA Void

**14.2 UN proper shipping name:**

ADR, ADN, IMDG, IATA Void

**14.3 Transport hazard class(es):**

ADR, ADN, IMDG, IATA

**Class:** Void

**14.4 Packing group:**

ADR, IMDG, IATA Void

**14.5 Environmental hazards:**

**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** Not applicable.

**UN "Model Regulation":** Void

**SECTION 15: Regulatory information**

**15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture:**  
**REGULATION (EC) No 1907/2006 ANNEX XVII** Conditions of restriction: 3

**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.

H302 Harmful if swallowed.

H317 May cause an allergic skin reaction.

H319 Causes serious eye irritation.

(Contd. on page 7)

## Safety data sheet according to 1907/2006/EC, Article 31

Printing date 13.09.2016

Revision: 13.09.2016

---

**Trade name: Protein Ark Fastback Ni Advance Resin / HiFliQ Ni Advance Columns**

---

(Contd. of page 6)

H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.

H351 Suspected of causing cancer.

**Training hints:**

Employees who use the product have to be trained on risks for health, hygiene, use of individual protection, accident preventive actions, rescue actions, etc.,

**Department issuing SDS:**

ADEEGO GmbH

Wildsteig 4A

D-42113 Wuppertal

Tel. +49 (0) 202 2575700

Fax. +49 (0) 202 2575701

Email: mail@adeego.de

www.adeego.de

**Contact:** Dr. Axel Deeg**Abbreviations and acronyms:**

ADR: Accord européen sur le transport 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)

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

Flam. Liq. 2: Flammable liquids – Category 2

Flam. Liq. 3: Flammable liquids – Category 3

Acute Tox. 4: Acute toxicity – Category 4

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

Resp. Sens. 1: Respiratory sensitisation – Category 1

Skin Sens. 1: Skin sensitisation – Category 1

Carc. 2: Carcinogenicity – Category 2

---