

## SAFETY DATA SHEET

This Safety Data Sheet (SDS) complies with the requirements of Annex II of Regulation (EC) No. 1907/2006 of the European Parliament and of the Council and subsequent amendments.

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

#### 1.1 Product Identifier

**Product Name**

Aflatoxin B1 Low Matrix ELISA

**Catalogue Number**

KIT5005

Helica<sup>®</sup> ELISA kits – Contain various components of low risk to a trained operator.

**Components:**

Coated plates  
Standards  
Conjugate  
Assay diluent  
Stop solution  
Substrate buffer  
Wash buffer

#### 1.2 Use of the substance/preparation

A competitive enzyme-linked immunoassay for the quantitative detection of Aflatoxin B1 in grains, nuts, cottonseed, cereals, and all commodities which are difficult to measure due to high matrix effects such as silage and most spices.

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

**BioChek (UK) Limited**

Unit 5 Kings Ride Park

Kings Ride

Ascot

Berkshire

SL5 8BP

Tel: +0044 (0)208 893 3000 (operating hours 09.00-17.00 GMT)

#### 1.4. Emergency Telephone

Tel: +0044 (0)208 893 3000 (operating hours 09.00-17.00 GMT)

## SECTION 2: Hazard Identification

### 2.1 Classification of the substance or mixture

#### Outer kit

**Classification according to CLP:**

Flam Liq 3: H226; Acute Tox Oral 3: H301; Acute Tox Dermal 3: H311; Skin Irr 2: H315; Skin Sens 1A: H317; Eye Irr 2: H319; Acute Tox Inhal 3: H331; STOT-SE 1: H370; Aqu Chron 2: H411

**Most important adverse effects:**

Flammable liquid and vapour.  
Causes skin irritation.  
Causes serious eye irritation.  
Toxic if swallowed.  
Toxic in contact with skin.  
Toxic if inhaled.  
Causes damage to organs (optic nerve, CNS).  
May cause an allergic skin reaction.  
Toxic to aquatic life with long lasting effects.

#### Coated plate and conjugate

**Classification according to CLP:**

Skin Sens 1A: H317; Aqu Chron 2: H411

**Most important adverse effects:**

May cause an allergic skin reaction.  
Toxic to aquatic life with long lasting effects.

#### Assay diluent

**Classification according to CLP:**

Skin Irr 2: H315; Skin Sens 1A: H317; Eye Irr 2: H319;  
Aqu Chron 2: H411

**Most important adverse effects:**

Causes skin irritation.  
Causes serious eye irritation.  
May cause an allergic skin reaction.  
Toxic to aquatic life with long lasting effects.

#### Standards

**Classification according to CLP:**

Flam Liq 3: H226; Acute Tox Oral 3: H301; Acute Tox Dermal 3: H311; Acute Tox Inhal 3: H331; STOT-SE 1: H370

**Most important adverse effects:**

Flammable liquid and vapour.  
Toxic if swallowed.  
Toxic in contact with skin.  
Toxic if inhaled.  
Causes damage to organs (optic nerve, CNS).

#### Substrate buffer, wash buffer and stop solution

**Classification according to CLP:**

Not classified.

**Most important adverse effects:**

Not applicable.

## 2.2 Label Elements

### REGULATION (EU) 1272/2008

#### Outer kit

Pictogram:

GHS02, GHS06, GHS07, GHS08, GHS09



Signal word:

Danger

Hazard statement(s):

H226 Flammable liquid and vapour.

H301 Toxic if swallowed.

H311 Toxic in contact with skin.

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

H319 Causes serious eye irritation.

H331 Toxic if inhaled.

H370 Causes damage to organs (optic nerve, CNS).

H411 Toxic to aquatic life with long lasting effects.

Precautionary statement(s):

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

P241 + P242 + P243: Use explosion-proof electrical/ventilating/light equipment. Use only non-sparking tools. Take action to prevent static discharges.

P260 Do not breathe dust/fume/gas/mist/vapours/spray.

P264 Wash skin thoroughly after handling.

P270 Do not eat, drink or smoke when using this product.

P271 Use only outdoors or in a well-ventilated area.

P273 Avoid release to the environment.

P280 Wear eye protection/ face protection.

P391 Collect spillage.

P405 Store locked up.

P501 Dispose of contents/container in accordance with local/regional/national/international regulation.

P301 + P310 + P330 + P331: IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. Immediately call a doctor/ physician.

P302 + P352: IF ON SKIN: Wash with soap and water.

P304 + P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a doctor/physician.

P309 + P311: IF exposed or you feel unwell: Call a POISON CENTER or doctor/physician.

P313 + P333: If skin irritation or a rash occurs: Get medical advice/attention.

P370 + P378: In case of fire: Use dry chemical, carbon dioxide, water spray or alcohol-resistant foam to extinguish.

P233 + P403: Store in a well-ventilated place. Keep container tightly closed.

Other Hazards:

This substance/ mixture contains no components considered to be either persistent, bioaccumulative and toxic, or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

#### Coated plate and conjugate

Pictogram:

GHS07, GHS09



Signal word:

Warning

Hazard statement(s):

H317 May cause an allergic skin reaction.

H411 Toxic to aquatic life with long lasting effects.

#### Assay diluent

Pictogram:

GHS07, GHS09



Signal word:

Warning

Hazard statement(s):

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

H319 Causes serious eye irritation.

H411 Toxic to aquatic life with long lasting effects.

#### Standards

Pictogram:

GHS02, GHS06, GHS08



Signal word:

Danger

Hazard statement(s):

H226 Flammable liquid and vapour.

H301 Toxic if swallowed.

H311 Toxic in contact with skin.

H331 Toxic if inhaled.

H370 Causes damage to organs (optic nerve, CNS).

#### Substrate buffer, wash buffer and stop solution

None.

### 2.3 Other hazards

None reasonably foreseeable.

## SECTION 3: Composition/information on ingredients

### Coated plate

Component	CAS-No.	EC-No.	Index-No.	Concentration	Classification
<b>Sodium carbonate</b>	497-19-8	207-838-8	011-005-00-2	≤1.0%	Eye Dam/Irr (Category 2); H319
<b>Proclin 300 / Isothiazolinone / MIT / Kathon CG</b>	96118-96-6	611-341-5	613-167-00-5	≤0.1%	Acute tox Oral (Category 4); Acute tox Dermal (Category 2); Acute tox inhal (Category 2); Skin Corr/Irr (Category 1C); Eye Damage (Category 1); Skin Sens (Category 1A); Aqu Acute (Category 1); Aqu Chronic (Category 1); H302, H310, H314, H317, H318, H330, H400 (M-factor 100), H410 (M-factor 100)
<b>Potassium chloride</b>	7440-09-7	231-119-8	019-001-00-2	≤0.1%	Skin Corr/Irr (Category 1C); Eye Damage (Category 1); Water-React (Category 1); H260, H314, H318

### Standards

Component	CAS-No.	EC-No.	Index-No.	Concentration	Classification
Methanol	67-56-1	200-659-6	603-001-00-X	25 – 50%	Flam Liq (Category 2); Acute tox oral (Category 3); Acute tox Dermal (Category 3); Acute tox inhal (Category 3); STOT-SE (Category 1)

### Conjugate

Component	CAS-No.	EC-No.	Index-No.	Concentration	Classification
Green food dye	2353-45-9	219-091-5	-	<1.0%	STOT-SE 3, resp irrit (Category 3); H335
Proclin 300 / Isothiazolinone / MIT / Kathon CG	96118-96-6	611-341-5	613-167-00-5	≤0.1%	Acute tox Oral (Category 4); Acute tox Dermal (Category 2); Acute tox inhal (Category 2); Skin Corr/Irr (Category 1C); Eye Damage (Category 1); Skin Sens (Category 1A); Aqu Acute (Category 1); Aqu Chronic (Category 1); H302, H310, H314, H317, H318, H330, H400 (M-factor 100), H410 (M-factor 100)

### Assay diluent

Component	CAS-No.	EC-No.	Index-No.	Concentration	Classification
Proclin 300 / Isothiazolinone / MIT / Kathon CG	96118-96-6	611-341-5	613-167-00-5	≤0.1%	Acute tox Oral (Category 4); Acute tox Dermal (Category 2); Acute tox inhal (Category 2); Skin Corr/Irr (Category 1C); Eye Damage (Category 1); Skin Sens (Category 1A); Aqu Acute (Category 1); Aqu Chronic (Category 1); H302, H310, H314, H317, H318, H330, H400 (M-factor 100), H410 (M-factor 100)

### Stop solution

Component	CAS-No.	EC-No.	Index-No.	Concentration	Classification
Phosphoric acid 85%	7664-38-2	231-633-2		1-5%	Skin Corr/Irr (Category 1B); Eye Damage (Category 1); H314, H318

## SECTION 4: First Aid measures

### 4.1 Description of first aid measures

#### **General advice**

Consult a physician. Show this safety data sheet to the doctor in attendance.

#### **If inhaled**

If breathed in, move person to fresh air. If not breathing, give artificial respiration. Consult a physician.

#### **In case of skin contact**

Wash off with soap and plenty of water. Consult a physician.

#### **In case of eye contact**

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

#### **If swallowed**

Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

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

The most important known symptoms and effects are described in the labelling (see section 2.2) and/ or section 11.

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

No data available.

## SECTION 5: Firefighting measures

### 5.1 Extinguishing media

Use water spray, alcohol-resistant foam, dry powder, or carbon dioxide.

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

During heating or in case of fire poisonous gases are produced.

### 5.3 Advice for firefighters

Wear self-contained breathing apparatus for firefighting if necessary.

### 5.4 Further information

No data available.

## SECTION 6: Accidental release measures

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

Use personal protective equipment (see section 8).

### 6.2 Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter the drains. Discharge into the environment must be avoided.

### 6.3 Methods and materials for containment and cleaning up

Soak up with inert absorbent material and dispose of as hazardous waste. Keep in suitable, closed containers for disposal.

### 6.4 Reference to other sections

For disposal see section 13.

## SECTION 7: Handling and storage

### 7.1 Precautions for safe handling

Avoid contact with skin and eyes. For precautions see section 2.2.

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

Containers which are opened must be carefully resealed and kept upright to prevent leakage. Storage temperature 2-8°C.

### 7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated.



## SECTION 8: Exposure controls/personal protection

### 8.1 Control parameters

#### Components with workplace control parameters

Component	CAS-No.	Value	Control parameters	Basis
<b>Phosphoric acid 85%</b>	7664-38-2	LTEL	1.0 mg/m <sup>3</sup>	Europe. Commission Directive 2000/39/EC establishing a first list of indicative occupational exposure limit values
	Remarks	Identifies the possibility of significant uptake through the skin. Indicative.		
		STEL	2.0 mg/m <sup>3</sup>	Europe. Commission Directive 2000/39/EC establishing a first list of indicative occupational exposure limit values
		Identifies the possibility of significant uptake through the skin. Indicative.		
		LT 8h TWA	1.0 mg/m <sup>3</sup>	UK. EH40 WEL – Workplace Exposure Limits
		ST 15m ref	2.0 mg/m <sup>3</sup>	UK. EH40 WEL – Workplace Exposure Limits

Component	CAS-No.	Value	Control parameters	Basis
<b>Methanol</b>	67-56-1	LTEL	260 mg/m <sup>3</sup> 200 ppm	Europe. Commission Directive 98/24/EC establishing a second list of indicative occupational exposure limit values
	Remarks	Identifies the possibility of significant uptake through the skin. Indicative.		
		LT 8h TWA	260 mg/m <sup>3</sup> 200 ppm	UK. EH40 WEL – Workplace Exposure Limits
		ST 15m ref	250 mg/m <sup>3</sup> 333 ppm	UK. EH40 WEL – Workplace Exposure Limits
	Remarks	Can be absorbed through the skin.		

### 8.2 Exposure Controls

#### Appropriate engineering controls

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of the workday.

## **Personal protective equipment**

### **Eye/face protection**

Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166 (EU).

### **Skin protection**

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands. The selected protective gloves must satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

### **Body protection**

Long sleeved clothing. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

### **Respiratory protection**

While handling according to the intended use no respiratory protection is necessary.

### **Control of environmental exposure**

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

	Coated plates	Standards	Conjugate	Stop solution	Substrate buffer	Wash buffer
Physical State	Plastic plate	Liquid	Liquid	Liquid	Liquid	Liquid
Colour	Clear / white	Blue	Green	Clear	Clear	Clear
Odour	No data available	No data available	No data available	No data available	No data available	No data available
pH	Not applicable	No data available	No data available	No data available	No data available	No data available
Boiling Point	No data available	No data available	No data available	No data available	No data available	No data available
Freezing point	No data available	No data available	No data available	No data available	No data available	No data available
Flammability	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable
Upper/ lower explosion limit/ flammability limit	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable
Flash point	Not Applicable	29°C	Not Applicable	Not Applicable	Not Applicable	Not Applicable
Auto-ignition temperature	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable
Decomposition temperature	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable
Viscosity	No data available	No data available	No data available	No data available	No data available	No data available
Solubility	Insoluble	Soluble	Soluble	Soluble	Soluble	Soluble
Partition coefficient n-octanol/ water	No data available	No data available	No data available	No data available	No data available	No data available
Vapour pressure	No data available	No data available	No data available	No data available	No data available	No data available
Density	No data available	No data available	No data available	No data available	No data available	No data available
Relative vapour density	No data available	No data available	No data available	No data available	No data available	No data available
Particle characteristics	No data available	No data available	No data available	No data available	No data available	No data available

## SECTION 10: Stability and reactivity

### 10.1 Reactivity

No data available.

### 10.2 Chemical stability

Stable until expiry date under storage conditions detailed on labels.

### 10.3 Possibility of hazardous reactions

No data available.

### 10.4 Conditions to avoid

No data available.

### 10.5 Incompatible materials

No data available.

### 10.6 Hazardous decomposition products

No data available.

## SECTION 11: Toxicological information

### 11.1 Information on toxicological effects

#### Acute toxicity

ATE Oral (Category 3):	100 mg/kg bw
ATE Dermal (Category 3):	300 mg/kg bw
ATE Inhalation (Category 3):	700 ppmV (gases)
	3 mg/L (vapours)
	0.5 mg/L (dusts/mists)

#### Skin corrosion/irritation

Coated plates, Standards, Conjugate, Substrate buffer, Wash buffer and Stop solution

No data available

#### Assay diluent

Prolonged contact may cause skin irritation with local redness. Symptoms may include pain, severe local redness and swelling. May cause more severe response if skin is abraded (scratched or cut).

#### Serious eye damage/eye irritation

Coated plates, Standards, Conjugate, Substrate buffer, Wash buffer and Stop solution

No data available

#### Assay diluent

May cause eye irritation. May cause corneal injury.

#### Respiratory or skin sensitisation

No data available

**Germ cell mutagenicity**

No data available

**Carcinogenicity**

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible, or confirmed human carcinogen by IARC.

**Reproductive toxicity**

No data available

**Specific target organ toxicity – single exposure**

Coated plates, Conjugate, Assay diluent, Substrate buffer, Wash buffer and Stop solution

No data available

**Standards**

Causes damage to organs (optic nerve, CNS).

**Specific target organ toxicity – repeated exposure**

No data available

**Aspiration hazard**

No data available

**Additional information**

RTECS: Not available

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

**SECTION 12: Ecological information****12.1 Toxicity**

No data available

**12.2 Persistence and biodegradability**

No data available

**12.3 Bioaccumulative potential**

No data available

**12.4 Mobility in soil**

No data available

**12.5 Results of PBT and vPvB assessment**

These substances/mixtures contain no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

## 12.6 Other adverse effect

### Coated plates, Standards, Conjugate and Assay diluent

Contains Proclin 300/Isothiazolinone/MIT/Kathon CG (CAS 96118-96-6) which is very toxic to aquatic life with long lasting effects.

### Stop solution, Substrate buffer and Wash buffer

None reported

## SECTION 13: Disposal considerations

### 13.1 Waste treatment methods

Empty containers or liners may retain some product residues. This material and its container must be disposed of in according to approved disposal technique. Disposal of this product, its solutions or of any by-products, shall comply with the requirements of all applicable local, regional, or national/federal regulations.

## SECTION 14: Transport information

### 14.1 UN number

UN3316

### 14.2 UN proper shipping name

Chemical test kit

### 14.3 Transport hazard classes

9

### 14.4 Packaging group

III

### 14.5 Environmental hazards

Not applicable

### 14.6 Special precautions for user

Tunnel restriction code E

## SECTION 15: Regulatory information

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

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

### 15.2 Chemical safety assessment

No Chemical safety assessment has been carried out.

## SECTION 16: Other information

### Abbreviations:

ATE	Acute toxicity estimate
IARC	International Agency for Research on Cancer
LTEL	Long-term exposure limit
OEL	Occupational exposure limit
PBT	Persistent, bioaccumulative and toxic
RTECS	The Registry of Toxic Effects of Chemical Substances
STEL	Short-term exposure limit
TWA	Time-weighted average
vPvB	Very persistent and very bioaccumulative

### H-statements:

H260 In contact with water releases flammable gases which may ignite spontaneously.  
H301 Toxic if swallowed.  
H302 Harmful if swallowed.  
H310 Fatal in contact with skin.  
H311 Toxic in contact with skin.  
H314 Causes severe skin burns and eye damage.  
H315 Causes skin irritation.  
H317 May cause an allergic skin reaction.  
H318 Causes serious eye damage.  
H319 Causes serious eye irritation.  
H330 Fatal if inhaled.  
H331 Toxic if inhaled.  
H335 May cause respiratory irritation.  
H370 Causes damage to organs (optic nerve, CNS).  
H371 May cause damage to organs (optic nerve, CNS).  
H400 Very toxic to aquatic life.  
H410 Very toxic to aquatic life with long-lasting effects.  
H411 Toxic to aquatic life with long-lasting effects.

### Additional information

Not applicable.

"The above information was acquired by diligent search and/or investigation and the recommendations are based on prudent application of professional judgment. The information shall not be taken as being all-inclusive and is to be used only as a guide. All materials and mixtures may present unknown hazards and should be used with caution. Since the Company cannot control the actual methods, volumes, or conditions of use, the Company shall not be held liable for any damages or losses resulting from the handling or from contact with the product as described herein. THE INFORMATION IN THIS SDS DOES NOT CONSTITUTE A WARRANTY, EXPRESSED OR IMPLIED, INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE"