

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 Total Aflatoxin Rapid ELISA Catalogue Number KIT5007

Helica[®] ELISA kits – Contain various components of low risk to a trained operator.

Components: Coated plates Standards Conjugate Stop solution Substrate buffer

Wash buffer

1.2 Use of the substance/preparation

A competitive enzyme-linked immunoassay intended for the rapid quantitative detection of aflatoxin B1, B2, G1, and G2 in grains, nuts, cottonseeds, cereals, and other commodities including animal feeds.

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

<u>Outer kit</u>	
Classification according to CLP:	Flam Liq 2: H225; Acute Tox Oral 3: H301; Acute Tox Dermal 3: H311; Acute Tox Inhal 3: Skin Sens 1A: H317;
	H331; STOT-SE 1: H370; Aqu Chron 2: H411
Most important adverse effects:	Highly flammable liquid and vapour.
	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.
Standards	
Classification according to CLP:	Flam Lig 2: H225; Acute Tox Oral 3: H301; Acute Tox
C	Dermal 3: H311; Acute Tox Inhal 3: H331; STOT-SE 1: 370
Most important adverse effects:	Highly 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

<u>Outer kit</u>

Signal word: Hazard statement(s):

Precautionary statement(s):

GHS02, GHS06, GHS07, GHS08, GHS09



• • • • •	
Danger	
H225 Highly flammable liquid and vapour.	
H301 Toxic if swallowed.	
H311 Toxic in contact with skin.	
H317 May cause an allergic skin reaction.	
H331 Toxic if inhaled.	
H370 Causes damage to organs (optic nerve, CNS).	
H411 Toxic to aquatic life with long lasting effects.	
P210 Keep away from heat, hot surfaces, sparks, op	ben
flames and other ignition sources. No smoking.	
P241 + P242 + P243: Use explosion-proof	
electrical/ventilating/light equipment. Use only nor	า-
sparking tools. Take action to prevent static dischar	rges.
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 pr	oduct.
P271 Use only outdoors or in a well-ventilated area	1.
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	a
doctor/ physician.	
P302 + P352: IF ON SKIN: Wash with soap and wate	er.
P304 + P340 IF INHALED: Remove victim to fresh air	r and
keep at rest in a position comfortable for breathing	g. Call a
doctor/physician.	
P309 + P311: IF exposed or you feel unwell: Call a P	OISON
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, carbo	on
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.

<u>Coated plate and conjugate</u> Pictogram:

Signal word: Hazard statement(s):

<u>Standards</u> Pictogram:

Signal word: Hazard statement(s): GHS07, GHS09



Warning H317 May cause an allergic skin reaction. H411 Toxic to aquatic life with long lasting effects.

GHS02, GHS06, GHS08



Danger H225 Highly 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
Sodium	497-19-8	207-838-8	011-005-00-2	≤1.0%	Eye Dam/Irr (Category 2); H319
carbonate					
Proclin 300 /	96118-96-6	611-341-5	613-167-00-5	≤0.1%	Acute tox Oral (Category 4);
Isothiazolinone					Acute tox Dermal (Category 2);
/ MIT / Kathon					Acute tox inhal (Category 2);
CG					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)
Potassium	7440-09-7	231-119-8	019-001-00-2	≤0.1%	Skin Corr/Irr (Category 1C);
chloride					Eye Damage (Category 1);
					Water-React (Category 1);
					H260, H314, H318

<u>Standards</u>

Component	CAS-No.	EC-No.	Index-No.	Concentration	Classification
Methanol	67-56-1	200-659-6	603-001-00-X	50 – 75%	Flam Liq (Category 2);
					Acute tox oral (Category 3);
					Acute tox Dermal (Category 3);
					Acute tox inhal (Category 3);
					STOT-SE (Category 1)



<u>Conjugate</u>

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 /	96118-96-6	611-341-5	613-167-00-5	≤0.1%	Acute tox Oral (Category 4);
Isothiazolinone					Acute tox Dermal (Category 2);
/ MIT / Kathon CG					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	7664-38-2	231-633-2	015-011-00-6	1-5%	Skin Corr/Irr (Category 1B);
acid 85%					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
Phosphoric acid 85%	7664-38-2	LTEL	1.0 mg/m ³	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 ³	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 ³	UK. EH40 WEL – Workplace Exposure Limits
		ST 15m ref	2.0 mg/m ³	UK. EH40 WEL – Workplace Exposure Limits

Component	CAS-No.	Value	Control	Basis	
			parameters		
Methanol	67-56-1	LTEL	260 mg/m ³	Europe. Commission Directive 98/24/EC	
			200 ppm	establishing a second list of indicative	
				occupational exposure limit values	
	Remarks	Identifies the possibility of significant uptake through the skin.			
		Indicative.			
		LT 8h	260 mg/m ³	UK. EH40 WEL – Workplace Exposure Limits	
		TWA	/A 200 ppm		
		ST 250 mg/m ³ UK. EH40 WEL – Workplace Exposure Limit			
		15m	333 ppm		
		ref			
	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	Clear	Green	Clear	Clear	Clear
Odour	No data					
	available	available	available	available	available	available
рН	Not	No data				
	applicable	available	available	available	available	available
Boiling Point	No data					
	available	available	available	available	available	available
Freezing point	No data					
	available	available	available	available	available	available
Flammability	Not	Not	Not	Not	Not	Not
	Applicable	Applicable	Applicable	Applicable	Applicable	Applicable
Upper/ lower explosion limit/ flammability limit	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable
Flash point	Not	Not	Not	Not	Not	Not
	Applicable	Applicable	Applicable	Applicable	Applicable	Applicable
Auto-ignition	Not	Not	Not	Not	Not	Not
temperature	Applicable	Applicable	Applicable	Applicable	Applicable	Applicable
Decomposition	Not	Not	Not	Not	Not	Not
temperature	Applicable	Applicable	Applicable	Applicable	Applicable	Applicable
Viscosity	No data					
	available	available	available	available	available	available
Solubility	Insoluble	Soluble	Soluble	Soluble	Soluble	Soluble
Partition coefficient n- octanol/ water	No data available					
Vapour pressure	No data					
	available	available	available	available	available	available
Density	No data					
	available	available	available	available	available	available
Relative vapour	No data					
density	available	available	available	available	available	available
Particle	No data					
characteristics	available	available	available	available	available	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)

Skin corrosion/irritation

<u>Coated plates, Standards, Conjugate, Substrate buffer, Wash buffer and Stop solution</u> No data available

0.5 mg/L (dusts/mists)

Serious eye damage/eye irritation

<u>Coated plates, Standards, Conjugate, Substrate buffer, Wash buffer and Stop solution</u> No data available

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

<u>Coated plates, Conjugate, Substrate buffer, Wash buffer and Stop solution</u> No data available <u>Standards</u> 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

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
- **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"