

**BlueDiver** |   
**Combi**  
**Ku IgG**

**SECTION 1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING**

**1.1. Product Identifier**

Product Name: BlueDiver Combi Ku IgG  
Product Code: KU-24

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

Part of an immunodot kit (professional IVD use only, automated on the BlueDiver Instrument) for the detection of IgG antibodies to the Ku antigen in human serum.

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

D-TEK s.a  
Parc Initialis, rue René Descartes 19  
BE-7000 Mons Belgium  
Tel.: +32 65 841 888  
Fax: +32 65 842 663  
Internet: [www.d-tek.be](http://www.d-tek.be)  
email: [info@d-tek.be](mailto:info@d-tek.be)

**1.4. Emergency telephone number**

D-tek s.a. (only office hours): +32 65 841 888  
Centre Anti-Poisons (BE) 070 245 245  
*Please refer to your local Anti-Poison Centre!*

**SECTION 2. HAZARDS IDENTIFICATION**

**2.1 Classification of the substance or mixture**

According to *Regulation (EC) N° 1272/2008* the preparation is not classified as dangerous.

**2.2 Label elements**

According to *Regulation (EC) N° 1272/2008*: none; according to concentration and/or conditioning: none.

**2.3 Other hazards**

The products / product components contain preservatives which may possess in their given concentration, skin-sensitizing and slightly polluting properties. As any chemicals contain specific hazards, the products / product components should only be handled by appropriately trained personnel and with the necessary precautions for chemicals.

**SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS**

**3.1 Substances**

<b>Dispenser</b> <b>DISP</b>	<b>Containing 24 chips (breakable individually, in a plastic dispenser)</b>	
Cellulose Nitrate	<u>Each chip contains 3 lines of microdots:</u> 1 <sup>st</sup> line: Positive Control (C+) 2 <sup>nd</sup> line: Antigen 3 <sup>rd</sup> line: Negative Control (C-)	Membrane (cellulose-nitrate) coated with purified antigens: <b>Ku</b> (recombinant, human)

**3.2 Mixtures**

N/A

**Hazardous Substances and their concentrations**

The Hazard Classification listed in this section refers to the chemical at **a pure concentration**. It has been determined that the remaining ingredient(s) of these components are not classified as hazardous chemicals due to their physical and/or chemical nature and/or concentration in solution (see concentration here in the table) and/or their conditioning.

**Abbreviations and significances:**

CAS: Chemical Abstract Service (division of the American Chemical Society)

EINECS: European Inventory of Existing Commercial Chemical Substances

Information on significance H Phrases: see Section 16

Name	CAS	EINECS	Concentration in strip	Classification according to Regulation EC 1272/2008 Significance H Phrases
Cellulose Nitrate	9004-70-0	-	< 5 %	Flam. Sol. 1 H228

Annex VI to Regulation (EC) No 1272/2008; Index N°: 603-037-00-6; Commission Regulation (EU) 2015/830; 3.2.1

**SECTION 4. FIRST AID MEASURES**

	SYMPTOMS	FIRST AID
Contact with eyes:	N/A	-
Contact with skin:	N/A	-
Ingestion:	It is recommended to avoid ingestion and contact with food	If swallowed, wash out mouth with water provided the person is conscious; seek medical advice (showing this document when possible). Never give anything by mouth to an unconscious person; never try to make an unconscious person vomit.

**SECTION 5. FIRE-FIGHTING MEASURES**

<b>Flammability:</b>	Liquid reagents contained in the kit are not flammable. Cellulose Nitrate in pure form is highly flammable, but due to the small quantity (< 5% of chip) and the conditioning of it in a dispenser, it is not considered as a risk. Combustion of cardboard inserts inside the kit and the outer cardboard box of the kit may produce intense heat.
<b>Extinguishing Media:</b>	Water (for cellulose nitrate chips); water, carbon dioxide, dry chemical powder or polymer foam (for dispenser). Use extinguishing media appropriate to surrounding fire conditions.
<b>Special Fire Fighting Procedures:</b>	For fires involving this material, do not enter any enclosed or confined fire space without proper protective equipment. This may include self-contained breathing apparatus to protect against the hazardous effects of the normal products of combustion or oxygen deficiency.

**SECTION 6. ACCIDENTAL RELEASE MEASURES**

**6.1 Personal Precautions**

Always observe GLP (Good Laboratory Practice) safety lines. To avoid contact with skin and eyes wear appropriate protective clothing. Do not swallow, do not pipette by mouth.

**6.2 Environmental Precautions**

Avoid flushing away in drains; keep away from surface- and ground-water; keep away from soil.

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

Sweep up and collect in appropriate containers for waste disposal; clean the floor and all other contaminated objects with water.

**6.4 Reference to other sections**

N/A

**SECTION 7. HANDLING AND STORAGE**

**7.1 Precautions for safe handling**

Always observe GLP (Good Laboratory Practice) safety lines. Wear appropriate protective clothing (refer to point 8.2). Wash hands and any other exposed zones with water and mild soap before eating, drinking, smoking and leaving workplace. Check the local and general ventilation of the workplace. Take any measures to prevent aerosol and dust generation and fire. Dispose of the waste according to safety measures of GLP.

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

Always store the product according to instructions given on the label. Always observe given temperature and humidity limit/range.

**7.3 Specific end use(s)**

N/A

**SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION**

**8.1 Control parameters**

Name	Comment
Cellulose Nitrate	Contains no substances with occupational exposure limit values nor with short term exposure limit

**8.2 Exposure controls**

<b>Respiratory protection:</b>	None
<b>Gloves:</b>	Laboratory nitrile or latex gloves
<b>Eye protection:</b>	Goggles
<b>Skin protection</b>	Laboratory coat

**SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES**

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

Criterion	Reagent
	DISP
<b>Appearance:</b>	Solid (fibrous sheet); colour: white to yellow
<b>Odour:</b>	None
<b>Odour threshold:</b>	N/A
<b>pH value:</b>	Not given
<b>Melting point/freezing point:</b>	Decomposes
<b>Initial boiling point and boiling range:</b>	Not given
<b>Flash point:</b>	N/A
<b>Evaporation rate:</b>	N/A
<b>Flammability:</b>	Yes, if exposed to: flames, sparks, shocks, static discharge, acids
<b>Upper/lower flammability or explosive limits:</b>	Not explosive
<b>Vapour pressure:</b>	Not given
<b>Vapour density:</b>	Not given
<b>Relative density:</b>	Not given
<b>Solubility:</b>	Insoluble in water
<b>Partition coefficient n-octanol/water:</b>	Not given
<b>Auto-ignition temperature:</b>	185°C
<b>Decomposition temperature:</b>	Not given
<b>Viscosity:</b>	Not given
<b>Explosive properties:</b>	Not explosive
<b>Oxidizing properties:</b>	Not given

**9.2 Other information**

N/A

**SECTION 10. STABILITY AND REACTIVITY**

**10.1 Reactivity**

Particular dangerous reactions not known

**10.2 Chemical stability**

Materials to avoid: oxidizing agents, amines, strong acids and strong bases.

Chemical stability: If storage conditions and expiry date are correctly observed, the mixture / product components are chemically stable.

**10.3 Possibility of hazardous reactions**

Particular hazardous reactions not known.

**10.4 Conditions to avoid**

Avoid inappropriate storage (temperature, humidity, light, etc).

Avoid inappropriate use.

**10.5 Incompatible materials**

Oxidizing materials may adversely affect the functionality of cellulose nitrate.

**10.6 Hazardous decomposition products**

Under appropriate storage conditions and correct handling of the mixtures / product components, hazardous decomposition products are not known. Combustion of cardboard inserts inside the kit and of the outer cardboard box of the kit does not liberate toxic gas (only carbon dioxide and water vapour).

**SECTION 11. TOXICOLOGICAL INFORMATION**

**11.1 Information on toxicological effects**

**a. Acute toxicity**

Ingredient	Measured quantity	Value	Species
Cellulose Nitrate	LD <sub>50</sub> (oral)	3200 mg/kg	Rat

*LD<sub>50</sub> test: Lethal dose for 50% of the population of test animals*

**b. Skin corrosion/irritation**

No skin corrosion or irritation known

**c. Serious eye damage/irritation**

No eye damage or irritation known

**d. Respiratory or skin sensitisation**

No respiratory or skin sensitisation known

**e. Germ cell mutagenicity**

No data available

**f. Carcinogenicity**

No data available

**g. Reproductive toxicity**

No data available

**h. STOT-single exposure**

No data available

**i. STOT-repeated exposure**

No data available

**j. Aspiration hazard**

No data available

**SECTION 12. ECOLOGICAL INFORMATION**

**12.1 Toxicity**

Ingredient	Toxicity for algae	Toxicity for daphnia	for	Toxicity for fish	Toxicity for microorganisms
Cellulose Nitrate	Acute EC <sub>50</sub> : 579000 µg/l Fresh water (exposure 96 hours)	-	-	-	-

*EC<sub>50</sub> static test: (Effective Concentration 50) Concentration of test substance in dilution water that is calculated to effect 50 percent of a test population during continuous exposure over a specified period of time.*

**12.2 Persistence and degradability**

Ingredient	Measured quantity	Value	Comment
Cellulose Nitrate	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**

This reagent contains 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 effects**

Ingredient	Effect in pure form
Cellulose Nitrate	none

**SECTION 13. DISPOSAL CONSIDERATIONS**

**13.1 Waste treatment methods**

Used chips may retain product residues: always handle as if they were contaminated.

Humidify cellulose nitrate before disposal.

Chemical waste cannot be disposed of with household garbage: please contact a licensed professional waste disposal service to dispose of this material.

The waste generated by chemical preparations has generally to be regarded as special waste material, and is in most countries regulated by federal or state government laws and ordinances. Please contact the authority in the matter.

**Disposal of the packaging**

Dispose always according to official regulations: please contact the authority in the matter

**SECTION 14. TRANSPORT INFORMATION**

**14.1 to 14.7:** N/A: The products are not subject to transport regulations.

**SECTION 15. REGULATORY INFORMATION**

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

The user has to observe the applicable regulations.

- **Commission Regulation (EU) N° 2015/830** amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorization and Restriction of Chemicals (REACH)
- **Regulation (EC) N° 1907/2006 of the European Parliament and of the Council** concerning the Registration, Evaluation, Authorization and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC (classification, packaging and labelling of dangerous preparations) and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC.
- **Regulation (EC) N° 1272/2008 of the European Parliament and of the Council** on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006
- **Commission Regulation (EU) N° 453/2010** amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorization and Restriction of Chemicals (REACH)

**15.2 Chemical safety assessment**

No chemical safety assessment has been carried out.

**SECTION 16. OTHER INFORMATION**

The present MSDS has been compiled according to the ANNEX II of the **Commission Regulation (EU) 2015/830 of 28 May 2015**.

ANNEX II of Commission Regulation (EU) 2015/830 *replaces*

- Annex II <sup>(1)</sup> of Regulation (EC) No 1907/2006
- Article 59(5) of Regulation (EC) No 1272/2008 of the European Parliament and of the Council (which amends <sup>(1)</sup>)
- Commission Regulation (EU) No 453/2010 (which amends <sup>(1)</sup>)

Full text of hazard phrases mentioned in this document:

**Hazard phrases**

Code	Phrase
H228	Flammable solid