



# Safety Data Sheet

According to the regulations (CE) n° 1907/2006 [REACH] and (CE) n° 1272/2008 [CLP]

Revision date: 26/09/2022

Version: 2.9

## SECTION 1: Identification of the substance/mixture and the supplier/manufacturer

### 1.1. Product identifier

#### LDBIO DIAGNOSTICS WESTERN BLOT KITS

Trade name/designation	Product No
ASPERGILLUS WB IgG	ASP-WB12G – ASP-WB24G – ASP-WB96G
ASPERGILLUS WB IgE	AFU-WB12E – AFU-WB24E – AFU-WB96E
CHAGAS WB IgG	CHA-WB12G – CHA-WB24G – CHA-WB96G
CYSTICERCOSIS WB IgG	CYS-WB12G – CYS-WB24G – CYS-WB96G
ECHINOCOCCUS WB IgG	ECH-WB12G – ECH-WB24G – ECH-WB96G
FASCIOLA ES WB IgG	FAS ES-WB12G – FAS ES-WB24G – FAS ES-WB96G
LEISHMANIA WB IgG	LES-WB12G – LES-WB24G – LES-WB96G
LDBIO TOXO II IgG	TOXO II-12G – TOXO II-24G – TOXO II-96G
LDBIO TOXO II IgM	T2M-12M – T2M-24M – T2M-96M
PEO WB IgG	PEO-WB12G – PEO-WB24G – PEO-WB96G
SCHISTO II WB IgG	SCH II-WB12G – SCH II-WB24G – SCH II-WB96G
TOXOCARA WB IgG	TXA-WB12G – TXA-WB24G – TXA-WB96G
TOXOPLASMA WB IgG IgM	TOP-WB12GM – TOP WB24GM – TOP WB96GM
TRICHINELLA ES WB IgG	TRI ES-WB12G – TRI ES-WB24G – TRI ES-WB96G

### 1.2. Composition/information on components

The product is the set of LDBIO Diagnostics western blot kits (see product identifier table above) which include several components named R1, R2, R3, R4, R6, R7, R8, R10, (see the corresponding kit instructions for use), of identical composition and which, although not classified as dangerous mixtures, contain a dangerous substance for which the classification according to Regulation (EC) No 1272/2008 can be obtained in section 3.

Each of the above product references also contains a vial of substrate R5.

**Reagent R5, SUBSTRATE**, while not classified as dangerous, is a mixture of hazardous components whose classification according to Regulation (EC) No. 1272/2008 [CLP] can be obtained in section 3.

### 1.3. Relevant identified uses of the substance or mixture and uses advised against

Recommended Use: In Vitro Diagnosis – for professional users only

### 1.4. Details of the supplier of the safety data sheet Supplier

LDBIO DIAGNOSTICS

24, Avenue Joannes Masset

69009 Lyon, France

Phone number: +33 4 78 83 34 87

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Email: [contact@ldbiodiag.com](mailto:contact@ldbiodiag.com)  
 Website: [www.ldbiodiagnostics.com](http://www.ldbiodiagnostics.com)

### Manufacturer

LDBIO DIAGNOSTICS  
 24, Avenue Joannes Masset  
 69009 Lyon, France  
 Phone number: +33 4 78 83 34 87  
 Fax number: +33 4 78 83 34 30  
 Email: [contact@ldbiodiag.com](mailto:contact@ldbiodiag.com)  
 Website: [www.ldbiodiagnostics.com](http://www.ldbiodiagnostics.com)

### Emergency telephone

Telephone: 112 (emergency service) - 999 or Call a POISON CENTRE or doctor/physician

## SECTION 2: Hazards identification

### 2.1 substance or mixture identifier

Trade name/designation:	<b>Sample buffer</b> (included in the WB kit)
Product No.:	<b>R2</b>
EC identification No:	not applicable
REACH identification No:	not applicable
CAS No:	not applicable
Other means of identification:	no data available
Trade name/designation:	<b>Anti IgG conjugate</b> (included in the WB kit)
Product No.:	<b>R3</b>
EC identification No:	not applicable
REACH identification No:	not applicable
CAS No:	not applicable
Other means of identification:	no data available
Trade name/designation:	<b>Anti IgM conjugate</b> (included in the WB kit)
Product No.:	<b>R4</b>
EC identification No:	not applicable
REACH identification No:	not applicable
CAS No:	not applicable
Other means of identification:	no data available
Trade name/designation:	<b>Substrate</b> (included in the WB kit)
Product No.:	<b>R5</b>
EC identification No:	not applicable
REACH identification No:	not applicable
CAS No:	not applicable
Other means of identification:	no data available
Trade name/designation:	<b>Wash concentrate</b> (included in the WB kit)
Product No.:	<b>R6</b>
EC identification No:	not applicable
REACH identification No:	not applicable
CAS No:	not applicable
Other means of identification:	no data available
Trade name/designation:	<b>Anti IgE conjugate</b> (included in the WB kit)

Product No.:	<b>R7</b>
EC identification No:	not applicable
REACH identification No:	not applicable
CAS No:	not applicable
Other means of identification:	no data available
Trade name/designation:	<b>Anti IgA conjugate</b> (included in the WB kit)
Product No.:	<b>R8</b>
EC identification No:	not applicable
REACH identification No:	not applicable
CAS No:	not applicable
Other means of identification:	no data available
Trade name/designation:	<b>Positive control</b> (included in the WB kit)
Product No.:	<b>R10</b>
EC identification No:	not applicable
REACH identification No:	not applicable
CAS No:	not applicable
Other means of identification:	no data available

## 2.2 Classification of the substance or mixture

### 2.2.1 GHS Classification in accordance with (CE) N° 1272/2008 [CLP]

Is not considered an hazardous substance or mixture according to EC 1278/2008 regulation

## 2.3 Label elements

### 2.3.1 Labelling in accordance with (CE) N° 1272/2008 [CLP]

- **Hazard pictograms**  
None
- **Signal word:**  
None
- **Hazard statements**  
None
- **Precautionary statements**  
None
- **Hazards not otherwise classified (HNOC)**  
None
- **Annotation in the IFU:**  
R2, R3, R4, R7, R8, R10:  
EUH 032 - Contact with acids liberates very toxic gas  
EUH 210 - Material Safety Data Sheet available on request  
  
R5:  
EUH 210 - Material Safety Data Sheet available on request

## SECTION 3: Composition / information on ingredients

### 3.1 Substances

Nanoforms: no data available

### 3.2 Mixtures

SAMPLE BUIFFER – R2, IgG CONJUGATE – R3, IgM CONJUGATE – R4, IgE CONJUGATE – R7, IgA CONJUGATE – R8, POSITIVE CONTROL – R10

Hazardous ingredients Classification according to (CE) N° 1272/2008 [CLP]

Substance name	Substance identifier	Hazard classes and hazard categories of the substance	[C]	Hazard classes and hazard categories of the mixtures
Sodium azide	n°CAS: 26628-22-8 N°CE: 247-852-1 N° REACH: 01-2119457019-37-XXXX	Acute Tox, oral, 2 – H300 Acute Tox, inhalation, 2 – H330 Acute Tox, dermal, 1 – H310 STOT, repeat, oral, 2 M=1 – H372 Aquatic Acute 1 - H400 Aquatic Chronic 1 M=1– H410 Contact with acids liberates very toxic gas - EUH 032	<0.1%	EUH 032

SUBSTRATE – R5

Hazardous ingredients Classification according to (CE) N° 1272/2008 [CLP]

Substance name	Substance identifier	Hazard classes and hazard categories of the substance	[C]	Hazard classes and hazard categories of the mixture (R5)
N,N-dimethyl-formamide	n°CAS: 68-12-2 N°CE: 200-679-5 REACH Registration Number: 01-2119475605-32	Flammable liquid and vapour H226 Acute toxicity, skin (Category 4) H312 Acute toxicity, inhalation (Category 4) H332 Eye irritation (category 2) H319 Reproductive toxicity, category 1B H360D	<0.15%	Not considered as hazardous substance or mixture according to EC 1278/2008 regulation

## SECTION 4: First aid measures

### 4.1 General information

If exposed or if you feel unwell: Call a POISON CENTER or doctor/physician. If unconscious place in recovery position and seek medical advice. Never give anything by mouth to an unconscious person or a person with cramps. Change contaminated, saturated clothing. Do not leave affected person unattended.

#### After inhalation

Call a POISON CENTER/doctor. Remove casualty to fresh air and keep warm and at rest. If breathing is irregular or stopped, administer artificial respiration.

#### In case of skin contact

After contact with skin, wash immediately with plenty of water and soap. Remove contaminated, saturated clothing immediately. In case of skin reactions, consult a physician.

**After eye contact**

In case of contact with eyes flush immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart and consult an ophthalmologist. Protect uninjured eye. Remove contact lenses, if present and easy to do. Continue rinsing.

**In case of ingestion**

If accidentally swallowed rinse the mouth with plenty of water (only if the person is conscious) and obtain immediate medical attention. Do NOT induce vomiting. Give nothing to eat or drink.

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

no data available

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

no data available

**4.4 Self-protection of the first aider**

First aider: Pay attention to self-protection!

**4.5 Information to physician**

no data available

## SECTION 5: Firefighting measures

### 5.1 Extinguishing media

#### Suitable extinguishing media

The product itself is not flammable.  
Co-ordinate fire-fighting measures to the fire surroundings.

#### Extinguishing media which must not be used for safety reasons

no restriction

### 5.2 Specific hazards arising from the chemical

In case of fire may be liberated:  
Pyrolysis products, toxic

### 5.3 Advice for firefighters

Protective equipment and precautions for firefighters  
Wear a self-contained breathing apparatus and chemical protective clothing if necessary.

#### Additional information

Standard procedure for chemical fires: Use extinguishing media appropriate to local conditions and the surrounding environment.

## SECTION 6: Accidental release measures

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

In case of major fire and large quantities: Remove persons to safety.

### 6.2 Environmental precautions

Discharge into the environment must be avoided.

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

Spilled product must never be returned to the original container for recycling. Collect in closed and suitable containers for disposal.

### 6.4 Additional information

Clear spills immediately.

## SECTION 7: Handling and storage

### 7.1 Precautions for safe handling

All work processes must always be designed so that the following is as low as possible: Inhalation, ingestion, skin contact, eye contact. Do not eat, drink or smoke in the work area. Handle in accordance with good laboratory practice.

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

Recommended storage temperature: see operating instructions and labels.  
Storage class: no data available.

### 7.3 Specific end use(s)

In vitro diagnostics. For professional users only

## SECTION 8: Exposure controls/personal protection

### 8.1 Control parameters

Ingredient (Designation)	Regulatory information	Country	Country Limit value type (country origin)	Limit value
N,N-Dimethylformamide	2009/161/UE	EU	STEV	30 mg/m <sup>3</sup> - 10 ppm
N,N-Dimethylformamide	2009/161/UE	EU	OEV	15 mg/m <sup>3</sup> - 5 ppm
N,N-Dimethylformamide	INRS	FR	STEV	30 mg/m <sup>3</sup> - 10 ppm
N,N-Dimethylformamide	INRS	FR	OEV	15 mg/m <sup>3</sup> - 5 ppm

### 8.2 Engineering controls

#### Appropriate engineering controls

Technical measures and the application of suitable work processes have priority over personal protection equipment. If handled uncovered, arrangements with local exhaust ventilation have to be used.

#### Personal protection equipment (PPE)

Wear suitable protective clothing. When handling with chemical substances, CE approved protective clothing must be worn.

#### Eye/face protection

Eye glasses with side protection (norms DIN/EN: DIN EN 166)

#### Skin protection

Wear suitable gloves. When handling with chemical substances, CE approved protective gloves must be worn (norms DIN/EN: EN ISO 374). In the case of wanting to use the gloves again, clean them before taking off and air them well. Check leak tightness/impermeability prior to use.

#### Respiratory protection

Respiratory protection necessary at: aerosol or mist formation If exposure limits are exceeded or irritation is experienced, CE approved respiratory protection should be worn (norms NF EN 136/140).

#### Additional information

Wash hands before breaks and after work. Avoid contact with skin and eyes. When using do not eat, drink or smoke. Provide eye shower and label its location conspicuously.

#### Environmental exposure controls

no data available

## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

- (a) Appearance
- Physical state: solid and liquids
- Color: not applicable
- Odour: no data available
- (b) Odour threshold: no data available

#### Safety relevant basic data

- (c) pH: no data available
- (d) Melting point/freezing point: no data available
- (e) Initial boiling point and boiling range: no data available
- (f) Flash point: no data available
- (g) Evaporation rate: no data available
- (h) Flammability (solid, gas): not applicable
- (i) Flammability or explosive limits
- Lower explosion limit: no data available
- Upper explosion limit: no data available

(j) Vapour pressure:	no data available
(k) Vapour density:	no data available
(l) Relative density:	no data available
(m) Solubility(ies)	
Water solubility (g/L):	no data available
Soluble (g/L) in Ethanol:	no data available
(n) Partition coefficient: n-octanol/water:	no data available
(o) Auto-ignition temperature:	no data available
(p) Decomposition temperature:	no data available
(q) Viscosity	
Kinematic viscosity:	no data available
Dynamic viscosity:	no data available
(r) Explosive properties:	not applicable
(s) Oxidising properties:	not applicable

## 9.2 Other information

Bulk density:	not applicable
Refraction index:	no data available
Dissociation constant:	no data available
Surface tension:	no data available
Henry constant:	no data available
Explosive substances and mixtures:	no data available
Flammable gases:	no data available
Minimum flammable gas content:	no data available
Basic Burning Rate:	no data available
Aerosols:	no data available
Oxidizing gases:	no data available
Gases under pressure:	no data available
Flammable liquids:	no data available
Flammable solids:	no data available
Self-reactive substances and mixtures:	no data available
Pyrophoric liquids:	no data available
Pyrophoric solids:	no data available
Self-heating substances and mixtures:	no data available
Substances and mixtures which evolve flammable gases in contact with water:	no data available
Oxidizing liquids:	no data available
Oxidizing solids:	no data available
Organic peroxides:	no data available
Substances or mixtures corrosive to metals:	no data available
Desensitized explosives:	no data available
Mechanical sensitivity:	no data available
Accelerated polymerization temperature:	no data available
Formation of explosive dust/air mixtures:	no data available
Acid/alkali reserve:	no data available
Evaporation rate:	no data available
Miscibility:	no data available
Conductivity:	no data available
Corrosivity:	no data available
Gas group:	no data available
Redox potential:	no data available
Free radical potential:	no data available
Photocatalytic properties:	no data available

## SECTION 10: Stability and reactivity

### 10.1 Reactivity

no data available

### 10.2 Chemical stability

The product is chemically stable under standard ambient conditions (room temperature) .



### 10.3 Possibility of hazardous reactions

R2, R3, R4, R7, R8, R10 contain sodium azide (<0.1%): Contact with acids liberates very toxic gas.

### 10.4 Conditions to avoid

no data available

### 10.5 Incompatible materials

no data available

### 10.6 Hazardous decomposition products

no data available

### 10.7 Additional information

no data available

## SECTION 11: Toxicological information

### 11.1 Information on toxicological effects

#### Acute effects

*Acute oral toxicity:*

N,N-Dimethylformamide LD50 (rat) 3040 mg/kg

*Acute dermal toxicity:*

N,N- Dimethylformamide LD50 (rat) 3.2 g/kg LD50 (rabbit) 1.5g/kg

*Acute inhalation toxicity:*

N,N- Dimethylformamide LD50 (rat) > 5.58mg/l/4h

#### Irritant and corrosive effects

*Primary irritation to the skin:* not applicable

*Irritation to eyes:*

not applicable

*Irritation to respiratory tract:*

not applicable

#### Respiratory or skin sensitization

In case of skin contact: not sensitising

After inhalation: not sensitising

#### STOT-single exposure

May cause damage to organs.

#### STOT-repeated exposure

not applicable

#### CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)

##### Carcinogenicity

N,N- Dimethylformamide classification CIRC 3 – not classified by RU

##### Germ cell mutagenicity

N,N-Dimethylformamide Reproductive effects Experiments have shown reproductive toxicity in laboratory animals.

N,N-Dimethylformamide Developmental effects Risk of adverse effects on the child during pregnancy. Developmental effects observed in laboratory animals.

N,N-Dimethylformamide Teratogenicity Teratogenic effects have occurred in experimental animals.

##### Reproductive toxicity

No indications of human reproductive toxicity exist.

**Aspiration hazard**

not applicable

**Properties that disrupt the endocrine system**

no data available

**Other adverse effects**

no data available

**Additional information**

no data available

## SECTION 12: Ecological information

### 12.1 Ecotoxicity

**Fish toxicity:**

no data available

**Daphnia toxicity:**

no data available

**Algae toxicity:**

no data available

**Bacteria toxicity:**

no data available

### 12.2 Persistence and degradability

no data available

### 12.3 Bioaccumulative potential

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

### 12.4 Mobility in soil:

no data available

### 12.5 Results of PBT/vPvB assessment

no data available

### 12.6 Properties that disrupt the endocrine system

no data available

### 12.7 Other adverse effects

no data available

## SECTION 13: Disposal considerations

### 13.1 Waste treatment methods

**Appropriate disposal / Product**

Dispose according to legislation. Consult the appropriate local waste disposal expert about waste disposal.

Waste code product: no data available

**Appropriate disposal / Package**

Dispose according to legislation. Handle contaminated packages in the same way as the substance itself.

**Additional information**

no data available

## SECTION 14: Transport information

### Land transport (ADR/RID)

No dangerous good in sense of this transport regulation.

### Sea transport (IMDG)

No dangerous good in sense of this transport regulation.

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

not relevant

### Air transport (ICAO-TI / IATA-DGR)

No dangerous good in sense of this transport regulation.

## SECTION 15: Regulatory information

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

- Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency amending Directive 1999/45/EC 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) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 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) No 453/2010 of 20 May 2010 amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH)

- Commission Regulation (EU) 2015/830 of 28 May 2015 amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH)

## SECTION 16: Other information

### Abbreviations and acronyms

IVD – In Vitro Diagnostic

INRS - The National Research and Safety Institute for the Prevention of Occupational Accidents and Diseases

STEV – Short Term Exposure Value

OEV – Occupational exposure Value

VLE - Exposure limit value

VME - Average exposure value

ACGIH - American Conference of Governmental Industrial Hygienists

ADR - European Agreement concerning the International Carriage of Dangerous Goods by Road AGS - Committee on Hazardous Substances (Ausschuss für Gefahrstoffe)

CLP - Regulation on Classification, Labelling and Packaging of Substances and Mixtures DFG - German Research Foundation (Deutsche Forschungsgemeinschaft)

Gestis - Information system on hazardous substances of the German Social Accident Insurance (Gefahrstoffinformationssystem der Deutschen Gesetzlichen Unfallversicherung)

IATA-DGR - International Air Transport Association-Dangerous Goods Regulations ICAO-TI - International Civil Aviation Organization-Technical Instructions

IMDG - International Maritime Code for Dangerous Goods LTV - Long Term Value

NIOSH - National Institute for Occupational Safety and Health OSHA - Occupational Safety & Health Administration

PBT - Persistent, Bioaccumulative and Toxic

RID - Regulation concerning the International Carriage of Dangerous Goods by Rail STV - Short Term Value

SVHC - Substances of Very High Concern vPvB - very Persistent, very Bioaccumulative

**Additional information**

Modification date: 26/09/2022 (V2.9)

Indications of change: add of anti-IgA conjugate (R8) + change of address Loucheur → Masset

General update: 29/09/2020 (V2.5)

*The above information is believed to be correct but does not purport to be all-inclusive and shall be used only as a guidance. The information in this document is based on the present state knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. LDBIO DIAGNOSTICS shall not be held liable for any damage resulting from handling.*