

# DeepChek® RT-PCR Assay NS5B- Drug Resistance

24 RT-PCR tests & 24 Nested-PCR tests  
(K-16-NS5BDR)

## Material Safety Data Sheet For PCR Enzyme

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## A. Details of the Product and of the company/undertaking

Product type	PCR Enzyme
Product name	DeepChek® RT-PCR Assay NS5B-Drug Resistance reagents: PCR Enzyme
Chemical name	
Catalog number	K-16-NS5BDR
Manufacturer/Supplier	<b>Advanced Biological Laboratories (ABL SA)</b> 52-54 Avenue du X Septembre L – 2550 Luxembourg - Luxembourg Phone: (+352) 26 38 96 76 Fax: (+352) 26 38 96 30 <a href="http://diag.ablsa.com">http://diag.ablsa.com</a>
Further information obtainable from	<a href="mailto:support@ablsa.com">support@ablsa.com</a>
Information in case of emergency	Please contact ABL S.A directly (+352) 26 38 96 76
MSDS-Number	MSDS- 16-NS5BDR

## B. Hazards identification

Classification of the substance or mixture	<b>Classification (REGULATION (EC) No 1272/2008)</b> Not a hazardous substance or mixture. <b>Classification (67/548/EEC, 1999/45/EC)</b> Dangerous for the environment: R52/53: Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
Label elements	<b>Labelling (REGULATION (EC) No 1272/2008)</b> Not a hazardous substance or mixture.
Other hazards	This substance/mixture 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.

## C. Composition/information on ingredients: Mixtures

### Hazardous components

Chemical Name	CAS-No. EC-No. Registration number	Classification (67/548/EEC)	Classification (REGULATION (EC) No 1272/2008)	Concentration (%)
ethoxylated nonylphenol	9016-45-9	Xi; R37 Xi; R41 N; R50/53 Xn; R22	Skin Irrit. 2; H315 Eye Irrit. 2; H319 Aquatic Chronic 2; H411	>= 0.25 - < 1
Substances with a workplace exposure limit :				
glycerol	56-81-5 200-289-5			>= 50 - < 70

For explanation of abbreviations see section P.

## D. First-aid measures

### a. Description

General advice	Show this safety data sheet to the doctor in attendance.
If inhaled	Move to fresh air.

	If symptoms persist, call a physician.
In case of skin contact	Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. If symptoms persist, call a physician.
In case of eye contact	Remove contact lenses. Protect unharmed eye. Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.
If swallowed	If accidentally swallowed obtain immediate medical attention. Rinse mouth with water. Never give anything by mouth to an unconscious person.

**b. Most important symptoms and effects, both acute and delayed**

Symptoms	No information available.
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**c. Indication of any immediate medical attention and special treatment needed**

Treatment	No information available.
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**E. Fire-fighting measures**

Suitable extinguishing media	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment
Specific hazards during firefighting	Exposure to decomposition products may be a hazard to health.
Hazardous combustion products	No hazardous combustion products are known
Special protective equipment for firefighters	Wear self-contained breathing apparatus for firefighting if necessary.
Further information	In the event of fire and/or explosion do not breathe fumes.

**F. Accidental release measures**

Personal precautions	Use personal protective equipment. Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.
Methods for cleaning up	Keep in suitable, closed containers for disposal.
Other	For personal protection see section H

**G. Handling and storage**

**a. Precautions for safe handling**

Advice on safe handling	For personal protection see section H. Smoking, eating and drinking should be prohibited in the application area.
Advice on protection against fire and explosion	Normal measures for preventive fire protection.
Hygiene measures	Keep away from food and drink. When using do not eat, drink or smoke.

**b. Conditions for safe storage, including any incompatibilities**

Other data	No decomposition if stored and applied as directed.
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**c. Specific end uses(s)**

Specific use(s)	Laboratory chemicals
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**H. Exposure controls/personal protection**

**a. Control parameters: occupational Exposure Limits**

Components	CAS-No.	Value type (Form of exposure)	Control parameters	Basis
glycerol	56-81-5	TWA (Mist)	10 mg/m <sup>3</sup>	GB EH40
Further information	Where no specific short-term exposure limit is listed, a figure three times the long-term exposure should be used			

**b. Exposure controls: personal protective equipment**

Eye protection	Safety glasses
Hand protection	Remarks: The choice of an appropriate glove does not only depend on its material but also on other quality features and is different from one producer to the other. Take note of the information given by the producer concerning permeability and break through times, and of special workplace conditions (mechanical strain, duration of contact).
Skin and body protection	Choose body protection according to the amount and concentration of the dangerous substance at the work place. Footwear protecting against chemicals

**I. Physical and chemical properties**

Appearance	liquid
Colour	No data available
Odour	No information available.
Odour Threshold	No data available
pH	ca. 7.5
Melting point/range	No data available
Boiling point/boiling range	
Flash point	
Evaporation rate	
Burning rate	
Upper explosion limit	
Lower explosion limit	
Vapour pressure	
Relative vapour density	
Relative density	
Density	1.15 g/cm <sup>3</sup>
Water solubility	No data available
Solubility in other solvents	
Partition coefficient: n-octanol/water	
Auto-ignition temperature	
Thermal decomposition	
Viscosity, dynamic	
Viscosity, kinematic	
Explosive properties	
Oxidizing properties	

## J. Stability and reactivity

Reactivity	No decomposition if stored and applied as directed.
Chemical stability	No decomposition if stored and applied as directed.
Hazardous reactions	Stable under recommended storage conditions. Hazardous decomposition products formed under fire conditions.
Conditions to avoid	No data available
Materials to avoid	No data available
Hazardous decomposition products	No decomposition if stored and applied as directed.

## K. Toxicological information

Acute toxicity	Not classified based on available information.
<u>Product</u> Acute oral toxicity	No data available
<u>Product</u> Acute inhalation toxicity	
<u>Product</u> Acute dermal toxicity	
<u>Components ethoxylated nonylphenol:</u> Acute oral toxicity	LD50 Oral (Rat): 16,000 mg/kg
<u>Components ethoxylated nonylphenol:</u> Acute dermal toxicity	LD50 Dermal (Rabbit): 4,490 mg/kg
<u>Components glycerol:</u> Acute oral toxicity	LD50 Oral (Rat): 12,000 mg/kg
<u>Components glycerol:</u> Acute dermal toxicity	LD50 Dermal (Rabbit): 10,000 mg/kg
Skin corrosion/irritation	Not classified based on available information. <u>Product</u> Remarks: May cause skin irritation in susceptible persons. <u>Components glycerol:</u> Species: Rabbit Exposure time: 24 hours Result: Mild skin irritation
Serious eye damage/eye irritation	Not classified based on available information. <u>Product</u> Remarks: May irritate eyes. <u>Components glycerol:</u> Species: Rabbit Exposure time: 24 hours Result: Mild eye irritation
Skin sensitisation	Not classified based on available information.
Respiratory sensitisation:	
Germ cell mutagenicity	
Carcinogenicity	
Reproductive toxicity	
STOT - single exposure	
STOT - repeated exposure	
Aspiration toxicity	

## L. Ecological information

### a. Toxicity

<u>Product</u> : Toxicity to fish	No data available
<u>Product</u> : Toxicity to algae	
<u>Product</u> : Toxicity to bacteria	
<u>Components: ethoxylated nonylphenol:</u>	LC50 (Lepomis macrochirus (Bluegill sunfish)): 1 mg/l

Toxicity to fish	Exposure time: 96 hours
<u>Components: ethoxylated nonylphenol:</u> Toxicity to daphnia and other aquatic invertebrates	EC50 (Daphnia (water flea)): 1,821 mg/l Exposure time: 48 hours
<u>Components: ethoxylated nonylphenol:</u> Toxicity to algae	EC50 (Pseudokirchneriella subcapitata (green algae)): 20 mg/l Exposure time: 48 hours Test Type: Growth inhibition
<u>Components: glycerol:</u> Toxicity to fish	LC0 (Leuciscus idus (Golden orfe)): > 250 mg/l Exposure time: 48 hours

**b. Persistence and degradability**

<u>Components: ethoxylated nonylphenol:</u> Biodegradability	Biodegradation: 97 % Exposure time: 30 days Remarks: According to the results of tests of biodegradability this product is considered as being readily biodegradable.
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**c. Bioaccumulative potential**

<u>Product:</u> Bioaccumulation	No data available.
<u>Components: ethoxylated nonylphenol:</u> Partition coefficient: n-octanol/water	log Pow: 3.7 (25 °C)

**d. Mobility in soil**

No data available.

**e. Results of PBT and vPvB assessment**

<u>Product:</u> Assessment	This substance/mixture 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.
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**f. Other adverse effects**

<u>Product:</u> Additional ecological information	Remarks: No data available
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**M. Disposal considerations: Waste treatment methods**

Product	Dispose of as hazardous waste in compliance with local and national regulations.
Contaminated packaging	Empty containers should be taken to an approved waste handling site for recycling or disposal.

**N. Transport information**

UN number	Not regulated as a dangerous good
UN proper shipping name	
Transport hazard class(es)	
Packing group	
Environmental hazards	
Special precautions for user	For personal protection see section H.
Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code	Not applicable for product as supplied.

## O. Regulation information

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

REACH - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, preparations and articles (Annex XVII)	ethoxylated nonylphenol
Regulation (EC) No 649/2012 of the European Parliament and the Council concerning the export and import of dangerous chemicals	ethoxylated nonylphenol
REACH - Candidate List of Substances of Very High Concern for Authorisation (Article 59).	Not applicable
REACH - List of substances subject to authorisation (Annex XIV)	
Regulation (EC) No 1005/2009 on substances that deplete the ozone layer	
Regulation (EC) No 850/2004 on persistent organic pollutants	
Seveso II - Directive 2003/105/EC amending Council Directive 96/82/EC on the control of major-accident hazards involving dangerous substances	

### b. Chemical Safety Assessment

No data available

## P. Other information

### Full text of R-Phrases

R22: Harmful if swallowed.

R37: Irritating to respiratory system.

R41: Risk of serious damage to eyes.

R50/53: Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

### Full text of H-Statements

H315: Causes skin irritation.

H319: Causes serious eye irritation.

H411: Toxic to aquatic life with long lasting effects.

### Full text of other abbreviations

Aquatic Chronic: Chronic aquatic toxicity

Eye Irrit.: Eye irritation

Skin Irrit. : Skin irritation

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.