

DeepChek® RT-PCR Assay NS3- Drug Resistance

24 RT-PCR tests & 24 Nested-PCR tests (K-16-NS3DR)

Material Safety Data Sheet For PCR Enzyme

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Advanced Biological Laboratories (ABL SA)

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

| | |
|-------------------------------------|--|
| Product type | PCR Enzyme |
| Product name | DeepChek® RT-PCR Assay NS3-Drug Resistance reagents: PCR Enzyme |
| Chemical name | |
| Catalog number | K-16-NS3DR |
| Manufacturer/Supplier | Advanced Biological Laboratories (ABL SA) 52-54 Avenue du X Septembre L – 2550 Luxembourg - Luxembourg Phone: (+352) 26 38 96 76 Fax: (+352) 26 38 96 30 http://diag.ablsa.com |
| Further information obtainable from | support@ablsa.com |
| Information in case of emergency | Please contact ABL S.A directly (+352) 26 38 96 76 |
| MSDS-Number | MSDS- 16-NS3DR |

B. Hazards identification

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

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

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| | 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. |
|----------|---------------------------|

c. Indication of any immediate medical attention and special treatment needed

| | |
|-----------|---------------------------|
| Treatment | No information available. |
|-----------|---------------------------|

E. Fire-fighting measures

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|---|--|
| 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. |
|------------|---|

c. Specific end uses(s)

| | |
|-----------------|----------------------|
| Specific use(s) | Laboratory chemicals |
|-----------------|----------------------|

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/m3 | 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/cm3 |
| 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:</u> ethoxylated nonylphenol: | 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. |
|---|---|

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. |
|-------------------------------|--|

f. Other adverse effects

| | |
|--|----------------------------|
| <u>Product:</u> Additional ecological information | Remarks: No data available |
|--|----------------------------|

M. Disposal considerations: Waste treatment methods

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|------------------------|--|
| 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

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