

**BEHnk - APTT Silica + CaCl₂ : APTT SL - 771250 AC 5x3mL
771251 AC 8x10mL
BE APTT SL 1**

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Product identifier: BEHnk - APTT Silica + CaCl₂ : APTT SL - 771250 AC 5x3mL 771251 AC 8x10mL
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1.2 Relevant identified uses of the substance or mixture and uses advised against:

Relevant uses: In vitro diagnostic. For professional user only.

Uses advised against: All uses not specified in this section or in section 7.3

1.3 Details of the supplier of the safety data sheet:

Kommanditgesellschaft Behnk Elektronik GmbH & Co.

Hans-Böckler-Ring 27

22851 Norderstedt - Germany

Phone.: +49 (0)40-529 861 0 -

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1.4 Emergency telephone number: ORFILA (INRS) : + 33 (0)1 45 42 59 59

SECTION 2: HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture:

Directive 67/548/EC and Directive 1999/45/EC:

This product was classified in accordance with Directive 67/548/EC and Directive 1999/45/EC, adapting the requirements to Regulation (EC) n°1907/2006 (REACH regulation).

T: R23/24/25 - Toxic by inhalation, in contact with skin and if swallowed

Xi: R43 - May cause sensitisation by skin contact

R33 - Danger of cumulative effects

R52/53 - Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment

CLP Regulation (EC) n° 1272/2008:

Classification of this product has been carried out in accordance with CLP Regulation (EC) n° 1272/2008.

Acute Tox. 1: Acute toxicity on contact with skin, Category 1, H310

Acute Tox. 2: Acute inhalation toxicity, Category 2, H330

Aquatic Chronic 3: Hazardous to the aquatic environment, long-term hazard, Category 3, H412

Skin Sens. 1: Sensitisation, skin, Category 1, H317

STOT RE 2: Specific target organ toxicity, repeated exposure, Category 2, H373

2.2 Label elements:

Directive 67/548/EC and Directive 1999/45/EC:

In accordance with the legislation, the elements on the label are as follows:



Toxic

R Phrases:

R23/24/25: Toxic by inhalation, in contact with skin and if swallowed

R33: Danger of cumulative effects

R43: May cause sensitisation by skin contact

R52/53: Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment

S Phrases:

S24: Avoid contact with skin

S36/37: Wear suitable protective clothing and gloves

S45: In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible)

S61: Avoid release to the environment Refer to special instructions/safety data sheets

Supplementary information:

Non-applicable

Substances that contribute to the classification:

Reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-2H -isothiazol-3-one [EC no. 220-239-6] (3:1)

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SECTION 2: HAZARDS IDENTIFICATION (continued)

CLP Regulation (EC) n° 1272/2008:

Danger



Hazard statements:

Acute Tox. 1: H310 - Fatal in contact with skin
Acute Tox. 2: H330 - Fatal if inhaled
Aquatic Chronic 3: H412 - Harmful to aquatic life with long lasting effects
Skin Sens. 1: H317 - May cause an allergic skin reaction
STOT RE 2: H373 - May cause damage to organs through prolonged or repeated exposure

Precautionary statements:

P264: Wash thoroughly after handling
P271: Use only outdoors or in a well-ventilated area
P280: Wear protective gloves/protective clothing/eye protection/face protection
P302+P352: IF ON SKIN: Wash with plenty of water
P304+P340: IF INHALED: Remove person to fresh air and keep comfortable for breathing
P310: Immediately call a poison center/doctor
P403+P233: Store in a well-ventilated place. Keep container tightly closed
P501: Dispose of contents and / or containers in accordance with regulations on hazardous waste or packaging and packaging waste respectively

Substances that contribute to the classification

Thiomersal; Reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-2H -isothiazol-3-one [EC no. 220-239-6] (3:1)

2.3 Other hazards:

Product fails to meet PBT/vPvB criteria
WORKING REAGENT AC , once diluted IS NOT CLASSIFIED AS DANGEROUS ACCORDING TO 1272/2008 (CLP) REGULATION

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substance:





Non-applicable

3.2 Mixture:

Chemical description: Mixture of substances

Components:

In accordance with Annex II of Regulation (EC) n°1907/2006 (point 3), the product contains:

Identification	Chemical name/Classification		Concentration
CAS:EC: 54-64-8200-210- Index:R 4080-004-00-7Non- EACH: applicable	Thiomersal ATP CLP00		<1 %
	Directive 67/548/EC	N: R50/53; T+: R26/27/28; R33 	
	Regulation 1272/2008	Acute Tox. 1: H310; Acute Tox. 2: H300+H330; Aquatic Acute 1: H400; Aquatic Chronic 1: H410; STOT RE 2: H373 - Danger 	
CAS:EC: 55965-84-9Non- Index:R applicable613-167- EACH: 00-5Non-applicable	Reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-2H -isothiazol-3-one [EC no. 220-239-6] (3:1) ATP CLP00		<1 %
	Directive 67/548/EC	C: R34; N: R50/53; T: R23/24/25; Xi: R43 	
	Regulation 1272/2008	Acute Tox. 3: H301+H311+H331; Aquatic Acute 1: H400; Aquatic Chronic 1: H410; Skin Corr. 1B: H314; Skin Sens. 1: H317 - Danger 	

To obtain more information on the risk of the substances consult sections 8, 11, 12, 15 and 16.

SECTION 4: FIRST AID MEASURES

4.1 Description of first aid measures:

Request medical assistance immediately, showing the SDS of this product.

By inhalation:

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SECTION 4: FIRST AID MEASURES (continued)

Remove the person affected from the area of exposure, provide with fresh air and keep at rest. In serious cases such as cardiorespiratory failure, artificial resuscitation techniques will be necessary (mouth to mouth resuscitation, cardiac massage, oxygen supply, etc.) requiring immediate medical assistance.

By skin contact:

Remove contaminated clothing and footwear, rinse skin or shower the person affected if appropriate with plenty of cold water and neutral soap. In serious cases see a doctor. If the product causes burns or freezing, clothing should not be removed as this could worsen the injury caused if it is stuck to the skin. If blisters form on the skin, these should never be burst as this will increase the risk of infection.

By eye contact:

Rinse eyes thoroughly with lukewarm water for at least 15 minutes. Do not allow the person affected to rub or close their eyes. If the injured person uses contact lenses, these should be removed unless they are stuck to the eyes, as this could cause further damage. In all cases, after cleaning, a doctor should be consulted as quickly as possible with the SDS of the product.

By ingestion/aspiration:

Do not induce vomiting, but if it does happen keep the head down to avoid aspiration. Keep the person affected at rest. Rinse out the mouth and throat, as they may have been affected during ingestion.

4.2 Most important symptoms and effects, both acute and delayed:

Acute and delayed effects are indicated in sections 2 and 11.

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

Non-applicable

SECTION 5: FIREFIGHTING MEASURES

5.1 Extinguishing media:

Product is non-flammable under normal conditions of storage, manipulation and use. In the case of inflammation as a result of improper manipulation, storage or use preferably use polyvalent powder extinguishers (ABC powder), in accordance with the Regulation on fire protection systems. IT IS NOT RECOMMENDED to use tap water as an extinguishing agent.

5.2 Special hazards arising from the substance or mixture:

As a result of combustion or thermal decomposition reactive sub-products are created that can become highly toxic and, consequently, can present a serious health risk.

5.3 Advice for firefighters:

Depending on the magnitude of the fire it may be necessary to use full protective clothing and individual respiratory equipment. Minimum emergency facilities and equipment should be available (fire blankets, portable first aid kit,...) in accordance with Directive 89/654/EC.

Additional provisions:

Act in accordance with the Internal Emergency Plan and the Information Sheets on actions to take after an accident or other emergencies. Destroy any source of ignition. In case of fire, refrigerate the storage containers and tanks for products susceptible to inflammation, explosion or BLEVE as a result of high temperatures. Avoid spillage of the products used to extinguish the fire into an aqueous medium.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures:

Sweep up and shovel product or other means and place in container for reuse (preferred) or disposal

6.2 Environmental precautions:

Avoid at all cost any type of spillage into an aqueous medium. Contain the product absorbed appropriately in hermetically sealed containers. Notify the relevant authority in case of exposure to the general public or the environment.

6.3 Methods and material for containment and cleaning up:

It is recommended:

Sweep up and shovel product or other means and place in container for reuse (preferred) or disposal

6.4 Reference to other sections:

See sections 8 and 13.

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SECTION 7: HANDLING AND STORAGE

7.1 Precautions for safe handling:

A.- Precautions for safe manipulation

Comply with the current legislation concerning the prevention of industrial risks. Keep containers hermetically sealed. Control spills and residues, destroying them with safe methods (section 6). Avoid leakages from the container. Maintain order and cleanliness where dangerous products are used.

B.- Technical recommendations for the prevention of fires and explosions

Due to its non-flammable nature, the product does not present a fire risk under normal conditions of storage, manipulation and use.

C.- Technical recommendations to prevent ergonomic and toxicological risks

Do not eat or drink during the process, washing hands afterwards with suitable cleaning products.

D.- Technical recommendations to prevent environmental risks

Sweep up and shovel product or other means and place in container for reuse (preferred) or disposal See sections 8 and 13.

7.2 Conditions for safe storage, including any incompatibilities:

A.- Technical measures for storage

Store in a cool, dry, well-ventilated location

B.- General conditions for storage

Avoid sources of heat, radiation, static electricity and contact with food. For additional information see subsection 10.5

7.3 Specific end use(s):

Except for the instructions already specified it is not necessary to provide any special recommendation regarding the uses of this product.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters:

Substances whose occupational exposure limits have to be monitored in the work environment

Nuisance dust: Inhalable dust 10 mg/m³ // Respirable dust 4 mg/m³



8.2 Exposure controls:

A.- General security and hygiene measures in the work place



In accordance with the order of importance to control professional exposure (Directive 98/24/EC) it is recommended to use localized extraction in the work area as a collective protection measure to avoid exceeding the professional exposure limits. In case of using individual protection equipment they should have the CE marking in accordance with Directive 89/686/EC. For more information on Personal Protection Equipment (storage, use, cleaning, maintenance, class of protection,...) consult the information leaflet provided by the manufacturer. For additional information see subsection 7.1.

All information contained herein is a recommendation which needs some specification from the labour risk prevention services as it is not known whether the company has additional measures at its disposal.

B.- Respiratory protection

Pictogram	PPE	Labelling	CEN Standard	Remarks
 Mandatory respiratory tract protection	Filter mask for gases and vapours		EN 405:2001+A1:2009	Replace when there is a taste or smell of the contaminant inside the face mask. If the contaminant comes with warnings it is recommended to use isolation equipment.

C.- Specific protection for the hands

Pictogram	PPE	Labelling	CEN Standard	Remarks
 Mandatory hand protection	NON-disposable chemical protective gloves		EN 374-1:2003 EN 374-3:2003/AC:2006 EN 420:2003+A1:2009	The Breakthrough Time indicated by the manufacturer must exceed the period during which the product is being used. Do not use protective creams after the product has come into contact with skin.



As the product is a mixture of several substances, the resistance of the glove material can not be calculated in advance with total reliability and has therefore to be checked prior to the application

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SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION (continued)



D.- Ocular and facial protection

Pictogram	PPE	Labelling	CEN Standard	Remarks
 Mandatory face protection	Face mask		EN 166:2001 EN 167:2001 EN 168:2001 EN ISO 4007:2012	Clean daily and disinfect periodically according to the manufacturer's instructions. Use if there is a risk of splashing.

E.- Bodily protection

Pictogram	PPE	Labelling	CEN Standard	Remarks
 Mandatory complete body protection	Disposable clothing for protection against chemical risks		EN 13034:2005+A1:2009 EN 168:2001 EN ISO 13982-1:2004/A1:2010 EN ISO 6529:2001 EN ISO 6530:2005 EN 464:1994	For professional use only. Clean periodically according to the manufacturer's instructions.
 Mandatory foot protection	Safety footwear for protection against chemical risk		EN ISO 20345:2011 EN 13832-1:2006	Replace boots at any sign of deterioration.

F.- Additional emergency measures

Emergency measure	Standards	Emergency measure	Standards
 Emergency shower	ANSI Z358-1 ISO 3864-1:2002	 Eyewash stations	DIN 12 899 ISO 3864-1:2002

Environmental exposure controls:

In accordance with the community legislation for the protection of the environment it is recommended to avoid environmental spillage of both the product and its container. For additional information see subsection 7.1.D

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties:

For complete information see the product datasheet.

Appearance:

Physical state at 20 °C: Solid
Appearance: Compact
Colour: White
Odour: Not available
Odour threshold: Non-applicable *

Volatility:

Boiling point at atmospheric pressure: Non-applicable *
Vapour pressure at 20 °C: Non-applicable *
Vapour pressure at 50 °C: Non-applicable *
Evaporation rate at 20 °C: Non-applicable *

Product description:

Density at 20 °C: Non-applicable *
Relative density at 20 °C: Non-applicable *
Dynamic viscosity at 20 °C: Non-applicable *
Kinematic viscosity at 20 °C: Non-applicable *

*Not relevant due to the nature of the product, not providing information property of its hazards.

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SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES (continued)

Kinematic viscosity at 40 °C:	>20,5 cSt
Concentration:	Non-applicable *
pH:	Non-applicable *
Vapour density at 20 °C:	Non-applicable *
Partition coefficient n-octanol/water 20 °C:	Non-applicable *
Solubility in water at 20 °C:	Non-applicable *
Solubility properties:	Non-applicable *
Decomposition temperature:	Non-applicable *
Melting point/freezing point:	Non-applicable *
Explosive properties:	Non-applicable *
Oxidising properties:	Non-applicable *
Flammability:	
Flash Point:	Non-applicable
Flammability (solid, gas):	Non-applicable *
Autoignition temperature:	Non-applicable *
Lower flammability limit:	Non-applicable *
Upper flammability limit:	Non-applicable *
Explosive:	
Lower explosive limit:	Non-applicable *
Upper explosive limit:	Non-applicable *
9.2 Other information:	
Surface tension at 20 °C:	Non-applicable *
Refraction index:	Non-applicable *

*Not relevant due to the nature of the product, not providing information property of its hazards.

SECTION 10: STABILITY AND REACTIVITY
10.1 Reactivity:

No hazardous reactions are expected because the product is stable under recommended storage conditions. See section 7.

10.2 Chemical stability:

Chemically stable under the conditions of storage, handling and use.

10.3 Possibility of hazardous reactions:

Under the specified conditions, hazardous reactions that lead to excessive temperatures or pressure are not expected.

10.4 Conditions to avoid:

Applicable for handling and storage at room temperature:

Shock and friction	Contact with air	Increase in temperature	Sunlight	Humidity
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable

10.5 Incompatible materials:

Acids	Water	Combustive materials	Combustible materials	Others
Avoid strong acids	Not applicable	Avoid direct impact	Not applicable	Avoid alkalis or strong bases

10.6 Hazardous decomposition products:

See subsection 10.3, 10.4 and 10.5 to find out the specific decomposition products. Depending on the decomposition conditions, complex mixtures of chemical substances can be released: carbon dioxide (CO₂), carbon monoxide and other organic compounds.

SECTION 11: TOXICOLOGICAL INFORMATION

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SECTION 11: TOXICOLOGICAL INFORMATION (continued)

11.1 Information on toxicological effects:

The experimental information related to the toxicological properties of the product itself is not available

Dangerous health implications:

In case of exposure that is repetitive, prolonged or at concentrations higher than recommended by the occupational exposure limits, it may result in adverse effects on health depending on the means of exposure:

A.- Ingestion (acute effect):

- Acute toxicity : Based on available data, the classification criteria are not met, however, it contains substances classified as dangerous for consumption. For more information see section 3.
- Corrosivity/Irritability: Based on available data, the classification criteria are not met, however it does contain substances classified as dangerous for this effect. For more information see section 3.

B- Inhalation (acute effect):

- Acute toxicity : Inhalation after prolonged exposure may be lethal.
- Corrosivity/Irritability: Based on available data, the classification criteria are not met, however it does contain substances classified as dangerous for this effect. For more information see section 3.

C- Contact with the skin and the eyes (acute effect):

- Contact with the skin: Can be fatal if the product is absorbed through the skin. For more information on the secondary effects of contact with the skin see section 2.
- Contact with the eyes: Based on available data, the classification criteria are not met, however it does contain substances classified as dangerous for this effect. For more information see section 3.

D- CMR effects (carcinogenicity, mutagenicity and toxicity to reproduction):

- Carcinogenicity: Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for the effects mentioned. For more information see section 3.
- Mutagenicity: Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for this effect. For more information see section 3.
- Reproductive toxicity: Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for this effect. For more information see section 3.

E- Sensitizing effects:

- Respiratory: Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous with sensitising effects. For more information see section 3.
- Cutaneous: Prolonged contact with the skin can result in episodes of allergic contact dermatitis.

F- Specific target organ toxicity (STOT) - single exposure:

Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for this effect. For more information see section 3.

G- Specific target organ toxicity (STOT)-repeated exposure:

- Specific target organ toxicity (STOT)-repeated exposure: Exposure in high concentration can cause a breakdown in the central nervous system causing headache, dizziness, vertigo, nausea, vomiting, confusion, and in serious cases, loss of consciousness.
- Skin: Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for this effect. For more information see section 3.

H- Aspiration hazard:

Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for this effect. For more information see section 3.

Other information:

Non-applicable

Specific toxicology information on the substances:

Identification	Acute toxicity		Genus
	Thiomersal	LD50 oral	
CAS: 54-64-8	LD50 dermal	5 mg/kg (ATEi)	
EC: 200-210-4	LC50 inhalation	0,05 mg/L (4 h) (ATEi)	

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SECTION 11: TOXICOLOGICAL INFORMATION (continued)

Identification	Acute toxicity		Genus
	LD50 oral	LD50 dermal	
Reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC no. 220-239-6] (3:1) CAS: 55965-84-9 EC: Non-applicable	100 mg/kg	300 mg/kg	Rat
	Non-applicable	Non-applicable	

SECTION 12: ECOLOGICAL INFORMATION

The experimental information related to the eco-toxicological properties of the product itself is not available

12.1 Toxicity:

Identification	Acute toxicity		Species	Genus
	LC50	EC50		
Thiomersal CAS: 54-64-8 EC: 200-210-4	0.1 - 1 mg/L (96 h)			Fish
	0.1 - 1 mg/L			Crustacean
	0.1 - 1 mg/L			Algae
Reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC no. 220-239-6] (3:1) CAS: 55965-84-9 EC: Non-applicable	0.1 - 1 mg/L (96 h)			Fish
	0.1 - 1 mg/L			Crustacean
	0.1 - 1 mg/L			Algae

12.2 Persistence and degradability:

Not available

12.3 Bioaccumulative potential:

Not available

12.4 Mobility in soil:

Not available

12.5 Results of PBT and vPvB assessment:

Product fails to meet PBT/vPvB criteria

12.6 Other adverse effects:

Not described

SECTION 13: DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods:

Code	Description	Waste class (Regulation (EU) No 1357/2014)
	It is not possible to assign a specific code, as it depends on the intended use by the user	Dangerous

Type of waste (Regulation (EU) No 1357/2014):

HP14 Ecotoxic, HP6 Acute Toxicity

Waste management (disposal and evaluation):

Consult the authorized waste service manager on the assessment and disposal operations in accordance with Annex 1 and Annex 2 (Directive 2008/98/EC). As under 15 01 (2014/955/EC) of the code and in case the container has been in direct contact with the product, it will be processed the same way as the actual product. Otherwise, it will be processed as non-dangerous residue. We do not recommend disposal down the drain. See paragraph 6.2.

Regulations related to waste management:

In accordance with Annex II of Regulation (EC) n°1907/2006 (REACH) the community or state provisions related to waste management are stated

Community legislation: Directive 2008/98/EC, 2014/955/EU, Regulation (EU) No 1357/2014

SECTION 14: TRANSPORT INFORMATION **

** Changes with regards to the previous version

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SECTION 14: TRANSPORT INFORMATION ** (continued)

This product is not regulated for transport (ADR/RID,IMDG,IATA)

** Changes with regards to the previous version

SECTION 15: REGULATORY INFORMATION

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

Regulation (EC) No 528/2012: contains a preservative to protect the initial properties of the treated article. Contains Reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-2H -isothiazol-3-one [EC no. 220-239-6] (3:1). Candidate substances for authorisation under the Regulation (EC) 1907/2006 (REACH): Non-applicable

Substances included in Annex XIV of REACH ("Authorisation List") and sunset date: Non-applicable

Regulation (EC) 1005/2009, about substances that deplete the ozone layer: Non-applicable

Article 95, REGULATION (EU) No 528/2012: Reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-2H -isothiazol-3-one [EC no. 220-239-6] (3:1) (Product-type 2, 4, 6, 11, 12, 13)

REGULATION (EU) No 649/2012, in relation to the import and export of hazardous chemical products: Contains Thiomersal

Limitations to commercialisation and the use of certain dangerous substances and mixtures (Annex XVII REACH, etc):

Non-applicable

Specific provisions in terms of protecting people or the environment:

It is recommended to use the information included in this safety data sheet as data used in a risk evaluation of the local circumstances in order to establish the necessary risk prevention measures for the manipulation, use, storage and disposal of this product.

Other legislation:

The product could be affected by sectorial legislation

15.2 Chemical safety assessment:

The supplier has not carried out evaluation of chemical safety.

SECTION 16: OTHER INFORMATION

Legislation related to safety data sheets:

This safety data sheet has been designed in accordance with ANNEX II-Guide to the compilation of safety data sheets of Regulation (EC) N° 1907/2006 (Regulation (EC) N° 2015/830)

Modifications related to the previous Safety Data Sheet which concerns the ways of managing risks.:

TRANSPORT INFORMATION (SECTION 14):

- UN number
- Packing group

Texts of the legislative phrases mentioned in section 2:

H373: May cause damage to organs through prolonged or repeated exposure

H412: Harmful to aquatic life with long lasting effects

H317: May cause an allergic skin reaction

H310: Fatal in contact with skin

H330: Fatal if inhaled

Texts of the legislative phrases mentioned in section 3:

The phrases indicated do not refer to the product itself; they are present merely for informative purposes and refer to the individual components which appear in section 3

Directive 67/548/EC and Directive 1999/45/EC:

R23/24/25: Toxic by inhalation, in contact with skin and if swallowed

R26/27/28: Very toxic by inhalation, in contact with skin and if swallowed

R33: Danger of cumulative effects

R34: Causes burns

R43: May cause sensitisation by skin contact

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

CLP Regulation (EC) n° 1272/2008:

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SECTION 16: OTHER INFORMATION (continued)

Acute Tox. 1: H310 - Fatal in contact with skin
Acute Tox. 2: H300+H330 - Fatal if swallowed or if inhaled
Acute Tox. 3: H301+H311+H331 - Toxic if swallowed, in contact with skin or if inhaled
Aquatic Acute 1: H400 - Very toxic to aquatic life
Aquatic Chronic 1: H410 - Very toxic to aquatic life with long lasting effects
Skin Corr. 1B: H314 - Causes severe skin burns and eye damage
Skin Sens. 1: H317 - May cause an allergic skin reaction
STOT RE 2: H373 - May cause damage to organs through prolonged or repeated exposure

Classification procedure:

STOT RE 2: Calculation method
Aquatic Chronic 3: Calculation method
Skin Sens. 1: Calculation method
Acute Tox. 1: Calculation method
Acute Tox. 2: Calculation method

Advice related to training:

Minimal training is recommended to prevent industrial risks for staff using this product, in order to facilitate their comprehension and interpretation of this safety data sheet, as well as the label on the product.

Principal bibliographical sources:

<http://echa.europa.eu>
<http://eur-lex.europa.eu>

Abbreviations and acronyms:

ADR: European agreement concerning the international carriage of dangerous goods by road
IMDG: International maritime dangerous goods code
IATA: International Air Transport Association
ICAO: International Civil Aviation Organisation
COD: Chemical Oxygen Demand
BOD5: 5-day biochemical oxygen demand
BCF: Bioconcentration factor
LD50: Lethal Dose 50
LC50: Lethal Concentration 50
EC50: Effective concentration 50
Log-POW: Octanol–water partition coefficient
Koc: Partition coefficient of organic carbon

The information contained in this safety data sheet is based on sources, technical knowledge and current legislation at European and state level, without being able to guarantee its accuracy. This information cannot be considered a guarantee of the properties of the product, it is simply a description of the security requirements. The occupational methodology and conditions for users of this product are not within our awareness or control, and it is ultimately the responsibility of the user to take the necessary measures to obtain the legal requirements concerning the manipulation, storage, use and disposal of chemical products. The information on this safety data sheet only refers to this product, which should not be used for needs other than those specified.

- END OF SAFETY DATA SHEET -

**BEHnk - APTT Silica + CaCl₂ : CaCl - 771250 CC 2x10mL 771251
CC 8x10mL
BE APTT SL 2**

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Product identifier: BEHnk - APTT Silica + CaCl₂ : CaCl - 771250 CC 2x10mL 771251 CC 8x10mL
BE APTT SL 2

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

Relevant uses: In vitro diagnostic. For professional user only.

Uses advised against: All uses not specified in this section or in section 7.3

1.3 Details of the supplier of the safety data sheet:

Kommanditgesellschaft Behnk Elektronik GmbH & Co.

Hans-Böckler-Ring 27

22851 Norderstedt - Germany

Phone.: +49 (0)40-529 861 0 -

Fax: +49 (0)40-529 861 99

info@behnk.de

www.behnk.de

1.4 Emergency telephone number: ORFILA (INRS) : + 33 (0)1 45 42 59 59

SECTION 2: HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture:

Directive 67/548/EC and Directive 1999/45/EC:

In accordance with Directive 67/548/EC and Directive 1999/45/EC, the product is not classified as dangerous.

CLP Regulation (EC) n° 1272/2008:

The product is not classified as dangerous according to CLP Regulation (EC) n° 1272/2008.

2.2 Label elements:

Directive 67/548/EC and Directive 1999/45/EC:

In accordance with the legislation, the elements on the label are as follows:

Not classified as dangerous. Safety data sheet available to professional users that request it.

CLP Regulation (EC) n° 1272/2008:

None

2.3 Other hazards:

Product fails to meet PBT/vPvB criteria

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substance:

Non-applicable

3.2 Mixture:

Chemical description: Mixture of substances

Components:

None of the substances contained in the mixture are above the values fixed in Annex II of Regulation (EC) n°1907/2006

SECTION 4: FIRST AID MEASURES

4.1 Description of first aid measures:

Consult a doctor in case of discomfort with this Safety data Sheet.

By inhalation:

In case of symptoms, move the person affected into fresh air.

By skin contact:

In case of contact it is recommended to clean the affected area thoroughly with water and neutral soap. In case of modifications on the skin (stinging, redness, rashes, blisters,...), seek medical advice with this Safety data Sheet

- CONTINUED ON NEXT PAGE -

SECTION 4: FIRST AID MEASURES (continued)

By eye contact:

Rinse with water until the product has been eliminated. In case of problems, consult a doctor with the SDS of this product.

By ingestion/aspiration:

In case of consumption in large quantities, it is recommended to seek medical assistance.

4.2 Most important symptoms and effects, both acute and delayed:

Acute and delayed effects are indicated in sections 2 and 11.

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

Non-applicable

SECTION 5: FIREFIGHTING MEASURES

5.1 Extinguishing media:

Product is non-flammable, low risk of fire by the inflammability characteristics of the product in normal conditions of storage, manipulation and use. In the case of the existence of sustained combustion as a result of improper manipulation, storage or use any type of extinguishing agent can be used (ABC Powder, water,...)

5.2 Special hazards arising from the substance or mixture:

Due to its non-flammable nature, the product does not present a fire risk under normal conditions of storage, manipulation and use.

5.3 Advice for firefighters:

Depending on the magnitude of the fire it may be necessary to use full protective clothing and individual respiratory equipment. Minimum emergency facilities and equipment should be available (fire blankets, portable first aid kit,...) in accordance with Directive 89/654/EC.

Additional provisions:

Act in accordance with the Internal Emergency Plan and the Information Sheets on actions to take after an accident or other emergencies. Destroy any source of ignition. In case of fire, refrigerate the storage containers and tanks for products susceptible to inflammation, explosion or BLEVE as a result of high temperatures. Avoid spillage of the products used to extinguish the fire into an aqueous medium.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures:

Isolate leaks provided that there is no additional risk for the people performing this task.

6.2 Environmental precautions:

This product is not classified as hazardous to the environment. Keep product away from drains, surface and underground water.

6.3 Methods and material for containment and cleaning up:

It is recommended:

Absorb the spillage using sand or inert absorbent and move it to a safe place. Do not absorb in sawdust or other combustible absorbents. For any concern related to disposal consult section 13.

6.4 Reference to other sections:

See sections 8 and 13.

SECTION 7: HANDLING AND STORAGE

7.1 Precautions for safe handling:

A.- Precautions for safe manipulation

Comply with the current legislation concerning the prevention of industrial risks. Keep containers hermetically sealed. Control spills and residues, destroying them with safe methods (section 6). Avoid leakages from the container. Maintain order and cleanliness where dangerous products are used.

B.- Technical recommendations for the prevention of fires and explosions

It is recommended to transfer at a slow speed to avoid the creation of electrostatic charges that could affect flammable products. Consult section 10 for conditions and materials that should be avoided.

- CONTINUED ON NEXT PAGE -

SECTION 7: HANDLING AND STORAGE (continued)

- C.- Technical recommendations to prevent ergonomic and toxicological risks
Do not eat or drink during the process, washing hands afterwards with suitable cleaning products.
- D.- Technical recommendations to prevent environmental risks
It is not necessary to take special measures to prevent environmental risks. For more information see subsection 6.2

7.2 Conditions for safe storage, including any incompatibilities:

- A.- Technical measures for storage
Store in a cool, dry, well-ventilated location
- B.- General conditions for storage
Avoid sources of heat, radiation, static electricity and contact with food. For additional information see subsection 10.5

7.3 Specific end use(s):

Except for the instructions already specified it is not necessary to provide any special recommendation regarding the uses of this product.



SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters:

Substances whose occupational exposure limits have to be monitored in the work environment
There are no occupational exposure limits for the substances contained in the product



8.2 Exposure controls:

- A.- General security and hygiene measures in the work place
As a preventative measure it is recommended to use basic Personal Protection Equipment, with the corresponding <<CE marking>> in accordance with Directive 89/686/EC. For more information on Personal Protection Equipment (storage, use, cleaning, maintenance, class of protection,...) consult the information leaflet provided by the manufacturer. For more information see subsection 7.1.
All information contained herein is a recommendation which needs some specification from the labour risk prevention services as it is not known whether the company has additional measures at its disposal.
- B.- Respiratory protection
The use of protection equipment will be necessary if a mist forms or if the occupational exposure limits are exceeded.
- C.- Specific protection for the hands


Pictogram	PPE	Labelling	CEN Standard	Remarks
 Mandatory hand protection	Protective gloves against minor risks			Replace gloves in case of any sign of damage. For prolonged periods of exposure to the product for professional users/industrials, we recommend using CE III gloves in line with standards EN 420 and EN 374.

As the product is a mixture of several substances, the resistance of the glove material can not be calculated in advance with total reliability and has therefore to be checked prior to the application

D.- Ocular and facial protection


Pictogram	PPE	Labelling	CEN Standard	Remarks
 Mandatory face protection	Panoramic glasses against splash/projections.		EN 166:2001 EN ISO 4007:2012	Clean daily and disinfect periodically according to the manufacturer's instructions. Use if there is a risk of splashing.

E.- Bodily protection

Pictogram	PPE	Labelling	CEN Standard	Remarks
	Work clothing			Replace before any evidence of deterioration. For periods of prolonged exposure to the product for professional/industrial users CE III is recommended, in accordance with the regulations in EN ISO 6529:2001, EN ISO 6530:2005, EN ISO 13688:2013, EN 464:1994.

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SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION (continued)

Pictogram	PPE	Labelling	CEN Standard	Remarks
	Anti-slip work shoes		EN ISO 20347:2012	Replace before any evidence of deterioration. For periods of prolonged exposure to the product for professional/industrial users CE III is recommended, in accordance with the regulations in EN ISO 20345 y EN 13832-1

F.- Additional emergency measures

It is not necessary to take additional emergency measures.

Environmental exposure controls:

In accordance with the community legislation for the protection of the environment it is recommended to avoid environmental spillage of both the product and its container. For additional information see subsection 7.1.D

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties:

For complete information see the product datasheet.

Appearance:

Physical state at 20 °C:	Liquid
Appearance:	Transparent
Colour:	Colourless
Odour:	Not available
Odour threshold:	Non-applicable *

Volatility:

Boiling point at atmospheric pressure:	100 °C
Vapour pressure at 20 °C:	2350 Pa
Vapour pressure at 50 °C:	12381 Pa (12 kPa)
Evaporation rate at 20 °C:	Non-applicable *

Product description:

Density at 20 °C:	1034 kg/m ³
Relative density at 20 °C:	1,034
Dynamic viscosity at 20 °C:	1,04 cP
Kinematic viscosity at 20 °C:	1 cSt
Kinematic viscosity at 40 °C:	Non-applicable *
Concentration:	Non-applicable *
pH:	Non-applicable *
Vapour density at 20 °C:	Non-applicable *
Partition coefficient n-octanol/water 20 °C:	Non-applicable *
Solubility in water at 20 °C:	Non-applicable *
Solubility properties:	Non-applicable *
Decomposition temperature:	Non-applicable *
Melting point/freezing point:	Non-applicable *
Explosive properties:	Non-applicable *
Oxidising properties:	Non-applicable *

Flammability:

Flash Point:	Non Flammable (>60 °C)
Flammability (solid, gas):	Non-applicable *

*Not relevant due to the nature of the product, not providing information property of its hazards.

- CONTINUED ON NEXT PAGE -

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES (continued)

Autoignition temperature: Non-applicable *
Lower flammability limit: Non-applicable *
Upper flammability limit: Non-applicable *

Explosive:

Lower explosive limit: Non-applicable *
Upper explosive limit: Non-applicable *

9.2 Other information:

Surface tension at 20 °C: Non-applicable *
Refraction index: Non-applicable *

*Not relevant due to the nature of the product, not providing information property of its hazards.

SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity:

No hazardous reactions are expected because the product is stable under recommended storage conditions. See section 7.

10.2 Chemical stability:

Chemically stable under the conditions of storage, handling and use.

10.3 Possibility of hazardous reactions:

Under the specified conditions, hazardous reactions that lead to excessive temperatures or pressure are not expected.

10.4 Conditions to avoid:

Applicable for handling and storage at room temperature:

Shock and friction	Contact with air	Increase in temperature	Sunlight	Humidity
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable

10.5 Incompatible materials:

Acids	Water	Combustive materials	Combustible materials	Others
Avoid strong acids	Not applicable	Not applicable	Not applicable	Avoid alkalis or strong bases

10.6 Hazardous decomposition products:

See subsection 10.3, 10.4 and 10.5 to find out the specific decomposition products. Depending on the decomposition conditions, complex mixtures of chemical substances can be released: carbon dioxide (CO₂), carbon monoxide and other organic compounds.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects:

LD50 oral > 2000 mg/kg (rat)

Dangerous health implications:

In case of exposure that is repetitive, prolonged or at concentrations higher than recommended by the occupational exposure limits, it may result in adverse effects on health depending on the means of exposure:

A.- Ingestion (acute effect):

- Acute toxicity : Based on available data, the classification criteria are not met
- Corrosivity/Irritability: Based on available data, the classification criteria are not met

B- Inhalation (acute effect):

- Acute toxicity : Based on available data, the classification criteria are not met
- Corrosivity/Irritability: Based on available data, the classification criteria are not met

C- Contact with the skin and the eyes (acute effect):

- Contact with the skin: Based on available data, the classification criteria are not met
- Contact with the eyes: Based on available data, the classification criteria are not met

- CONTINUED ON NEXT PAGE -

SECTION 11: TOXICOLOGICAL INFORMATION (continued)

D- CMR effects (carcinogenicity, mutagenicity and toxicity to reproduction):

- Carcinogenicity: Based on available data, the classification criteria are not met
- Mutagenicity: Based on available data, the classification criteria are not met
- Reproductive toxicity: Based on available data, the classification criteria are not met

E- Sensitizing effects:

- Respiratory: Based on available data, the classification criteria are not met
- Cutaneous: Based on available data, the classification criteria are not met

F- Specific target organ toxicity (STOT) - single exposure:

Based on available data, the classification criteria are not met

G- Specific target organ toxicity (STOT)-repeated exposure:

- Specific target organ toxicity (STOT)-repeated exposure: Based on available data, the classification criteria are not met
- Skin: Based on available data, the classification criteria are not met

H- Aspiration hazard:

Based on available data, the classification criteria are not met

Other information:

Non-applicable

Specific toxicology information on the substances:

Not available

SECTION 12: ECOLOGICAL INFORMATION

The experimental information related to the eco-toxicological properties of the product itself is not available

12.1 Toxicity:

Not available

12.2 Persistence and degradability:

Not available

12.3 Bioaccumulative potential:

Not available

12.4 Mobility in soil:

Not available

12.5 Results of PBT and vPvB assessment:

Product fails to meet PBT/vPvB criteria

12.6 Other adverse effects:

Not described

SECTION 13: DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods:

Code	Description	Waste class (Regulation (EU) No 1357/2014)
16 05 09	Discarded chemicals other than those mentioned in 16 05 06, 16 05 07 or 16 05 08	Non dangerous

Type of waste (Regulation (EU) No 1357/2014):

Non-applicable

Waste management (disposal and evaluation):

- CONTINUED ON NEXT PAGE -

SECTION 13: DISPOSAL CONSIDERATIONS (continued)

Consult the authorized waste service manager on the assessment and disposal operations in accordance with Annex 1 and Annex 2 (Directive 2008/98/EC). As under 15 01 (2014/955/EC) of the code and in case the container has been in direct contact with the product, it will be processed the same way as the actual product. Otherwise, it will be processed as non-dangerous residue. We do not recommend disposal down the drain. See paragraph 6.2.

Regulations related to waste management:

In accordance with Annex II of Regulation (EC) n°1907/2006 (REACH) the community or state provisions related to waste management are stated

Community legislation: Directive 2008/98/EC, 2014/955/EU, Regulation (EU) No 1357/2014

SECTION 14: TRANSPORT INFORMATION

This product is not regulated for transport (ADR/RID,IMDG,IATA)

SECTION 15: REGULATORY INFORMATION

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

Candidate substances for authorisation under the Regulation (EC) 1907/2006 (REACH): Non-applicable

Substances included in Annex XIV of REACH ("Authorisation List") and sunset date: Non-applicable

Regulation (EC) 1005/2009, about substances that deplete the ozone layer: Non-applicable

Article 95, REGULATION (EU) No 528/2012: Non-applicable

REGULATION (EU) No 649/2012, in relation to the import and export of hazardous chemical products: Non-applicable

Limitations to commercialisation and the use of certain dangerous substances and mixtures (Annex XVII REACH, etc):

Non-applicable

Specific provisions in terms of protecting people or the environment:

It is recommended to use the information included in this safety data sheet as data used in a risk evaluation of the local circumstances in order to establish the necessary risk prevention measures for the manipulation, use, storage and disposal of this product.

Other legislation:

The product could be affected by sectorial legislation

15.2 Chemical safety assessment:

The supplier has not carried out evaluation of chemical safety.

SECTION 16: OTHER INFORMATION

Legislation related to safety data sheets:

This safety data sheet has been designed in accordance with ANNEX II-Guide to the compilation of safety data sheets of Regulation (EC) N° 1907/2006 (Regulation (EC) N° 2015/830)

Modifications related to the previous Safety Data Sheet which concerns the ways of managing risks.:

Non-applicable

Texts of the legislative phrases mentioned in section 3:

The phrases indicated do not refer to the product itself; they are present merely for informative purposes and refer to the individual components which appear in section 3

Directive 67/548/EC and Directive 1999/45/EC:

Non-applicable

CLP Regulation (EC) n° 1272/2008:

Non-applicable

Classification procedure:

Non-applicable

Advice related to training:

- CONTINUED ON NEXT PAGE -

SECTION 16: OTHER INFORMATION (continued)

Minimal training is recommended to prevent industrial risks for staff using this product, in order to facilitate their comprehension and interpretation of this safety data sheet, as well as the label on the product.

Principal bibliographical sources:

<http://echa.europa.eu>
<http://eur-lex.europa.eu>

Abbreviations and acronyms:

ADR: European agreement concerning the international carriage of dangerous goods by road
IMDG: International maritime dangerous goods code
IATA: International Air Transport Association
ICAO: International Civil Aviation Organisation
COD: Chemical Oxygen Demand
BOD₅: 5-day biochemical oxygen demand
BCF: Bioconcentration factor
LD₅₀: Lethal Dose 50
LC₅₀: Lethal Concentration 50
EC₅₀: Effective concentration 50
Log-POW: Octanol–water partition coefficient
K_{oc}: Partition coefficient of organic carbon

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- END OF SAFETY DATA SHEET -