

# Safety Data Sheet

according to Regulation (EC) No 1907/2006

**Vivalytic SARS-CoV-2, Vivalytic SARS-CoV-2 Pooling**

Revision date: 18.11.2020

Product code: F09G300658

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**SECTION 1: Identification of the substance/mixture and of the company/undertaking****1.1. Product identifier**

Vivalytic SARS-CoV-2, Vivalytic SARS-CoV-2 Pooling

**Further trade names**

This SDS covers the following products:

1. Lyobead
2. Elutionspuffer (RB-EB2)
3. Waschpuffer (RB-WB-27)
4. Bindepuffer (RB-BB-34a)

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

Use as laboratory reagent.

**Uses advised against**

Any non-intended use.

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

Company name: Bosch Healthcare Solutions GmbH

Place: D Waiblingen

Post-office box: 11 27  
D Waiblingen

Responsible Department: Info-Bosch-Healthcare@bosch.com

+49 (0) 761 19240 (Poisoning Information Centre Freiburg, Germany)

**1.4. Emergency telephone number:****SECTION 2: Hazards identification****2.1. Classification of the substance or mixture****Regulation (EC) No. 1272/2008**

Hazard categories:

Acute toxicity: Acute Tox. 4

Skin corrosion/irritation: Skin Irrit. 2

Serious eye damage/eye irritation: Eye Irrit. 2

Hazard Statements:

Harmful if swallowed.

Causes skin irritation.

Causes serious eye irritation.

This labelling / classification refers to the product:

Binding buffer (RB-BB-34a): Acute Tox. 4. Skin Irrit. 2. Eye Irrit. 2

**2.2. Label elements****Regulation (EC) No. 1272/2008****Hazard components for labelling**

guanidinium chloride; guanadine hydrochloride

**Signal word:** Warning**Pictograms:**

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### Hazard statements

H302 Harmful if swallowed.  
 H315 Causes skin irritation.  
 H319 Causes serious eye irritation.

### Precautionary statements

P280 Wear protective gloves/protective clothing/eye protection/face protection.  
 P302+P352 IF ON SKIN: Wash with plenty of soap and water.  
 P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
 P337+P313 If eye irritation persists: Get medical advice/attention.  
 P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

### Additional advice on labelling

This labelling / classification refers to the product:

Binding buffer (RB-BB-34a): Hazard pictograms: GHS 07, Signal word: Warning. Precautionary Statements: H315 -H319 - H302

### 2.3. Other hazards

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.

No risks worthy of mention. Please observe the information on the safety data sheet at all times.

## SECTION 3: Composition/information on ingredients

### 3.2. Mixtures

#### Hazardous components

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	GHS Classification			
	Binding buffer (RB-BB-34a):			%
50-01-1	guanidinium chloride; guanadine hydrochloride			25 - 50 %
	200-002-3	607-148-00-0		
	Acute Tox. 4, Skin Irrit. 2, Eye Irrit. 2, H302 H315 H319			

Full text of H and EUH statements: see section 16.

### Further Information

Product does not contain listed SVHC substances > 0,1 % according to Regulation (EC) No. 1907/2006 Article 59 (REACH)

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

#### General information

In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).

#### After inhalation

In case of accident by inhalation: remove casualty to fresh air and keep at rest. In case of respiratory tract irritation, consult a physician.

#### After contact with skin

Gently wash with plenty of soap and water. In case of skin irritation, seek medical treatment.

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**After contact with eyes**

Rinse cautiously with water for several minutes. In case of troubles or persistent symptoms, consult an ophthalmologist.

**After ingestion**

Rinse mouth thoroughly with water. Let water be drunken in little sips (dilution effect). Do NOT induce vomiting. In all cases of doubt, or when symptoms persist, seek medical advice.

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

No information available.

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

Treat symptomatically.

**SECTION 5: Firefighting measures****5.1. Extinguishing media****Suitable extinguishing media**

Carbon dioxide (CO<sub>2</sub>). Dry extinguishing powder. alcohol resistant foam. Atomized water.

**Unsuitable extinguishing media**

High power water jet.

**5.2. Special hazards arising from the substance or mixture**

Can be released in case of fire: Carbon monoxide. Carbon dioxide (CO<sub>2</sub>).

**5.3. Advice for firefighters**

In case of fire: Wear self-contained breathing apparatus.

**Additional information**

Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

Co-ordinate fire-fighting measures to the fire surroundings.

**SECTION 6: Accidental release measures****6.1. Personal precautions, protective equipment and emergency procedures**

Safe handling: see section 7

Personal protection equipment: see section 8

**6.2. Environmental precautions**

Discharge into the environment must be avoided.

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

Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding agents).

Treat the recovered material as prescribed in the section on waste disposal.

Clean contaminated objects and areas thoroughly observing environmental regulations.

**6.4. Reference to other sections**

Disposal: see section 13

**SECTION 7: Handling and storage****7.1. Precautions for safe handling****Advice on safe handling**

Wear suitable protective clothing. (See section 8.)

**Advice on protection against fire and explosion**

Usual measures for fire prevention.

**Further information on handling**

General protection and hygiene measures: See section 8.

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

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### Requirements for storage rooms and vessels

Keep container tightly closed in a cool, well-ventilated place.

### Hints on joint storage

Do not store together with: Explosives. Oxidizing solids. Oxidizing liquids. Radioactive substances. Infectious substances. Food and animal feedingstuff

### Further information on storage conditions

Keep the packing dry and well sealed to prevent contamination and absorption of humidity.

Protect against: frost. UV-radiation/sunlight. heat. Humidity

### 7.3. Specific end use(s)

See section 1.

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

#### Additional advice on limit values

To date, no national critical limit values exist.

### 8.2. Exposure controls

#### Appropriate engineering controls

Provide adequate ventilation.  
Use extractor hood (laboratory).

#### Protective and hygiene measures

Always close containers tightly after the removal of product. When using do not eat, drink, smoke, sniff. Wash hands before breaks and after work.

#### Eye/face protection

Wear safety glasses; chemical goggles (if splashing is possible). BS/EN 166

#### Hand protection

In case of prolonged or frequently repeated skin contact:

Wear suitable gloves.

The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

Before using check leak tightness / impermeability. In the case of wanting to use the gloves again, clean them before taking off and air them well.

#### Skin protection

Suitable protective clothing: Lab apron.

Minimum standard for preventive measures while handling with working materials are specified in the TRGS 500 (D).

#### Respiratory protection

With correct and proper use, and under normal conditions, breathing protection is not required.

#### Environmental exposure controls

No special precautionary measures are necessary.

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

Physical state:	solid (1.) liquid (2.-4.)
Colour:	colourless/various
Odour:	not determined
pH-Value:	8 (2.); 7 (3.); 6,5 (4.)

#### Changes in the physical state

Melting point:	not determined
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Initial boiling point and boiling range:	not determined
Sublimation point:	not determined
Softening point:	not determined
Pour point:	not determined
Flash point:	not determined
Sustaining combustion:	Not sustaining combustion

### Explosive properties

none

Lower explosion limits:	not determined
Upper explosion limits:	not determined
Ignition temperature:	not determined

### Auto-ignition temperature

Gas:

not determined

Decomposition temperature:	not determined
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### Oxidizing properties

none

Vapour pressure:	not determined
Density:	not determined
Water solubility:	not determined

### Solubility in other solvents

not determined

Partition coefficient:	not determined
Viscosity / dynamic:	not determined
Viscosity / kinematic:	not determined
Flow time:	not determined
Vapour density:	not determined
Evaporation rate:	not determined
Solvent separation test:	not determined
Solvent content:	not determined

### 9.2. Other information

Solid content:	not determined
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## SECTION 10: Stability and reactivity

### 10.1. Reactivity

No information available.

### 10.2. Chemical stability

The product is chemically stable under recommended conditions of storage, use and temperature.

### 10.3. Possibility of hazardous reactions

Refer to chapter 10.5.

### 10.4. Conditions to avoid

Protect against: UV-radiation/sunlight. heat.

### 10.5. Incompatible materials

Materials to avoid: Oxidizing agents, strong. Reducing agents, strong.

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### 10.6. Hazardous decomposition products

Can be released in case of fire: Carbon monoxide. Carbon dioxide (CO<sub>2</sub>).

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

#### Toxicocinetics, metabolism and distribution

No data available.

#### Acute toxicity

Harmful if swallowed.

#### ATEmix calculated

ATE (oral) 950,0 mg/kg

CAS No	Chemical name				
	Exposure route	Dose	Species	Source	Method
50-01-1	guanidinium chloride; guanadine hydrochloride				
	oral	LD50 475 mg/kg	Rat		
	inhalation (4 h) vapour	LC50 5,3 mg/l	Rat		

#### Irritation and corrosivity

Causes skin irritation.

Causes serious eye irritation.

#### Sensitising effects

Based on available data, the classification criteria are not met.

#### Carcinogenic/mutagenic/toxic effects for reproduction

Based on available data, the classification criteria are not met.

#### STOT-single exposure

Based on available data, the classification criteria are not met.

#### STOT-repeated exposure

Based on available data, the classification criteria are not met.

#### Aspiration hazard

Based on available data, the classification criteria are not met.

#### Specific effects in experiment on an animal

No data available.

## SECTION 12: Ecological information

### 12.1. Toxicity

The product has not been tested.

CAS No	Chemical name				
	Aquatic toxicity	Dose	[h]   [d]	Species	Source
50-01-1	guanidinium chloride; guanadine hydrochloride				
	Acute fish toxicity	LC50 1758 mg/l	96 h	Leuciscus idus	

### 12.2. Persistence and degradability

The product has not been tested.

CAS No	Chemical name			
	Method	Value	d	Source
	Evaluation			

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50-01-1	guanidinium chloride, guanadine hydrochloride			
	OECD 301C / ISO 9408 / EEC 92/69 annex V, C.4-F	0	56	ECHA Dossier
	Not easily bio-degradable (according to OECD-criteria).			

### 12.3. Bioaccumulative potential

No indication of bioaccumulation potential.

### Partition coefficient n-octanol/water

CAS No	Chemical name	Log Pow
50-01-1	guanidinium chloride, guanadine hydrochloride	-1,7

### 12.4. Mobility in soil

No data available.

### 12.5. Results of PBT and vPvB assessment

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.

### 12.6. Other adverse effects

No data available.

### Further information

Do not allow to enter into surface water or drains.

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

#### Disposal recommendations

Observe in addition any national regulations! Consult the local waste disposal expert about waste disposal.

Non-contaminated packages may be recycled.

According to (EWC) European Waste Catalogue, allocation of waste identity numbers/waste descriptions must be carried out in a specific way for every industry and process.

Control report for waste code/ waste marking according to (EWC) European Waste Catalogue:

#### List of Wastes Code - residues/unused products

160506 WASTES NOT OTHERWISE SPECIFIED IN THE LIST; gases in pressure containers and discarded chemicals; laboratory chemicals, consisting of or containing hazardous substances, including mixtures of laboratory chemicals; hazardous waste

#### List of Wastes Code - used product

160506 WASTES NOT OTHERWISE SPECIFIED IN THE LIST; gases in pressure containers and discarded chemicals; laboratory chemicals, consisting of or containing hazardous substances, including mixtures of laboratory chemicals; hazardous waste

#### List of Wastes Code - contaminated packaging

150106 WASTE PACKAGING; ABSORBENTS, WIPING CLOTHS, FILTER MATERIALS AND PROTECTIVE CLOTHING NOT OTHERWISE SPECIFIED; packaging (including separately collected municipal packaging waste); mixed packaging

#### Contaminated packaging

Handle contaminated packages in the same way as the substance itself.

## SECTION 14: Transport information

### Land transport (ADR/RID)

#### 14.1. UN number:

No dangerous good in sense of these transport regulations.

#### 14.2. UN proper shipping name:

No dangerous good in sense of these transport regulations.

#### 14.3. Transport hazard class(es):

No dangerous good in sense of these transport regulations.

#### 14.4. Packing group:

No dangerous good in sense of these transport regulations.

### Inland waterways transport (ADN)

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<b>14.1. UN number:</b>	No dangerous good in sense of these transport regulations.
<b>14.2. UN proper shipping name:</b>	No dangerous good in sense of these transport regulations.
<b>14.3. Transport hazard class(es):</b>	No dangerous good in sense of these transport regulations.
<b>14.4. Packing group:</b>	No dangerous good in sense of these transport regulations.

### Marine transport (IMDG)

<b>14.1. UN number:</b>	No dangerous good in sense of these transport regulations.
<b>14.2. UN proper shipping name:</b>	No dangerous good in sense of these transport regulations.
<b>14.3. Transport hazard class(es):</b>	No dangerous good in sense of these transport regulations.

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

<b>14.1. UN number:</b>	No dangerous good in sense of these transport regulations.
<b>14.2. UN proper shipping name:</b>	No dangerous good in sense of these transport regulations.
<b>14.3. Transport hazard class(es):</b>	No dangerous good in sense of these transport regulations.

### 14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: no

### 14.6. Special precautions for user

Refer to section 6-8

### 14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

not relevant

## SECTION 15: Regulatory information

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

#### EU regulatory information

2010/75/EU (VOC): 2004/42/EC No information available. No information available.  
 Information according to 2012/18/EU (SEVESO III): Not subject to 2012/18/EU (SEVESO III)

#### Additional information

Safety Data Sheet according to Regulation (EC) No. 1907/2006 (amended by Regulation (EU) No 2019/957)  
 Product 4:

The mixture is classified as hazardous according to regulation (EC) No 1272/2008 [CLP].

REACH 1907/2006 Appendix XVII, No (mixture): 3

Product 1.-3.:

The mixture is classified as not hazardous according to regulation (EC) No 1272/2008 [CLP].

REACH 1907/2006 Appendix XVII, No (mixture): not relevant

#### National regulatory information

Employment restrictions: Observe restrictions to employment for juveniles according to the 'juvenile work protection guideline' (94/33/EC).

### 15.2. Chemical safety assessment

For the following substances of this mixture a chemical safety assessment has been carried out:

## SECTION 16: Other information

### Changes

Rev. 1.0; Initial release: 17.07.2020

### Abbreviations and acronyms

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)



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AGW: Arbeitsplatzgrenzwert  
 CAS: Chemical Abstracts Service  
 CLP: Classification, Labelling and Packaging of substances and mixtures  
 DNEL: Derived No Effect Level  
 d: day(s)  
 EINECS: European INventory of Existing Commercial chemical Substances  
 ELINCS: European List of Notified Chemical Substances  
 ECHA: European Chemicals Agency  
 EWC: European Waste Catalogue  
 IARC: INTERNATIONAL AGENCY FOR RESEARCH ON CANCER  
 IMDG: International Maritime Code for Dangerous Goods  
 IATA: International Air Transport Association  
 IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)  
 ICAO: International Civil Aviation Organization  
 ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO)  
 GHS: Globally Harmonized System of Classification and Labelling of Chemicals  
 GefStoffV: Gefahrstoffverordnung (Ordinance on Hazardous Substances, Germany)  
 h: hour  
 LOAEL: Lowest observed adverse effect level  
 LOAEC: Lowest observed adverse effect concentration  
 LC50: Lethal concentration, 50 percent  
 LD50: Lethal dose, 50 percent  
 NOAEL: No observed adverse effect level  
 NOAEC: No observed adverse effect concentration  
 NLP: No-Longer Polymers  
 N/A: not applicable  
 OECD: Organisation for Economic Co-operation and Development  
 PNEC: predicted no effect concentration  
 PBT: Persistent bioaccumulative toxic  
 RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)  
 REACH: Registration, Evaluation, Authorisation of Chemicals  
 SVHC: substance of very high concern  
 TRGS: Technische Regeln für Gefahrstoffe  
 UN: United Nations  
 VOC: Volatile Organic Compounds

### Classification for mixtures and used evaluation method according to Regulation (EC) No. 1272/2008 [CLP]

Classification	Classification procedure
Acute Tox. 4; H302	Calculation method
Skin Irrit. 2; H315	Calculation method
Eye Irrit. 2; H319	Calculation method

### Relevant H and EUH statements (number and full text)

H302 Harmful if swallowed.  
 H315 Causes skin irritation.  
 H319 Causes serious eye irritation.

### Further Information

Classification according to Regulation (EC) No 1272/2008 [CLP] - Classification procedure:

Health hazards: Calculation method.

Environmental hazards: Calculation method.

Physical hazards: On basis of test data and / or calculated and / or estimated.

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product

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named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.

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***(The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)***