



Material Safety Data Sheets

Doc. Number

MSDS-M-NCOV-01-0119022800

Revision Date(No.)

2020.01.29(0)

1) Product and company identification

Model Name STANDARD M nCoV Real-Time Detection kit**Reference Number** M-NCOV-01

Manufacturer Information

Name SD Biosensor, Inc.**Address** Head office: C-4th&5th, 16, Deogyong-daero, 1556beon-gil, Yeongtong-gu, Suwon-si, Gyeonggi-do 16690, KOREA

Manufacturing site: 74, Osongsaengmyeong 4-ro, Osong-eup, Heungdeok-gu, Cheongju-si, Chungcheongbuk-do, 28161, KOREA

Telephone**Fax****Emergency phone number**

2) Hazards identification

2.1 Classification of the substance or mixture

Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008.

Not a hazardous substance or mixture according to EC-directives 67/548/EEC or 1999/45/EC

2.2 Label elements

The product does not need to be labelled in accordance with EC directives or respective national laws.

2.3 Other hazards - none

3) Composition/Information on ingredients

1. 2019-nCoV Reaction solution

Ingredient name	Cas number	Percentage
MgCl ₂	14989-29-8	10-20mmol/L
dNTPs	--	0.2-2mmol/L
Water	7732-18-5	Up to 100%(v/v)

2. RTase Mix

Ingredient name	Cas number	Percentage
Glycerol	56-81-5	5-50%(v/v)
Water	7732-18-5	Up to 100%(v/v)

3. 2019-nCoV Positive control

Ingredient name	Cas number	Percentage
Tris	77-86-1	1-20mmol/L
EDTA	60-00-4	0.5-5mmol/L
Water	7732-18-5	Up to 100%(v/v)

4. Negative control

Ingredient name	Cas number	Percentage
Diethyl Pyrocarbonate	1609-47-8	0.1%(v/v)
water	7732-18-5	Up to 100%(v/v)

5. Internal control A

Ingredient name	Cas number	Percentage
NaCl	7647-14-5	0.9%(v/w)
water	7732-18-5	Up to 100%(v/v)

No components need to be disclosed according to the applicable regulations.



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4) Emergency first aid measures

4.1 Description of first aid measures

General advice

Consult a physician. Show this safety data sheet to the doctor in attendance.

If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

In case of skin contact

Wash off with soap and plenty of water at least 20 minutes. Consult a physician.

In case of eye contact

Rinse thoroughly with plenty of water for at least 20 minutes and consult a physician.

If swallowed/ d

Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

4.2 Most important symptoms and effects, both acute and delayed

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

4.3 Indication of any immediate medical attention and special treatment needed

no data available

5) Fire-Fighting measures

5.1 Extinguishing media

Suitable extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment

5.2 Special hazards arising from the substance or mixture

Not combustible.

5.3 Advice for firefighters

Wear self- contained breathing apparatus for fire- fighting if necessary.

5.4 Further information

no data available

6) Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures

Avoid breathing vapors, mist or gas.

6.2 Environmental precautions

Do not let product enter drains.



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6.3 Methods and materials for containment and cleaning up

Keep in suitable, closed containers for disposal.

6.4 Reference to other sections

For disposal see section 13.

7) Handling and storage

7.1 Precautions for safe handling

no data available

7.2 Conditions for safe storage, including any incompatibilities

Store in -15 ° C to -25 ° C conditions. Keep container tightly closed. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

Recommended storage room temperature

7.3 Specific end uses

no data available

8) Exposure controls/Personal protection

8.1 Control parameters

Components with workplace control parameters

8.2 Exposure controls

Appropriate engineering controls

Personal protective equipment

Eye/face protection

Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin protection

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

Body Protection

impervious clothing. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection

Respiratory protection not required. For nuisance exposures use type OV/AG (US) or type ABEK (EU EN 14387) respirator cartridges. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

9) Physical and chemical properties

9.1 Information on basic physical and chemical properties

- | | |
|---------------------|-------------------|
| a) Appearance Form: | Liquid |
| b) Odour | no data available |
| c) Odour Threshold | no data available |
| d) pH | no data available |



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- e) Melting point/freezing point : no data available
- f) Initial boiling point and boiling range : 100 °C at 1.013 hPa
- g) Flash point : no data available
- h) Evaporation rate : no data available
- i) Flammability (solid, gas) : no data available
- j) Upper/lower flammability or explosive limits : no data available
- k) Vapour pressure : no data available
- l) Vapour density : no data available
- m) Relative density : no data available
- n) Water solubility : no data available
- o) Partition coefficient
noctanol/ water : no data available
- p) Autoignition temperature : no data available
- q) Decomposition temperature : no data available
- r) Viscosity : no data available
- s) Explosive properties : no data available
- t) Oxidizing properties : no data available

9.2 Other safety information

no data available

10) Stability and Reactivity data

10.1 Reactivity : no data available

10.2 Chemical stability : no data available

10.3 Possibility of hazardous reactions b. : no data available

10.4 Conditions to avoid : no data available

10.5 Incompatible materials : Strong bases, Strong oxidizing agents, Strong acids

10.6 Hazardous decomposition products : Other decomposition products - no data available

11) Toxicological information

Acute toxicity : no data available

Skin corrosion/irritation : no data available

Serious eye damage/eye irritation : no data available

Respiratory or skin sensitization : no data available

Germ cell mutagenicity : no data available

Carcinogenicity

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

Reproductive toxicity : no data available



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Specific target organ toxicity - single exposure : no data available

Specific target organ toxicity - repeated exposure : no data available

Aspiration hazard : no data available

Potential health effects

Inhalation May be harmful if inhaled. May cause respiratory tract irritation.

Ingestion May be harmful if swallowed.

Skin May be harmful if absorbed through skin. May cause skin irritation.

Eyes May cause eye irritation.

Signs and Symptoms of Exposure

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

Additional Information

RTECS: Not available

12) Ecological information

12.1 Toxicity : no data available

12.2 Persistence and degradability : no data available

12.3 Bioaccumulative potential : no data available

12.4 Mobility in soil : no data available

12.5 Results of PBT and vPvB assessment : no data available

12.6 Other adverse effects : no data available

13) Disposal considerations

13.1 Waste treatment methods

Product

Offer surplus and non-recyclable solutions to a licensed disposal company.

Contaminated packaging

Dispose of as unused product

14) Transport information

14.1 UN number

ADR/RID: -

IMDG: -

IATA: -

14.2 UN proper shipping name

ADR/RID: Not dangerous goods

IMDG: Not dangerous goods

IATA: Not dangerous goods

14.3 Transport hazard class(es)

ADR/RID: -

IMDG: -

IATA: -

14.4 Packaging group

ADR/RID: -

IMDG: -

IATA: -

14.5 Environmental hazards



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ADR/RID: no

IMDG Marine pollutant: no

IATA: no

14.6 Special precautions for user

no data available

15) Regulatory information

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

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

no data available

15.2 Chemical Safety Assessment

no data available

16) Other information

16.1 Training advice

Provide adequate information, instruction and training for operators.

The information, data and recommendations contained herein are based upon information believed by SD Biosensor, Inc., after reasonable investigation and research, to be accurate; however, SD Biosensor, Inc., does not warrant the accuracy of this information. All materials and mixtures may present unknown hazards and should be used with caution. When necessary or appropriate, independent opinions regarding the risk of handling or exposure should be obtained from trained professionals. SD Biosensor, Inc., disclaims any warranty against patent infringement and the implied warranties of merchantability and fitness for a particular purpose. Customer's sole and exclusive remedy shall be replacement of the product or return of the product and refund of the purchase price, at SD Biosensor, Inc.'s option. In no case shall SD Biosensor, Inc. be liable for incidental or consequential damages, including lost profits.