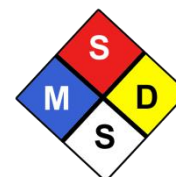


Revision Date: 15-Jun-2018

Prepared according to 1907/2006/EC, Article 31

Material Safety Data Sheet



CVX Viral RNA Extraction Kit

Ref:

AN0105

AN0105-XL

1- Company/Undertaking Identification

1.2 Company Details:

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2. HAZARDS IDENTIFICATION

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Buffer BLQ

GHS Classification

Physical hazards

Not Hazardous

Health hazards

Acute toxicity (Oral): Category 4

Acute toxicity (Inhalation): Category 4

kin irritation: Category 2

Eye irritation: Category 2A

GHS Label element

Hazard pictograms:



Signal Word: Warning

Hazard Statements

H315 - Causes skin irritation

H319 - Causes serious eye irritation

H302 - Harmful if swallowed

H412 - Harmful to aquatic life with long lasting effects

Precautionary Statements

Prevention

P261 - Avoid breathing dust/fume/gas/mist/vapours/spray

P280 - Wear protective gloves/protective clothing/eye protection/face protection

P273 - Avoid release to the environment

P270 - Do not eat, drink or smoke when using this product

Response

P301 + P310 - IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician

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

P330 - Rinse mouth

P332 + P313 - If skin irritation occurs: Get medical advice/attention

Storage

Not Applicable

Disposal

P501 - Dispose of contents/ container to an approved waste disposal plant

Other hazards

Not Applicable



Buffer WB1

GHS Classification

Physical hazards

Not Hazardous

Health hazards

Acute toxicity (Oral): Category 4

Acute toxicity (Inhalation): Category 4

kin irritation: Category 2

Eye irritation: Category 2A

GHS Label element

Hazard pictograms:



Signal Word: Warning

Hazard Statements:

H302 + H332 Harmful if swallowed or if inhaled.

H315 Causes skin irritation.

H319 Causes serious eye irritation.

Precautionary Statements:

Prevention:

P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.

Other hazards None known.

Buffer WB2*

GHS Classification

Not a hazardous substance or mixture.

GHS Label element

Not a hazardous substance or mixture.

Other hazards

None known.

RNase Free Water*

GHS Classification

Not a hazardous substance or mixture.

GHS Label element

Not a hazardous substance or mixture.

Other hazards

None known.



Carrier RNA*

GHS Classification

Not a hazardous substance or mixture.

GHS Label element

Not a hazardous substance or mixture.

Other hazards

None known.

* The component mentioned above is not classified as hazardous according to CLP Regulation (EC) No 1272/2008. Consequently, does not require a Material Safety Data Sheet (MSDS), according to Regulation (EC) No 1907/2006, emended by Regulation (EC) No 2015/830.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Buffer BLQ:

Substance / Mixture: Mixture

Chemical Name	CAS-No.	Concentration (% w/w)
guanidinium thiocyanate	593-84-0	>= 50 - < 70

Buffer WB1:

Substance / Mixture: Mixture

Chemical Name	CAS-No.	Concentration (% w/w)
guanidine hydrochloride	50-01-1	>= 50 - < 70

Buffer WB2:

Substance / Mixture: Mixture

Hazardous ingredients: No hazardous ingredients

RNase Free Water:

Substance

Hazardous ingredients: No hazardous ingredients

Carrier RNA:

Substance / Mixture: Mixture

Hazardous ingredients: No hazardous ingredients



4. FIRST AID MEASURES

Description of first aid measures:

The symptoms resulting from intoxication can appear after exposure, therefore, in case of doubt, seek medical attention for direct exposure to the chemical product or persistent discomfort, showing the SDS of this product.

By inhalation:

This product is not classified as hazardous through inhalation. However, in case of intoxication symptoms it is recommended to remove the person affected from the area of exposure, provide clean air and keep at rest. Request medical attention if symptoms persist.

By skin contact:

This product is not classified as hazardous when in contact with the skin. However, in case of skin contact it is recommended to remove contaminated clothes and shoes, rinse the skin or if necessary, shower the affected person thoroughly with cold water and neutral soap. In case of serious reaction consult a doctor.

By eye contact:

Rinse eyes thoroughly with water for at least 15 minutes. If the injured person uses contact lenses, these should be removed unless they are stuck to the eyes, in which case removal could cause further damage. In all cases, after cleaning, a doctor should be consulted as quickly as possible with the SDS for the product.

By ingestion/aspiration:

Request medical assistance immediately, showing the SDS of this product. Do not induce vomiting, but if it does happen keep the head down to avoid aspiration. In the case of loss of consciousness do not administer anything orally unless supervised by a doctor. Rinse out the mouth and throat, as they may have been affected during ingestion. Keep the person affected at rest.

Most important symptoms and effects, both acute and delayed:

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

Indication of any immediate medical attention and special treatment needed:

Non-applicable

5. FIRE-FIGHTING MEASURES

Extinguishing media:

If possible, use polyvalent powder fire extinguishers (ABC powder), alternatively use foam or carbon dioxide extinguishers (CO₂).

IT IS RECOMMENDED NOT to use full jet water as an extinguishing agent.

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.

Advice for firefighters:

Depending on the magnitude of the fire it may be necessary to use full protective clothing and self-contained breathing apparatus (SCBA). 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. Eliminate all sources of ignition. In case of fire, cool the storage containers and tanks for products susceptible to combustion, explosion or BLEVE as a result of high temperatures. Avoid spillage of the products used to extinguish the fire into an aqueous medium.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions

Wear protective gloves and goggles. Evacuate area. Shut off all sources of ignition.

Environmental precautions

Product must not enter ground, sewerage system or water course

Measures for cleaning/collecting

Collect spilled liquid with liquid-binding material or inert absorbent and place it in a container for disposal. Wash spill site after material pickup is complete.

7. HANDLING AND STORAGE

Handling

Always keep the containers tightly closed. Observe good laboratory technique when handling.

Storage

Store each component of the kit in the original container, at room temperatures.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Control parameters**BLQ buffer**

Contains no substances with occupational exposure limit values.

Carrier RNA

Contains no substances with occupational exposure limit values.

WB1 buffer

Contains no substances with occupational exposure limit values.

WB2 buffer

Contains no substances with occupational exposure limit values.

Nuclease free water

Contains no substances with occupational exposure limit values.

Exposure controls**Engineering measures**

No data available

Personal protective equipment**Eye protection :**

Eye wash bottle with pure water
Tightly fitting safety goggles



Wear face-shield and protective suit for abnormal processing problems.

Hand protection

Material:

Protective gloves

Remarks:

The selected protective gloves have to satisfy the specifications of Regulation (EU) 2016/425 and the standard EN 374 derived from it. This recommendation is only valid for the product mentioned in the safety data sheet and provided by us and for the application specified by us. Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. Also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion, and the contact time. The suitability for a specific workplace should be discussed with the producers of the protective gloves.

Skin and body protection

Impervious clothing

Choose body protection according to the amount and concentration of the dangerous substance at the work place.

9. PHYSICAL AND CHEMICAL PROPERTIES

BLQ Buffer

Appearance: Liquid

Odour: Odourless

Solubility: no data available

pH : 7.4

WB1 Buffer

Appearance: Colourless, Liquid

Odour: Odourless

Solubility: no data available

pH : 4.5

WB2 Buffer

Appearance: Colourless, Liquid

Odour: Odourless

Solubility: no data available

pH : 7

RNase Free water

Appearance: Colourless, Liquid

Odour: Odourless



pH : 7

RNase Free water

Appearance: Lyophilized

Odour: no data available

pH : no data available

10. STABILITY AND REACTIVITY

Hazardous reactions: none under normal use

Hazardous decomposition products: none

Reactivity

No dangerous reaction known under conditions of normal use.

Chemical stability

Stable under normal conditions.

Possibility of hazardous reactions

Hazardous reactions:

Keep away from heat and sources of ignition.

Reacts with the following substances:

Acids

Oxidizing agents

No decomposition if stored and applied as directed.

Conditions to avoid

Conditions to avoid : Heat, flames and sparks.

Incompatible materials

Materials to avoid :

Strong acids and oxidizing agents

Bases

Hazardous decomposition products

In case of fire hazardous decomposition products may be produced such as:

Carbon monoxide, carbon dioxide and unburned hydrocarbons (smoke).

Nitrogen oxides (NO_x)

Ammonia

Gaseous hydrogen chloride (HCl)

11. TOXICOLOGICAL INFORMATION

BLQ Buffer

Information on Likely Routes of Exposure:

Inhalation: Harmful if inhaled. May cause respiratory tract irritation.

Ingestion: Harmful if swallowed.

Skin: Harmful if absorbed through skin. May cause skin irritation.

Eyes: May cause eye irritation.

Acute Toxicity:

Oral LD50: 593 mg/kg (Rat)

Inhalation LC50: No data available

Dermal LD50: No data available



Other Information: Peritoneal LD50: 300 mg/kg (Mouse)

Skin Corrosion/Irritation: No data available

Serious Eye Damage/Irritation: No data available

Respiratory or Skin Sensitization: Components of this product may be absorbed into the body through the skin. Irritating to skin and mucus membranes.

Specific target organ toxicity(STOT)–singleexposure

May cause respiratory irritation

Specific target organ toxicity (STOT)–repeatedexposure

Data are conclusive but insufficient for classification

Carcinogenicity

Data are conclusive but insufficient for classification

Germ cell mutagenicity

Data are conclusive but insufficient for classification

Reproductive Toxicity

Data are conclusive but insufficient for classification

Aspiration Hazard

Data are conclusive but insufficient for classification

WB1 Buffer

Acute toxicity

Ingredients:

guanidine hydrochloride:

Acute oral toxicity : LD50 Oral (Rat): 1,120 mg/kg

Skin corrosion/irritation

Causes skin irritation.

Serious eye damage/eye irritation

Causes serious eye irritation.

May cause irreversible eye damage.

Respiratory or skin sensitization

Skin sensitization: Not classified based on available information.

Respiratory sensitization: Not classified based on available information.

Specific target organ toxicity(STOT)–singleexposure

May cause respiratory irritation

Specific target organ toxicity (STOT)–repeatedexposure

Data are conclusive but insufficient for classification

Carcinogenicity

Data are conclusive but insufficient for classification

Germ cell mutagenicity

Data are conclusive but insufficient for classification

Reproductive Toxicity

Data are conclusive but insufficient for classification

Aspiration Hazard

Data are conclusive but insufficient for classification



11. ECOLOGICAL INFORMATION

Ecotoxicity

The environmental impact of this product has not been fully investigated.

Toxicity

Components:

Toxicity to fish: No data available

Toxicity to algae: No data available

Toxicity to bacteria: No data available

Persistence and degradability

No data available

Bioaccumulation: No data available

Mobility in soil

No data available

Results of PBT and vPvB assessment

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.

Other adverse effects

Additional ecological information

An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

Harmful to aquatic life with long lasting effects

12. DISPOSAL CONSIDERATIONS

Waste treatment methods

The generation of waste should be avoided or minimized wherever possible. Empty containers or liners may retain some product residues. This material and its container must be disposed of in accordance with approved disposal technique. Disposal of this product, its solutions or of any by-products, shall comply with the requirements of all applicable local, regional or national/federal regulations.

13. TRANSPORT INFORMATION

BLQ Buffer:

IATA / ADR / DOT-US / IMDG

Not regulated in the meaning of transport regulations

UN number Not Applicable

UN proper shipping name Not Applicable

Transport hazard class(es) Not Applicable

Packing group Not Applicable

Environmental hazards Not Applicable

Special precautions for user Not Applicable

Transport in bulk according to Annex II of MARPOL and the IBC Code

Not Applicable.



WB1 Buffer:

IATA / ADR / DOT-US / IMDG

Not regulated in the meaning of transport regulations

UN number Not Applicable

UN proper shipping name Not Applicable

Transport hazard class(es) Not Applicable

Packing group Not Applicable

Environmental hazards Not Applicable

Special precautions for user Not Applicable

Transport in bulk according to Annex II of MARPOL and the IBC Code

Not Applicable.

14. REGULATIONS

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

Substances of Very High Concern: None.

Substance subject to authorization per REACH Annex XIV: None

Restricted substances under EC 1907/2006, Annex XVII: None.

Substances listed under Annex I of Regulation (EC) No 689/2008: None.

Restricted substances under Annex V of Regulation (EC) No 689/2008: None.

Substances under Regulation (EC) No 850/2004 of the European Parliament and of the Council of 29 April 2004 on persistent organic pollutants and amending Directive 79/117/EEC: None.

Chemical Safety Assessment: No data available

15. OTHER INFORMATION

The preceding information was acquired through a research and diligent investigation and the recommendations are based on prudent application of professional judgment. The information should not be considered as exhaustive and should be used only as a guide. All materials and mixtures may present unknown hazards and should be used with care. Since the company cannot control the actual methods, volumes, or the field conditions, the company shall not be liable for any damages or losses resulting from handling or from contact with the product described herein. THE INFORMATION IN THIS MSDS DOES NOT CONSTITUTE A WARRANTY, EXPRESS OR IMPLIED, INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE.

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