MATERIAL SAFETY DATA SHEET


1. Identification of the substance/mixture and of the company/undertaking

**Product Name:** Viral nucleic acid: positive-sense RNA

**Volume:** Various (typically <1mL per tube)

**Contact:** Culture Collections  
Public Health England  
Porton Down, Wiltshire  
United Kingdom. SP4 0JG  
Telephone +44 (01980) 612512  
Out of hours + 44 (01980) 612100  
Email: culturecollections@phe.gov.uk / culturecollections.ncpv@phe.gov.uk

2. Hazard identification

**Biological hazards**
This material was extracted from an ACDP Hazard Group (Bio-safety level) 2 or Hazard Group 3 virus. There is no evidence that it is infectious (the virus was inactivated using a well-validated chaotropic agent), but should still be handled using standard microbiological practices. A laboratory coat, latex or nitrile gloves, and eye protection should be worn.

**Health Effects**
Eyes: Not known.
Skin: Not known.
Ingestion: Not known.
Inhalation: Not known.

**Physical Hazards**
It is recommended that persons handling this material should wear a laboratory overall, protective glasses and protective gloves. Shipping container contains dry ice so packages should be stored in well ventilated areas.
3. **Composition/information on ingredients**

Product appears as either (1) clear fluid in a 2ml plastic tube or (2) clear fluid in a plastic 96 well plate. This product is supplied either frozen on dry ice or thawed on cold ice packs. The nucleic acid is dissolved in an aqueous, inorganic buffer.

4. **First aid measures**

If accidental contact with material occurs laboratory staff must follow the local first aid procedures that are normally applied following exposure to organisms of ACDP Hazard Group 2.

- **Eyes:** Irrigate with physiological saline or water. Seek medical advice immediately.
- **Skin:** Wash thoroughly with soap and water. Seek medical advice immediately.
- **Ingestion:** Seek medical advice immediately.
- **Inhalation:** Seek medical advice immediately.

5. **Fire-fighting measures**

- **Extinguisher medium:** N/A
- **Unsuitable Extinguisher medium:** N/A
- **Protective equipment for fire fighting:** N/A

6. **Accidental release measures**

- **Personal precautions:** Avoid direct contact with the material. Do not open the primary containers unless authorised to do so. Wear a laboratory overall, disposable protective gloves and safety glasses.
- **Environmental precautions:** If spillage occurs place absorbent material over the spillage to saturate and leave for 30 minutes prior to cleaning and disposal. The preferred disinfectant is 10% v/v sodium hypochlorite (10,000 parts per million available chlorine). This should not be used in combination with other disinfectants. See your local risk assessment or contact the manufacturer of the disinfectant for additional information.

7. **Handling and storage**

- **Handling:** Personal protective equipment comprised of laboratory coat, disposable protective gloves and safety glasses should be worn when handling. Product should be handled under ACDP Containment Level 2 conditions.
- **Storage:** Store package in a well ventilated area as it contains dry ice (solid carbon dioxide).

Detailed discussions of laboratory safety procedures are provided in: “Laboratory Safety: Principles and Practice” (Fleming, et al, 1995), and in the U.S. Government Publication, “Bio-safety in Microbiological and Biomedical Laboratories” (CDC,

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8. Exposure controls/personal protection

Engineering control measures: Personal protective equipment comprised of laboratory coat, disposable gloves and safety glasses should be worn.
Respiratory protection: Avoid aerosol production and inhalation.
Hand Protection: wear protective gloves at all times.
Eye protection: wear safety glasses at all times.

9. Physical and chemical properties

Appearance: Clear liquid.
Additional Components: AVE elution buffer (Qiagen).
Other Properties: None

10. Stability and reactivity

Reactivity data: Stable.
Conditions to avoid: Exposure of package to direct heat.
Hazardous decomposition products: Cardice will sublime to gaseous carbon dioxide.

11. Toxicological information

Infection of positive-sense RNA would require assisted entry into a living host cell e.g. electroporation or transfection, and even then may not trigger a replication cycle due to innate immunity. There is no evidence that this material presents any actual biological hazard, but Containment Level 2 practices are recommended. The toxicological risk from additional chemicals in not known.

12. Ecological information

Mobility: N/A
Persistence / degradability: N/A
Bioaccumulation: N/A
Ecotoxicity: N/A

13. Disposal considerations

Disinfection with 10% v/v sodium hypochlorite is recommended prior to disposal.
Follow all national, regional and local regulations. The UK Environmental Protection Act 1990 applies.
14. **Transport information**

Additional information arising from the Carriage of Dangerous Goods and Use of Transportable Pressure Equipment Regulations 2007:

UN nos: 1845 and 3373 / 2814 / 2900
Packing Instruction: PI 650 (UN3373) or PI 620 (UN2814; UN2900)

15. **Regulatory information**

Material extracted from certain organisms may be covered by UK and international legislation including Advisory Committee for Dangerous Pathogens, Specified Animal Pathogen Order and Anti-terrorism, Crime and Security Act.

For agents covered by the Health & Safety Executive Specified Animal Pathogen Order, a SAPO holding licence is required for transfer to another laboratory.

For certain agents, an export licence is required if these agents are shipped outside the EU (1C351a31 of Annex 1 to the EC regulations).

I confirm that all necessary licenses required for the consignment of this material are in place and the recipient is able to safely handle the material.

Print name: Barry Atkinson  
Sign:  
Date: 23/04/2020

16. **Other information**

All materials and mixtures may present unknown hazards and should be used with caution. The user should make independent assessments and decisions regarding the completeness of the information based on all sources available. It is recommended that persons using this substance or material are fully acquainted with the hazards/safety in use procedures before handling. This data sheet does not constitute an assessment as required by the Control of Substances Hazardous to Health Regulations 2002 (as amended). The information contained in this publication is provided in good faith and is accurate to the best of our knowledge.

Completed by NCPV representative:  
Name: Barry Atkinson  
Signature:  
Date: 23/04/2020

Checked by Divisional Safety Officer:  
Name: Ros Packer  
Signature:  
Date: 27.4.20