MATERIAL SAFETY DATA SHEET

Material Safety Data Sheet for Cell Cultures
Containment (Bio-safety) Levels 1 or 2.
European Collection of Cell Culture Cell Lines

1. Identification of the product and the establishment

Refer to Attached Cell Line Data Sheet

Contact: **European Collection of Cell Cultures (ECACC)**
Health Protection Agency
Porton Down, Wiltshire
United Kingdom. SP4 0JG
Telephone (01980) 612512; working hours
Telephone (01980) 612100; out of hours or
On-call Mobile: 07796 946660
Fax + 44 (01980) 611315
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2. Physical and Chemical properties and information on ingredients

Appearance: Fluid in small glass or plastic containers (vials).
Solid/liquid/gas: Solid (frozen state); Liquid (thawed state).
The product is provided as either a frozen culture or a growing culture of animal cells shipped in liquid cell culture medium in a flask.
Appearance: pink or red aqueous liquid for growing cultures.
Yellowish solid for frozen cultures. Aqueous pH 6-8.
The components may include but are not limited to: water, inorganic salts, vitamins, amino acids, carbohydrates, lipids, proteins (animal-derived) and cryoprotectant (dimethyl sulphoxide 10% v/v; or glycerol 10-20% v/v), phenol red.

3. Hazards identification

Chemical Hazards:
Frozen culture may contain 5 to 10% (v/v) dimethyl sulphoxide

Biological hazards
Although most animal cell lines are not known to contain any agents capable of harm to healthy adult humans, the possibility of a contaminant or adventitious virus can rarely be excluded. Therefore, it is recommended that all animal cell lines are handled as a Containment (Biosafety) Level 2 organism. The attached Data Sheet includes any specific instructions that may pertain to the biohazard potential of this cell line and that should be considered by the user when performing a risk assessment. Any such information will not be inconsistent with Containment

(Bio-safety) Level 2. The user is referred to the relevant references in the attached Cell Line Data Sheet
Health Effects:
Eyes: Not known; Skin: Not known; Ingestion: Not known; Inhalation: Not known

Physical Hazards
In the case of cell lines being shipped as frozen ampoules there is a small risk that the ampoule may be pressurised, due to the expansion of trapped liquid nitrogen and could explode on warming. Such a risk will be increased if, (unusually), the ampoule has been shipped to the customer in a liquid nitrogen container (dry-shipper).
It is recommended that persons handling ampoules of frozen cell suspension should wear a laboratory overall, protective glasses and insulated gloves

This sheet does not constitute an assessment as required by the Control of Substances Hazardous to Health Regulations 1994.

The information contained in this publication is given in good faith and is accurate to the best of our knowledge.

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.
Contact ECACC.
Skin: Wash thoroughly with soap and water. Seek medical advice immediately.
Contact ECACC.
Ingestion: Seek medical advice immediately. Contact ECACC.
Inhalation: Seek medical advice immediately. Contact ECACC.

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 gloves and safety glasses.
Environmental precautions: if spillage occurs place absorbent material over the spillage and disinfect; see below.
Spillage: wear a laboratory overall, safety glasses and disposable gloves. Place paper towels or other absorbent material over the spillage. Pour disinfectant over 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

Personal protective equipment comprised of laboratory coat, disposable gloves and safety glasses should be worn when handling (unpacking) animal cell lines The dry ice (solid carbon dioxide) used to ship frozen ampoules should be allowed to evaporate in a well-ventilated area. Do not dispose of dry ice in a sealed container.

Ampoules or flasks containing animal cells should be opened in a Class II microbiological safety cabinet under conditions of Containment (Biohazard) Level 2.

Detailed discussions of laboratory safety procedures are provided in: "Laboratory Safety: Principles and Practice" (Fleming, et al, 1995); the Journal of Tissue Culture Methods (Caputo, 1988), and in the U.S. Government Publication, "Bio-safety in Microbiological and Biomedical Laboratories" (CDC, 1999). This publication is available on the Center for Disease Control, Office of Health and Safety's web site www.cdc.gov/od/ohs/biosfty/bmbl4/bmbl4toc.htm.

8. Exposure controls/personal protection

Engineering control measures: Ampoules or flasks containing animal cells should be opened in a Class II microbiological safety cabinet under conditions of Containment (Biohazard) Level 2.
Personal protective equipment comprised of laboratory coat, disposable gloves and safety glasses should be worn.
Respiratory protection: avoid aerosol production and inhalation. Handle as for ACDP2.
Hand Protection: wear latex gloves at all times.
Eye protection: wear safety glasses at all times.

9. Physical and chemical properties

Frozen liquid in glass ampoule or plastic vial; plastic flask containing reddish-pink, aqueous liquid. See above.

10. Stability and reactivity

Reactivity data. Stable. Hazardous polymerization will not occur.

11. Toxicological information

Routes of exposure: N/A
Acute effects: N/A
Chronic effects: N/A
Special considerations: in its liquid state this substance is not normally toxic but avoid aerosol formation and inhalation. Vials contain di-methyl sulphoxide 10% v/v which is an irritant that readily penetrates the skin. (Not applicable to cells shipped as live cultures.)

12. Ecological information

Mobility: consult Cell Line Data Sheet (May apply in certain cases of genetic modification)
Persistence / degradability N/A
Bioaccumulation: N/A
Ecotoxicity: N/A

13. Disposal considerations

Follow established procedures for Containment (Bio-safety) Level 2.
Methods for disposal
Spillage: wear a laboratory overall, safety glasses and disposable gloves. Place paper towels or other absorbent material over the spillage. Pour disinfectant over spillage to saturate and leave for 30 minutes prior to cleaning and disposal. The most appropriate 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.
Waste disposal: Dispose of decontaminated liquid waste down a designated sink with running water. Solid waste should be placed in a sealed bag and labelled and destroyed by incineration. 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 by Road & Rail (Classification, Packaging and Labelling) Regulations:
UN no: 1845
Packing group; 3
ADR/RID: N/A
IMO-IMG code: N/A

15. Regulatory information

ECACC confirms that all necessary licences (Import, holding, transfer and export) required for the consignment of this material is in place and the recipient is able to handle the material. For the relevant licences consult the ECACC catalogue and website www.ecacc.org.uk
This organism/material may be covered by United Kingdom or International legislation.

Yes/No	Import licence (DEFRA IAPO)
Yes/No	Holding licence (DEFRA SAPO)
Yes/No	Permission to transfer (DEFRA)
Yes/No	Permission to receive, transfer and hold (HSE)
Yes/No	Export licence (DTI)

16. Further information

In the event of an accident involving exposure of staff to the material contained in the samples, contact the European Collection of Cell Cultures (+44 (0) 1980-612512) during normal UK working hours. The ECACC duty officer should be contacted out of hours. On call mobile: 07796 946660.

THE ABOVE INFORMATION IS CORRECT TO THE BEST OF OUR KNOWLEDGE. 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.

ECACC SHALL NOT BE HELD LIABLE FOR ANY DAMAGE RESULTING FROM HANDLING OR CONTACT WITH THE ABOVE PRODUCT.