DECONTAMINATION CERTIFICATE • DECONTAMINATION CERTIFICATE • DECONTAMINATION CERTIFICATE • DECONTAMINATION

ThermoFisher SCIENTIFIC

Certificate of Instrument Decontamination

To ensure the safety of your colleagues, transport personnel, Thermo Fisher Scientific's employees and those performing any repair, refurb, or disposal actions on the instrument, it is essential that you characterize any potential contaminants to which the instrument was exposed and note any decontamination procedures used on the instrument or part (hereinafter referred to as instrument). Prior to returning an instrument to a Thermo Fisher Scientific facility or contracted eWaste recycler (whether for repair, maintenance, trade-in, loan or disposal), this form must be completed in full, signed by the Customer, attached to the outside of transport packaging and a copy faxed/email to Customer Services. Prior to performance of any service of an instrument, this form must be completed in full, signed by the Customer, and given to the Thermo Fisher Scientific Engineer prior to any service of

an instrument.

Instrument Identification

Model:	Serial Number:
Description:	
Reason for return/service:	
RMA or RA Number (if required):	

Potential Contaminants

RADIOACTIVE MATERIALS: Has this instrument been exposed to radioactive materials? YES ☐ NO ☐	If YES, please identify radioactive isotopes:
BIOLOGICAL AGENTS: Has this instrument been exposed to biological agents? YES ☐ NO ☐	If YES, please state the viable biological agent(s), their Hazard Group(s) and Biosafety Level/Category of Containment:
HAZARDOUS CHEMICALS: Has this instrument been exposed to chemicals that are very toxic (in quantities harmful to human contact), carcinogenic, mutagenic, toxic for reproduction, sensitizing, and/or which have not yet been fully tested? YES ☐ NO ☐	If YES, please identify the hazardous chemicals:

Decontamination *(Refer to the user manual and page 2 of this form for special instructions)*

If 'YES" is answered to any of the above potential contaminants, describe the procedures used to decontaminate the instrument (attach additional sheets if needed) for biological, radioactive and other hazardous contaminants, also include the radioactivity survey results where applicable indicating levels at or below local background level: (*or in the US only, for service work excluding any transportation, at levels designated to be clean or safe as stated in the Customer's regulatory approved Site Radioactive Materials License*)

Acknowledgement

The Customer understands and agrees that decontamination is critical to issues of health and safety and that thoroughly completing this Certificate is essential. The Customer represents that Customer has removed all kinds of biological agents, non-hazardous chemicals, hazardous chemicals, and radioactive materials from the instruments and that Customer performed all decontamination procedures as described in this Certificate and completed this Certificate accurately, truthfully and in full. Customer hereby assumes all responsibility and liability for and shall defend and indemnify Thermo Fisher Scientific against injury or damage of whatever kind incurred by Thermo Fisher Scientific, its employees, contractors, and/or agents that result directly or indirectly from Customer's breach of this representation and warranty. The Customer accepts that Thermo Fisher Scientific has no obligation to repair, service, or transport any product if this Certificate is not completed in full.

Name:	Signature:
Company:	Date:
Phone:	Email:

DECONTAMINATION CERTIFICATE • DECONTAMINATION CERTIFICATE • DECONTAMINATION CERTIFICATE • DECONTAMINATION CERTIFICATE

DECONTAMINATION CERTIFICATE • DECONTAMINATION CERTIFICATE • DECONTAMINATION CERTIFICATE • DECONTAMINATION

ThermoFisher SCIENTIFIC

Examples of Instrument Decontamination Procedures

1. Radioactive Materials

a. Apply an industry standard radioactivity decontaminant (e.g. Radiacwash®, Rad-Con® or equivalent) to the instrument, and wipe surfaces as directed by the decontaminant manufacturer.

b. Survey the instrument with an appropriate radioactivity-measuring instrument (e.g. Geiger Counter or scintillation counter).

c. Satisfactory decontamination is defined as survey results at or below background level or **in the US only**, for service work excluding transportation, levels designated to be clean or safe as stated in the Customer's regulatory approved Site Radioactive Materials License.

2. Biological Agents

The World Health Organization's (WHO) Laboratory Biosafety Manual describes decontamination procedures that are widely used for instrument or part (hereinafter referred to as instrument) decontamination. Customer is required to refer to the current version of this Manual (available at http://www.who.int/csr/resources/publications/biosafety) and administer the appropriate decontamination procedures. However, the Customer must assess the suitability of these methods for the biological agents concerned and adherence to any warnings in the instrument user manuals. Commonly used decontamination agents prescribed by the above Manual include:

a. **Sodium hypochlorite** Sodium hypochlorite (1:10 dilution of domestic bleach) that gives 5g/l concentration is a general all-purpose disinfectant. However, it should be prepared fresh each time. Avoid mixing bleach with acid as this would release toxic chlorine gas.

b. **Formaldehyde** Commonly marketed as Formalin, a solution of gas in water of about 37% concentration. It is effective for all microorganisms and spores at temperatures > 20°C, but is not active against prions. Formaldehyde is a suspected carcinogen and safety precautions must be followed when working with the chemical.

c. **Glutaraldehyde** Generally supplied as a solution of about 2% concentration. It is active against vegetative bacterias, spores, fungi and lipid-/nonlipid-containing viruses. However, it takes several hours to kill bacterial spores. Glutaraldehyde is toxic and an irritant. Safety precautions must be followed when using the chemical.

d. **Phenolic compounds** Active against vegetative bacteria and lipid-containing viruses and, when properly formulated, against mycobacteria. However, they are not active against spores and produce variable results against non-lipid viruses. Some phenolic compounds may be inactivated by water hardness. Phenolic compounds are toxic and can penetrate the skin. Safety precautions must be followed.

e. **Alcohols** 70% ethanol or 70% isopropanol are active against vegetative bacteria, fungi and lipid-containing viruses but not against spores. Their actions on non-lipid viruses are variable. Alcohols are flammable and must not be used near open flames.

f. **Hydrogen Peroxide** A strong oxidant and can be potent broad-spectrum germicides. However, a 3-6% solution of hydrogen peroxide alone is relatively slow and limited as germicides. Hydrogen peroxide can be corrosive and affect skins and mucous membranes. Safety precautions should be exercised when dealing with the chemical.

Special Instructions, Hazard Group 3 or 4

a. Instruments situated in Biosafety Level/Containment Level 3 or 4 laboratories must be decontaminated, by the customer, using an internationally approved sterilization procedure. The customer must then move the instrument to either a Containment Level 1 or 2 laboratory for service.

b. Thermo Fisher Scientific employees are not permitted to enter Biosafety Level/Containment Level 3 or 4 laboratories without the prior consent of Thermo Fisher Scientific Management and EH&S.

c. It may not be possible for Thermo Fisher Scientific to service or transport these instruments.

3. Hazardous Chemicals

a. Areas exposed to hazardous chemicals should be washed with an acceptable solvent such as ethyl alcohol or isopropyl alcohol.

b. Rinse with detergent and water.

Please note that Thermo Fisher Scientific cannot accept any instruments or parts that may be contaminated with viable biological agents, harmful quantities of hazardous chemicals, or radioactive materials.