




- [1] **TYPE EXAMINATION CERTIFICATE vers.00**
- [2] **Equipment intended for use in potentially explosive atmospheres -
Directive 2014/34/EU**
- [3] Type Examination Certificate number: **DTI 22ATEX0248X**
- [4] Equipment: Freezers
Type BioUltra UL570 series, (see type key under item 15)
- [5] Manufacturer: Gram Scientific ApS
- [6] Address: Aage Grams Vej 1
DK-6500 Vojens, Denmark
- [7] This equipment and acceptable variation thereto is specified in the schedule to this certificate and in the documents that the certificate refers to.
- [8] Danish Technological Institute certifies that this equipment has been found to comply with the Essential Health and Safety Requirements relating to design and construction of equipment intended for use in potentially explosive atmospheres given in Annex II of the ATEX Directive.
- The examinations and test results are recorded in confidential report no. 19.0112-01, J170770
- [9] The essential Health and Safety Requirements are assured by compliance with:
EN 60079-0:2018/AC:2020, EN 60079-11:2012,
EN 60079-15:2019, EN 60079-7:2015+A1:2018
- [10] The sign "X" placed after the certificate number, indicates that the equipment or protective system is subject to special conditions for safety use specified in the schedule to this certificate.
- [11] This certification relates to the design, examination and tests of the specified equipment or protective system. Further requirements of the directive may apply to the manufacturing process and supply of this equipment or protective system. These are not covered by this certificate.
- [12] The marking of the equipment shall include the following:

 II 3G Ex ec nC ic IIB T4 Gc

Danish Technological Institute
Certifications & Inspection

2023-01-31


Jakob Nittegaard
ATEX Manager

Kongsvang Allé 29
DK-8000 Århus C
Denmark

Tel. +45 72 20 10 00
Fax +45 72 20 10 19
www.teknologisk.dk



[13] **Schedule**
[14] **TYPE EXAMINATION CERTIFICATE vers. 00**

DTI 22ATEX0248X

[15] **Description of equipment**

The BioUltra UL570 is a series of freezers intended to be used by hospitals, laboratories, biobanks, re-search institutes and similar users, which need to store vital biological material in the temperature range from -60/-86 °C with an ambient temperature for the freezers of +10 °C to +30 °C.

It has a bottom mounted cascade refrigeration system, vacuum insulated panel technology and safe closing system constituted by multitier gasket placed in a labyrinth frame.

Type variants covered by this certificate:

BioUltra UL570 can be delivered in several type variants with different kind of options and accessories. The basis version is the air-cooled version:

BioUltra UL 570, 230 V/50 Hz compressor
with refrigerant: R290/R170 - R601 or
R404A/R508 - R601 (only outside EU)

The type number system is specified to the following concept:

BioUltra UL570 yx zz

Where “zz” are defined in a sequence (no space in between) of the below listed equipment variants. (e.g. BioUltra UL570 CG 1020294178)

BioUltra UL570	
Temperature range	
UL	-60/-86 °C
Refrigerant (x)	
H	R404A/R508 - R601 (only outside EU)
G	R290/R170 - R601
Exterior (y)	
C	Stainless steel
L	White Lacquered
Equipment (zz)	
10	Solid door
12	Customized door
15	RUKO lock (DK)
20	Right hinged incl. self-door closing mechanism
21	Left hinged incl. self-door closing mechanism
22	Right hinged
23	Left hinged
29	Levelling castors
41	E-sensor



42	Customized sensor*
72	Insulated inner doors (2 doors)
78	Water cooled condenser (only HFC)
79	Hybrid - water and fan cooled condenser
82	60 Hz compressor
..V	# of liquid containers incl. Holder
..P	# of perforated shelves

Only type variants listed in the table above are covered by this certification.
Specified ambient temperature: $+10\text{ °C} < T_{\text{amb}} < +30\text{ °C}$
Ingress Protection: IP 2X

[16] **Report number**
19.0112-01, J170770

[17] **Special conditions for safe use:**

1. The power supply to the freezers are through a plug/socket connection on the electronic control box. The manufacturer delivers the belonging supply cable. The locking mechanism on the plug/socket connection must always be used. The supply cord/plug must only be connected in a non-hazardous area. If the freezers are electrically connected in a zone classified area, the supply cord must be connected in a terminal box complying with national installation requirements e.g. EN 60079-14.
2. To secure potential equalization of the unit – the mounted external bonding/ground connector must be used in accordance with national installation requirements e.g. EN 60079-14.
3. The specified ambient temperature for “BioUltra” freezers are limited to: $+10\text{ °C} < T_{\text{amb}} < +30\text{ °C}$
4. The equipment shall only be used in an area of at least pollution degree 2, as defined in IEC 60664-1 (Indoor laboratories / Office environment).
5. Transient protection shall be provided that is set at a level not exceeding 140% of the peak rated voltage value at the supply terminals to the equipment.

[18] **Essential Health and Safety Requirements**

Concerning EHSR this schedule only verifies compliance with the Directive 2014/34/EU of 26 February 2014.
The manufacturer’s Declaration of Conformity declares compliance with other relevant directives.

[19] **Drawings and Documents**

Documentation with relevance for the Ex-safety of the product.

Title	Document no.	Date
Risk analysis	RAC_BioUltra_rev. 004.xlsm	11. May 2020
Description of the product	Beskrivelse af BioUltra 570 og varianter heraf_004.docx	9. January 2023



Description of PE / bonding connections	EX16-2020_”Jording af døre og indvendige dele på BioUltra UL 570 – ATEX relateret”	3. June 2020
User Manual	BioUltra_Instructions for use. Item 765041576	20230901
DoC (Declaration of Conformity)	BioUltra_DK_13.12.2022.pdf BioUltra_UK_13.12.2022.pdf	13. December 2022
Measurement of surface temperature	BioUltra-temperaturmåling_og_temperaturklassificering.docx	3. December 2020
Codes in regards to ATEX on Sprint 2019 products	2021000303_rev001	March 2021

The documentation and scheduled drawings specified for the BioUltra are stored in the manufacturers “CCD homepage” package, downloaded by DTI on the 30th January 2023. This “CCD homepage” contains information related to several other series of freezers and refrigerators. Only the information related to the above mentioned type variants are listed as “Scheduled Drawings” and covered by this certification

Additional information

This certificate has an expiry date on 2026-01-31

Danish Technological Institute
Certifications & Inspection

Date 2023-01-31


Jakob Nittegaard
ATEX Manager

