

# CombiFlash® NextGen Safety Sheet

## Overview

This document contains the required safety and regulatory information for the CombiFlash NextGen system. The *CombiFlash NextGen Installation and Operation Guide* is available in PDF format and can be downloaded from [www.teledyneisco.com](http://www.teledyneisco.com). In addition, a printed copy is available for purchase.

### CAUTION

Cautions identify a potential hazard, which if not avoided, may result in minor or moderate injury. This category can also warn you of unsafe practices, or conditions that may cause property damage.

### WARNING

Warnings identify a potentially hazardous condition, which if not avoided, could result in death or serious injury.

### DANGER

DANGER – limited to the most extreme situations to identify an imminent hazard, which if not avoided, will result in death or serious injury.

## Hazard Symbols

### Warnings and Cautions



The exclamation point within the triangle is a warning sign alerting you of important instructions in the instrument's technical reference manual.



The lightning flash and arrowhead within the triangle is a warning sign alerting you of "dangerous voltage" inside the product.

### Symboles de sécurité



Ce symbole signale l'existence d'instructions importantes relatives au produit dans ce manuel.



Ce symbole signale la présence d'un danger d'électrocution.

### Warnungen und Vorsichtshinweise

## Hazard Symbols (Continued)



Das Ausrufezeichen in Dreieck ist ein Warnzeichen, das Sie darauf aufmerksam macht, daß wichtige Anleitungen zu diesem Handbuch gehören.



Der gepfeilte Blitz im Dreieck ist ein Warnzeichen, das Sie vor "gefährlichen Spannungen" im Inneren des Produkts warnt.

### Advertencias y Precauciones



Esta señal le advierte sobre la importancia de las instrucciones del manual que acompañan a este producto.



Esta señal alerta sobre la presencia de alto voltaje en el interior del producto.

Before installing, operating, or maintaining this equipment, it is imperative that all hazards and preventive measures are fully understood. While specific hazards may vary according to location and application, take heed in the following general warnings:

### WARNING

Liquids associated with this instrument may be classified as carcinogenic, biohazard, flammable, or radioactive. Should these liquids be used, it is highly recommended that this application be accomplished in an isolated environment designed for these types of materials in accordance with federal, state, and local regulatory laws, and in compliance with your company's chemical/hygiene plan in the event of a spill.

### WARNING

Avoid hazardous practices! If you use this instrument in any way not specified in this manual, the protection provided by the instrument may be impaired.

### WARNING

If you are using flammable solvents or chemicals with this system, vapor concentration levels may exceed the maximum exposure levels as recommended by OSHA Guide 1910.1000. To reduce those levels to a safe exposure, Teledyne ISCO recommends that you place the system in a

**laboratory hood designed for the purpose of ventilation. This hood should be constructed and operated in accordance with federal, state, and local regulations. In the event of a solvent or chemical spill, your organization should have a plan to deal with these mishaps. In all cases, use good laboratory practices and standard safety procedures.**

Technical assistance for the Teledyne ISCO CombiFlash NextGen can be obtained from:

**Teledyne ISCO**  
4700 Superior St.  
Lincoln NE 68504

Phone: (800) 775-2965 or (402) 853-5340  
Fax: (402) 465-3001  
E-mail: IscoService@teledyne.com

**⚠ WARNING**

**The CombiFlash NextGen has redundant safety devices to limit pressure to less than 300 psi (2068 kPa), 150 psi (1034 kPa) for systems without an automated injection valve. RediSep columns smaller than 100 g are CE certified using standard IEC61010-1 for use on the CombiFlash NextGen. RediSep columns 100 g or larger meet Pressure Vessel Directive 97/23/EC.**

**⚠ CAUTION**

For safety, maximum pressure limits are limited by each column's RFID-defined pressure limit. If the column is not RFID recognized see section 1.6.5. of the *CombiFlash NextGen Installation and Operation Guide*. Maximum pressure limit is also set at 200 psi for methods using a solid-load cartridge.

**☑ Note**

The rear panel mounted circuit breaker is the power disconnect device.

## FCC Statement

CombiFlash NextGen systems equipped with RFID column and rack recognition (NextGen 300+ and optional on the NextGen 300) contain modules with FCC ID numbers of PJMCPR74 and 2ADZBID-2 and are subject to the following statements:

1. This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:
  - a. This device may not cause harmful interference.
  - b. This device must accept any interference received, including interference that may cause undesired operation.
2. Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.



# EU DECLARATION OF CONFORMITY

Application of Council Directive: 2014/30/EU – The EMC Directive  
2014/35/EU – The Low Voltage Directive  
2014/53/EU – Radio Equipment Directive (RF ID reader)  
2011/65/EU – The RoHS Directive

Manufacturer's Name: Teledyne Isco  
Manufacturer's Address: 4700 Superior  
Lincoln, Nebraska 68504 USA  
Mailing Address: P.O. Box 82531, Lincoln, NE 68501

Equipment Type/Environment: Laboratory Equipment for Light Industrial/Commercial Environments

Trade Name/Model No: CombiFlash NextGen, NextGen300, and NextGen300+ all including optional ELS and Purlon

Year of Issue: 2018

Harmonized Standards: EN 55011:2009/2010  
EN 61326-1:2013  
EN 61000-3-2:2014  
EN 61000-3-3:2013  
EN 61010-1:2010  
EN 61010-2-081:2015  
EN 61010-2-010:2014

RF ID reader:  
EN 300 330-1 V2.1.1  
EN 301 489-1 V2.1.1  
EN 301 489-3 V2.1.1  
EN 50364:2010

I, the undersigned under sole responsibility, hereby declare that the design of the equipment specified above conforms to the above Directive(s) and Standards as of JUNE 18, 2018.

USA Representative

Signature:

Printed Name:

Edward J. Carter

Title:

Director of Engineering

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America

# CERTIFICATE

No. U8 102721 0001 Rev. 00

**Holder of Certificate:** **Teledyne Isco**  
4700 Superior Street  
Lincoln NE 68504-1398  
USA

**Certification Mark:**



**C US**

**Product:** **Laboratory Equipment  
Chromatography System**

This product was voluntarily tested to the relevant safety requirements referenced on this certificate. It can be marked with the certification mark above. The mark must not be altered in any way. This product certification system operated by TÜV SÜD America Inc. most closely resembles system 3 as defined in ISO/IEC 17067. Certification is based on the TÜV SÜD "Testing and Certification Regulations". TÜV SÜD America Inc. is an OSHA recognized NRTL and a Standards Council of Canada accredited Certification body.

**Test report no.:** 231-72144060-000

**Date,** 2019-07-26

( Adrian Rabago Valenzuela )





America

# CERTIFICATE

No. U8 102721 0001 Rev. 00

## Model(s):

CombiFlash NextGen 100  
CombiFlash NextGen 300  
CombiFlash NextGen 300+

## Brand Name:

**TELEDYNE ISCO**

## Tested according to:

UL 61010-1:2012/R:2016-04  
Supplemented by UL 61010-2-081:2015  
UL 61010-2-010:2015  
CAN/CSA-C22.2 No. 61010-1:2012/U2:2016-04  
CAN/CSA-C22.2 No. 61010-2-081:2015  
CAN/CSA-C22.2 No. 61010-2-010:2015

## Production Facility(ies):

102721

## Parameters:

Rated Input Voltage: 100-240 VAC  
Rated Input Frequency: 50/60 Hz  
Rated Input Current: 2 A Max  
Protection Class: PE Connected  
Degree of Protection: IPX0  
Temperature, Ambient: 20°C to 40°C  
Maximum Altitude: 2000 m

### MODEL DIFFERENCES

CombiFlash NextGen 300+ is the product of the NextGen product family. It has all features and maximum capabilities.

The CombiFlash NextGen 300 is a subset of the CombiFlash NextGen 300+. Compared to the CombiFlash NextGen 300+ it doesn't have the injection valve or RFID support of columns or racks. It has reduced pressure capabilities of 150 psi maximum instead of 300 psi.

The CombiFlash NextGen 100 has limited capabilities compared to the CombiFlash NextGen 300. It has a flow rate of 100 ml/min (compared to 300 ml/min for the CombiFlash NextGen 300 and 300+). It is also limited to 150 psi instead of 300 psi in the 300+. It has the ability to select from only 2 solvents instead of the 4 solvents used in the CombiFlash NextGen 300 and 300+.

### CONDITIONS OF ACCEPTABILITY

The following pressure limit was defined by manufacturer for normal operation:

- CombiFlash NextGen 100: 150 psi
- CombiFlash NextGen 300 and CombiFlash NextGen 300+: 300 psi
- CombiFlash NextGen 300 and CombiFlash NextGen 300+: 150 psi (if not equipped with injection valve)

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产品中有毒有害物质或元素的名称及含量  
Name and amount of Hazardous Substances or Elements in the product

部件名称 Component Name	有毒有害物质或元素 Hazardous Substances or Elements					
	铅 (Pb)	汞 (Hg)	镉 (Cd)	六价铬 (Cr(VI))	多溴联苯 (PBB)	多溴二联苯 (PBDE)
液晶显示 LCD Display	O	O	O	O	O	O
线路板 Circuit boards	O	O	O	O	O	O
接线 Wiring	O	O	O	O	O	O
内部电缆 Internal Cables	O	O	O	O	O	O
主电源线 Line Cord	O	O	O	O	O	O
步进电机 Stepper Motor	O	O	O	O	O	O
氘气灯 Deuterium lamp	O	O	O	O	O	O
阀体 Valve Body	O	O	O	O	O	O

产品中有毒有害物质或元素的名称及含量：Name and amount of Hazardous Substances or Elements in the product

O: 表示该有毒有害物质在该部件所有均质材料中的含量均在ST/ 标准规定的限量要求以下。

O: Represent the concentration of the hazardous substance in this component's any homogeneous pieces is lower than the ST/ standard limitation.

X: 表示该有毒有害物质至少在该部件的某一均质材料中的含量超出ST/ 标准规定的限量要求。

(企业可在此处，根据实际情况对上表中打“X”的技术原因进行进一步说明。)

X: Represent the concentration of the hazardous substance in this component's at least one homogeneous piece is higher than the ST/ standard limitation.

(Manufacturer may give technical reasons to the "X"marks)

环保使用期由经验确定。

The Environmentally Friendly Use Period (EFUP) was determined through experience.

生产日期被编码在系列号码中。前三位数字为生产年(207 代表2007年)。随后的一个字母代表月份：A 为一月，B为二月，等等。

The date of Manufacture is in code within the serial number. The first three numbers are the year of manufacture with the second digit removed (218 is year 2018) followed by a letter for the month. "A" is January, "B" is February and so on (I is not used).

**Teledyne Isco**

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E-mail: IscoService@teledyne.com

Teledyne Isco is continually improving its products and reserves the right to change product specifications, replacement parts, schematics, and instructions without notice.



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