Cytiva
925 West 1800 South
Logan, Utah 84321
USA

Nitrosamine Compliance Statement

Regarding: Nitrosamines in Cytiva HyClone™ Cell Culture products

Background

According to the World Health Organization (WHO), nitrosamines are any compound containing a nitroso (NO) functional group. These compounds are of concern because they are potential carcinogens. Nitrosamine is formed when secondary or tertiary amines react with a nitrosating agent, such as nitrous acid. The most common source of nitrosating agents is sodium nitrite.

The European Medicines Agency (EMA) finalized a review under Article 5(3) of Regulation (EC) No 726/2004 in June 2020 to provide guidance to marketing authorization holders (MAH) on how to avoid presence of nitrosamine impurities in human medicines. Assessment report EMA/369136/2020 "Nitrosamine impurities in human medicinal products" was published on 25 June 2020 and adopted by the Committee for Medicinal Products for Human Use (CHMP).

The U.S. Food and Drug Administration (FDA) Guidance for Industry, entitled "Control of Nitrosamine Impurities in Human Drugs" and published in September 2020, recommends steps manufacturers of active pharmaceutical ingredients (APIs) and drug products should take to detect and prevent unacceptable levels of nitrosamine impurities in pharmaceutical products.

Statement

It is hereby stated that Cytiva does not manufacturer APIs or finished human drugs. Cytiva understands that Cytiva cell culture products may be used in the manufacture of finished drugs and drug products. Cytiva verifies that sourced raw materials conform to specified requirements and are acquired from qualified suppliers; however, information has not been secured from all component suppliers to address any contamination risks that may be present.

Nitrosamines and nitrosamine-related substances are not intentionally used in Cytiva products or, to our knowledge, in supplier sourced raw materials. The fact that these substances are not intentionally used by Cytiva or in supplier sourced raw materials does not exclude that trace levels of these substances may be present as a result of the specific raw material and/or the manufacturing process. Specific analytical testing for nitrosamines and nitrosamine-related materials is not performed on Cytiva finished goods or supplier sourced raw materials. Therefore, it is the sole responsibility of the end user to determine the suitability of any materials used for their applications.

Signature: DocuSigned by: Gerald Dusti McEwen 00773A09EFC74CB...	Date: 21 March 2023
Name: Gerald Dusti McEwen	Title Regulatory Support Manager

Cytiva
925 West 1800 South
Logan, Utah 84321
USA