EFFICACY EVALUATION AND TECHNICAL MANAGEMENT SECTION

EFFICACY REVIEW -I

ANTIMICROBIAL PROGRAM BRANCH

IN 07/24/96 OUT 08/05/96

Reviewed by Z. Vanryzin Date 07/31/96

LAN Code 9480-4.608

EPA Reg. No. or File Symbol 9480-4

Date Division Received 07-24-96

Type Product (s) Hospital towelette (Saturated Towelette)

MAID No (s) None

Product Manager PM 31 Johnson/Terry

Product Name Sani-Cloth Germicidal Wipes

Company Name Nice-Pak

Submission Purpose Amendment to add additional uses and a "1" minute tuberculocidal claim.

Type Formulation Single Use Disposable Towelette Saturated with ready-to-use liquid

Active Ingredient (s): %

n-alkyl (60% C14, 30% C16, 5% C12, 5% C18) dimethyl benzyl ammonium chloride.....0.25

069154 n-alkyl (68% C12,32% C14) dimethyl benzyl ammonium chloride..0.25

Isopropyl alcohol.....55.00

1/1

202.0 **Recommendations**

202.1 Efficacy Supported by the Data:

The data to add 5 minute disinfection claims against Escherichia coli 0157:H7 ATCC 35150 and Vancomycin-Resistant Enterococcus faecalis ATCC 51299 have been reviewed and accepted by EETMS on 7-31-96.

203.0 **Labeling:**

Comments are applicable to submitted revised label dated July 24, 1996

(See RATIONALE section below for the basis of the following requirements)

1. On the front panel the claim "Disinfectant Thermometer Wipes" is not acceptable and must be deleted. Thermometers are considered semi-critical instruments (medical devices) and fall under the jurisdiction of Food and Drug Administration. According to the MOU between EPA-FDA (JUNE 30, 1994 PESTICIDE REGULATION [PR] NOTICE 94-4) only registered sterilants are to be used on medical devices that touch the mucous membranes. Sani-Cloth Germicidal Wipes are not registered as sterilants. (In addition, wiping would not expose the thermometer to the disinfectant for the required contact time to achieve the desired results).

2. According to EPA Antimicrobial Labeling Guidelines (See RATIONALE) the level of antimicrobial activity must be specified in the Directions for Use. The submitted label has no disinfection directions. Therefore, on the Back Panel, separate "Dispenser Directions" from "Disinfection directions".

3. Remove the words "where required" from Disinfection and Food Contact Surface Disinfection directions. The **Directions for Use** must list the contact time for each type of antimicrobial activity. When one contact time is listed it applies for **all** label uses [see paragraph (C) in RATIONALE, below].

4. On front panel, change "Kills Mycobacterium bovis BCG (Tuberculosis) in one minute at 20°C" to read **"tuberculocidal against Mycobacterium bovis BCG by the Log Reduction Suspension test within 1 minute at 20°C". However, the above cannot be listed as use-contact time.** See COMMENTS(*) below for explanation of this requirement.

(cont'd)

RATIONALE:

(8) Directions for Use. (i) Basic Requirements. (A) Refer to 40 CFR 156.10(i), **Directions for Use** for general requirements and contents of directions for use.

(ii) Additional Requirements. When use directions are required, **labels must bear directions for each recommended category of use and/or level of antimicrobial activity.** (40 CFR 156.10(i)(1)(iii) gives exceptions to the requirement for directions for use.) The directions for use should include the information in **paragraphs (A)** through (M) below, except in those cases where certain items are not applicable. In addition, products intended for the use patterns specified in § 101-2 through -16 and §§ 102-3 through -7 of this Subdivision should comply with the specific requirements provided therein. Additional instructions, other than those listed below, or contained in § 101-2 through -16 and §§ 102-3 through -7 may be recommended by the applicant, or required by the Agency on a case-by-case basis.

(A) The level of antimicrobial activity (e.g., sterilization, disinfection, sanitization, bacteriostasis) intended to be provided by the product. Refer to § 101-1(d) of this Subdivision for terminology concerning levels of antimicrobial activity.

§ 101-1(d):

(5) "Disinfectant" means an agent that eliminates a specific species of infectious or other undesired microorganism, but not necessarily bacterial spores, in the inanimate environment only. The term "disinfection" connotes the combating of an infection whereas "infection" involves only living plants and animals. For the purposes of this section, the environment is considered "contaminated," not "infected", and the term "germicide" and "bactericide" are synonyms for the word "disinfectant."

(6) "Fungicide" means an agent that destroys fungi (including yeasts) and/or fungal spores pathogenic to man or other animals in the inanimate environment.

(7) "Virucide" means an agent that destroys or irreversibly inactivates viruses in the inanimate environment.

Label Claims. (i) The unqualified label claim "virucidal" is not generally acceptable. The claim "virucidal" must be qualified by designating each specific virus against which the product has been

tested and shown to be effective. The complete nomenclature of each virus needs to be exhibited on the label [see paragraph (g)(3) of this section]. Causal effects can accompany each virus listed parenthetically [e.g., herpes simplex virus, type 1 (causes cold sores) and herpes simplex virus, type 2 (causes genital herpes)]. It should be indicated that the virucidal activity occurs only on environmental surfaces.

(8) "Tuberculocide" means an agent that destroys or irreversibly inactivates tubercle bacilli **in the inanimate environment. (Note: not liquid culture)**

(C) If the label indicates that the product may be used for more than one level of antimicrobial activity (e.g., sterilization, disinfection, sanitization) there must be separate and distinct directions for use for each level of activity. If the product can be used for different types of antimicrobial activity (e.g., virucidal, tuberculocidal), but the contact time and temperature are the same for each type of activity, separate directions are not necessary. If extended contact times or elevated temperature are required to achieve a specific type of antimicrobial activity (e.g., tuberculocidal) then this guidance must be provided under a separate heading (e.g., Directions for Use as a Tuberculocide) under the Directions for Use.

COMMENTS(*)

This amendment is being sought because the registrant demands equal treatment with another product (Palmero Health Care [PHC] Isotex-70/DisCide). Therefore, only the exact label language accepted on the Isotex-70/DisCide label will be accepted by this amendment. In addition, all of the conditions given to PHC at the time that their label language was accepted are also given to Nice-Pak and are applicable in the marketing of their product Sani-Cloth Germicidal Wipes. The conditions referred to above are as follows:

At the time of product registration PHC was instructed to adhere to the contact time in the Directions for Use. This was clearly communicated to PHC by Z. Vaituzis via facsimile on 8-13-93. PHC had originally requested a 2 minute tuberculocidal contact time. It was not accepted. Instead, on another part of the label, not in the Directions for Use, PHC was permitted to list by what laboratory tests the tuberculocidal, fungicidal and bacteriocidal **properties** (not contact times) were determined. PHC was instructed that these presumptive tuberculocidal times cannot appear in the Directions for Use.

The 8-13-93 communication to PHC contained the following quotes:

> **"Isotex-70 is tuberculocidal against Mycobacterium bovis BCG by the Log Reduction Suspension test within 1 minute at 20° C; ...fungicidal against Trichophyton mentagrophytes by the AOAC Fungicidal Activity test in 4 minutes at 20° C.**
>
> **The above cannot be listed as use-contact times.**
>
> **The implication that these are actual use contact times is misleading since the tuberculocidal and the fungicidal tests were liquid suspension tests.**
>
> **Efficacy data developed by suspension culture tests, while highly quantitative and controllable in the laboratory, have the dual disadvantage of irrelevancy to real-use situations as well as a degree of sensitivity that can mislead users into a false sense of efficacy (safety). "**

Marketing of DisCide with one minute tuberculocidal use claims is misleading because the one minute tuberculocidal claims do not appear in the Directions for Use as required by FIFRA (Section 136 (q)(1)(F), 1990)*. The DisCide label Directions for Use, which the users must follow, list a 6 minute contact time.

Adherence to the contact times in the label Use Directions is required for the protection of public health regardless of what laboratory data contact times are developed for the product by liquid suspension testing methods. Liquid suspension methods demonstrate presumptive efficacy which, in the case of tuberculocidal claims, must be confirmed by carrier tests (See ADDENDUM below). Carrier tests simulate the actual product use conditions.

The Agency does not invoke the confirmative tuberculocidal testing requirement on data developed by the Log Reduction Suspension test because this method lists a minimum permissible contact time of 5 minutes which is deemed sufficient to achieve efficacy in actual use situations.

However, if Nice-Pak desires to have a tuberculocidal claim of less than 5 minutes, the Agency requests that Nice-Pak submit data at less than a five minute contact time developed using a carrier-based test which will simulate the actual use conditions (where tubercle bacilli in sputum droplets and dried on environmental surfaces). The Agency should review the protocol prior to initiation of testing.

However, until the tuberculocidal hard surface carrier test data are submitted and accepted by the Agency, the 5 minute contact time accepted by the Agency at the time of registration for the use of Sani-Cloth Germicidal Wipes remains in effect.

* (A pesticide is misbranded if:)
(F) the labeling accompanying it does not contain directions for use which are necessary for effecting the purpose for which the product is intended and if complied with, together with any requirements imposed under section 136a(d) of this title, are adequate to protect health and the environment;

ADDENDUM:

SUBDIVISION H

LABELING GUIDELINES FOR PESTICIDE USE DIRECTIONS

ANTIMICROBIAL PRODUCTS

§ 101-1 Antimicrobial Products.

(8) Directions for Use. (i) Basic Requirements.

(C) If the label indicates that the product may be used for more than one level of antimicrobial activity (e.g., sterilization, disinfection, sanitization) **there must be separate and distinct directions for use for each level of activity.** If the product can be used for different types of antimicrobial activity (e.g., virucidal, tuberculocidal), but the contact time and temperature are the same for each type of activity, separate directions are not necessary. If extended contact times or elevated temperature are required to achieve a specific type of antimicrobial activity (e.g., tuberculocidal) then **this guidance must be provided under a separate heading (e.g., Directions for Use as a Tuberculocide) under the Directions for Use.**

(5) Presumptive efficacy. "Phenol Coefficient," "Minimum Killing Concentration," and "Minimum Inhibitory Concentration" (**liquid suspension tests**) tables which **represent results of presumption or screening type tests** against various microorganisms are acceptable in collateral labeling if qualified with a prominent statement such as, "These values are intended only to indicate the broad spectrum activity of the product. This information **must not be interpreted as having any direct relevance to** the use patterns recommended, effective dosage concentrations, or **activity against specific microorganisms when used as directed."**

(2) The phenol coefficient, when multiplied by 20, provides the effective use dilution of the product [as confirmed by the AOAC Use-Dilution Method (§ 91-2(a), (b) or (c) of Subdivision G)] (or the AOAC confirmative Tuberculocidal Activity Test for tuberculocides).