

US EPA ARCHIVE DOCUMENT



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, D.C. 20460

OFFICE OF  
PREVENTION, PESTICIDES AND  
TOXIC SUBSTANCES

April 25, 2002

MEMORANDUM

Subject: Acute Toxicity Review for EPA Reg. No.: 9402-O / Kimtech Pre-Moistened Sanitizer Wipes  
DP Barcode: D282428 / D282051  
Case No: 71463

To: Velma Noble PM 31 / Tracy Lantz, Team Reviewer  
Regulatory Management Branch I  
Antimicrobials Division (7510C)

From: Robert A. Turpin, Scientist *R. T.*  
Chemistry/Toxicology Team  
Product Science Branch  
Antimicrobials Division (7510C)

Through: Karen Hicks, Team Leader *K. P. Hicks*  
Chemistry and Toxicology Team  
Product Science Branch  
Antimicrobials Division (7510C)  
5/14/02

Michele E. Wingfield, Chief  
Product Science Branch  
Antimicrobials Division (7510C)

Applicant: Kimberly-Clark Corp.

FORMULATION FROM LABEL:

| <u>Active Ingredient(s):</u>   | <u>% by wt.</u> |
|--|-----------------|
| Octyl decyl dimethyl ammonium chloride .....   | 0.0120          |
| Diocetyl dimethyl ammonium chloride .....  | 0.0048          |
| Didecyl dimethyl ammonium chloride .....   | 0.0072          |
| Alkyl (C <sub>14</sub> , 50%; C <sub>12</sub> , 40%; C <sub>16</sub> , 10%)<br>dimethyl benzyl ammonium chloride ..... | 0.0160          |
| <u>Other Ingredient(s):</u>  | <u>99.9600</u>  |
| Total:   | 100%            |

BACKGROUND: The applicant has submitted toxicity data in support of its application for registration of its product, Kimtech Pre-Moistened Sanitizer Wipe. The studies are MRID #'s 456439-01 - Oral Toxicity; 456439-02 - Acute Dermal Toxicity; 456439-03 - Primary Eye Irritation; 456439-04 - Primary Skin Irritation; 456439-05 - Dermal Sensitization; and 456439-06 - Characterization of Active. The applicant has requested a waiver of the requirement for an Acute Inhalation study.

RECOMMENDATIONS (PSB findings):

The applicant must identify the test substance of each of the studies submitted to be the equivalent of the subject material of the registration application. The material of the studies is identified as C2000-1650 Code 7345-80 Wet Wipe.

The acute toxicity profile for Reg. No. 9402-O is currently:

|                           |                |            |
|---------------------------|----------------|------------|
| acute oral toxicity       | IV             | Acceptable |
| acute dermal toxicity     | IV             | Acceptable |
| acute inhalation toxicity | IV             | Waived     |
| primary eye irritation    | III            | Acceptable |
| primary skin irritation   | IV             | Acceptable |
| dermal sensitization      | Non-Sensitizer | Acceptable |

LABELING:

The signal word is CAUTION.

**DATA REVIEW FOR ACUTE ORAL TOXICITY TESTING (§ 81-1, 870.1100)**

**Product Manager:** Velma Noble  
**MRID No.:** 456439-01

**Reviewer:** R. Turpin  
**Study Completion Date:** 3/29/2002  
**Report No.:** 11705

**Testing Laboratory :** Product Safety Labs  
**Authors :** George E. Moore

**Quality Assurance (40 CFR §160.12):** GLP statement provided.

**Test Material:** C2000-1650 Code 7345-80 Wet Wipe

**Species:** Rat  
**Age:** 9 to 10 weeks  
**Weight:** Males, 242-260 grams; Females, 181-190 grams  
**Source:** Ace Animals, Inc.

**Conclusion:**

1. **LD<sub>50</sub> (mg/kg):** Males = >5,000 mg/kg  
Females = >5,000 mg/kg  
Combined = >5,000 mg/kg
2. **The estimated LD<sub>50</sub> is** >5,000 mg/kg
3. **Tox. Category:** IV **Classification:** Acceptable

**Procedure (Deviations from §81-1):** None noted other than sponsor requested use of expressed liquid from wipe.

**Results:**

| Dosage (mg/kg) | (Number Deaths/Number Tested) |         |          |
|----------------|-------------------------------|---------|----------|
|                | Males                         | Females | Combined |
| 5,000 mg/kg    | 0/5                           | 0/5     | 0/10     |
|                |                               |         |          |
|                |                               |         |          |
|                |                               |         |          |

**Observations:** All animals survived and gained weight. There were no signs of gross toxicity, adverse pharmacologic effects or abnormal behavior.

**Gross Necropsy:** No gross abnormalities were observed.



**DATA REVIEW FOR PRIMARY EYE IRRITATION TESTING (§81-4, 870.2400)**

**Product Manager:** Velma Noble  
**MRID No.:** 456439-03

**Reviewer:** R. Turpin  
**Study Completion Date:** 3/29/2002  
**Report No.:** 11707

**Testing Laboratory:** Product Safety Labs  
**Author(s):** George E. Moore

**Quality Assurance (40 CFR §160.12):** GLP statement provided.

**Test Material:** C2000-1645 Code 7345-80 Wet Wipe

**Dosage:** 0.1 ml

**Species:** Rabbit

**Sex:** 2 males; 1 female

**Weight:** N/A

**Age:** Young adults

**Source:** Davidson's Mill Farm

**Summary:**

1. **Toxicity Category:** III
2. **Classification:** Acceptable

**Procedure (Deviations From §81-4):** None noted

**Results:**

| Observations        | (number "positive"/number tested) |      |     |     |   |   |    |     |
|---------------------|-----------------------------------|------|-----|-----|---|---|----|-----|
|                     | Hour                              | Days |     |     |   |   |    |     |
|                     | 1                                 | 1    | 2   | 3   | 4 | 7 | 14 | 21  |
| Corneal Opacity     | 0/3                               | 0/3  | 0/3 | 0/3 | — | — | —  | --- |
| Iritis              | 0/3                               | 0/3  | 0/3 | 0/3 | — | — | —  | --- |
| <b>Conjunctivae</b> |                                   |      |     |     |   |   |    |     |
| Redness             | 3/3                               | 1/3  | 0/3 | 0/3 | — | — | —  | --- |
| Chemosis            | ---                               |      |     |     |   |   |    |     |
| Discharge           | ---                               |      |     |     |   |   |    |     |

--- = no observations at this point

**DATA REVIEW FOR SKIN IRRITATION TESTING (§81-5, 870.2500)**

**Product Manager:** Velma Noble  
**MRID No.:** 456439-04

**Reviewer:** R. Turpin  
**Study Completion Date:** 3/29/2002  
**Report No.:** 11708

**Testing Laboratory:** Product Safety Labs  
**Author:** George E. Moore

**Quality Assurance (40 CFR §160.12):** GLP statement provided

**Test Material:** C2000-1645 Code 7345-80 Wet Wipe

**Dosage:**

**Species:** Rabbit

**Age:** Young adults

**Sex:** 2 males; 1 female

**Weight:** N/A

**Source:** Davidson's Mill Farm

**Summary:**

1. **Toxicity Category:** IV
2. **Classification:** Acceptable

**Procedure (Deviations From §81-5):** Test substance was cut into 1 inch squares and applied to as received to the test site.

**Results:** All animals appeared active and healthy. There were no signs of gross toxicity, dermal irritation, adverse pharmacologic effects or abnormal behavior.

**Special Comments:** None

**DATA REVIEW FOR DERMAL SENSITIZATION TESTING (§81-6, 870.2600)**

**Product Manager:** Velma Noble  
**MRID No.:** 456439-05

**Reviewer:** R. Turpin  
**Study Completion Date:** 3/29/2002  
**Report No.:** 11709

**Testing Laboratory:** Product Safety Labs  
**Author:** George E. Moore

**Quality Assurance (40 CFR §160.12):** GLP statement provided.

**Test Material:** C2000-1650 Code 7345-80 Wet Wipe  
**Positive Control Material:** 1-Chloro-2,4-dinitrobenzene (DNCB)

**Species:** Guinea pig  
**Weight:** 390-477 grams  
**Source:** Elm Hill Breeding Labs

**Age:** Young adults

**Method:** Buehler

**Summary:**

- 1. This Product is not a dermal sensitizer.**
- 2. Classification:** Acceptable

**Procedure (Deviation From §81-6):** The test substance was cut into circles (20-22 mm prior to application. The circles are not required to be moistened, as they are pre-moistened..

**Procedure:** The test sites on four animals was prepared by clipping. The wipres were cut into 20-22 mm circles and applied as received to each animal using an occlusive 25 mm Hill top Chamber. After six hours the chambers were removed and wiped with water and a clean towel. Approximately 24 hours after application, each site was evaluated for local reactions.

In the Induction Phase the above procedure was preformed on the test animals and they were observed after 24 and 48 hours for reactions to exposure. In the Challenge Phase, 28 days after the first induction dose, a 20-22 mm circle of test substance was applied to a naive site of each animal using the procedures, above. These sites were evaluated.

**Results:** The test substance was determined to be a non-sensitizer.

## ACUTE TOX ONE-LINER

1. PC CODE: 69105 / 69165 / 69166 / 69149
2. CURRENT DATE: 4/25/2002
3. TEST MATERIAL: C2000-1645 Code 7345-80 Wet Wipe

| Study/Species/Lab/<br>Study#/Date                                      | MRID No.  | Results  | Tox.<br>Cat. | Core<br>Grade |
|--|-----------|--|--------------|---------------|
| acute oral toxicity /Rat/Product<br>Safety Labs(PSL)/11705/3-29-<br>02 | 456439-01 | LD <sub>50</sub> (mg/kg) = >5,000  | IV           | A             |
| acute dermal toxicity<br>/Rat/PSL/11706/3-29-02                        | 456439-02 | LD <sub>50</sub> (mg/kg) = >5,000  | IV           | A             |
| acute inhalation toxicity /  | Waived    | LC <sub>50</sub> (mg/L)  |              |               |
| primary eye irritation<br>/Rabbit/PSL/11707/3-29-02                    | 456439-03 | Minimally irritating, all<br>symptoms cleared at the 48 hr.<br>observation | III          | A             |
| primary skin irritation<br>/Rabbit/PSL/11708/3-29-02                   | 456439-04 | No dermal irritation was<br>observed at any time during test<br>period     | IV           | A             |
| dermal sensitization /Guinea<br>pig/PSL/11709/3/29/02                  | 456439-05 | Not a sensitizer   | ---          | A             |

A = Acceptable  
 U = Unacceptable  
 S = Supplementary  
 V = self-Validated

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