MEMORANDUM

Subject:  EPA Reg. #:  66550-1
         DPBarcode: D228930
         Chemical #: 128725
         Chemical Name: Methyl anthranilate
         Action Code:  305
         Type of Data: Toxicology, acute
         PRS Bean #:  5633

TO:  Robert Forrest, PM # 14  Attn: Dan Peacock
     Insecticide/Rodenticide Branch
     Registration Division (7505C)

FROM:  David Ritter, Toxicologist
        Precautionary Review Section
        Registration Support Branch
        Registration Division (7505W)

Registrant:  Bird Shield Repellant Corp.
              PO Box 785
              Pullman WA 99163-0785

FORMULATION FROM LABEL:

<table>
<thead>
<tr>
<th>Active Ingredient(s):</th>
<th>% by Wt.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Methyl anthranilate</td>
<td>26.4%</td>
</tr>
<tr>
<td>Inert Ingredient(s):</td>
<td>73.6%</td>
</tr>
<tr>
<td>Total</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

Action Requested:

Review eye and skin irritation studies and precautionary labeling.

PRS Response:

The data have been reviewed and the DERs are attached.

The eye irritation study was placed in TOX category II and the skin
irritation study was placed in TOX category III. Both studies were
classified as acceptable.

The studies are summarized below:
Acute Toxicity Data Requirements (40 CFR §158.340).  

<table>
<thead>
<tr>
<th>Data Required</th>
<th>MRID #</th>
<th>Toxicity Category</th>
<th>Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eye Irr. (§81-4)</td>
<td>440703-02</td>
<td>II</td>
<td>A</td>
</tr>
<tr>
<td>Dermal Irr. (§81-5)</td>
<td>&quot; -01</td>
<td>III</td>
<td>A</td>
</tr>
</tbody>
</table>

These data support registration of the product.

**Precautionary Labeling Review:**

PRS has no information from other acute toxicity studies required to write precautionary labeling. Therefore, the attached label reflects only the results of those studies (eye and dermal irritation) reviewed in this submission.
DATA EVALUATION RECORD FOR EYE IRRITATION TOXICITY TESTING

(PM): 14   EPA Reg. No.: 66550-1   Reviewer: D. Ritter
MRID No.: 440703-02   Lab. No.: 4372
Testing Laboratory: Product Safety Labs
725 Cranbury Road
East Brunswick NJ 08816

Title Of Report: Primary Eye Irritation
Date of Report: 6/11/96   Author(s): Gary Wnorowski
Species: NZW rabbit
Source: Davidson's Mill Farm, S. Brunswick NJ
Test Material: Bird Shield Repellant Concentrate
Dosage: 0.1 ml
Quality Assurance (40 CFR, Section 160.12): Acceptable

Summary: Corneal effects clearing in 8 - 21 days
Toxicity Category: II   Classification: Acceptable
Procedure (Deviation From Series 81-4):

Standard laboratory animal husbandry and GLP were observed. Eyes were examined with 2% sodium fluorescein 24 hours prior to application. 0.1 ml undiluted Test Article was administered as a single instillation into the everted lower eyelid. Observations for effects were made at 1, 24, 48 and 72 hours, and on days 4, 7, 10 and 14. Irritancy scores were made after Kay, et al (1962).

Results:

<table>
<thead>
<tr>
<th></th>
<th>No. affected/No. exposed in days</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1hr</td>
</tr>
<tr>
<td>Ocular Effects</td>
<td></td>
</tr>
<tr>
<td>Cornea</td>
<td>1/6</td>
</tr>
<tr>
<td>Iris</td>
<td>2/6</td>
</tr>
<tr>
<td>Conjunctivae</td>
<td></td>
</tr>
<tr>
<td>Redness</td>
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<tr>
<td>Chemosis</td>
<td>6/6</td>
</tr>
<tr>
<td>Discharge</td>
<td>6/6</td>
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</table>

Conclusions:

See summary above.
DATA EVALUATION RECORD DERMAL IRRITATION TOXICITY TESTING §81-5
(PM):  14     EPA Reg. No.: 66550-1     Reviewer: D. Ritter
MRID No.: 440703-01     Lab. No.: 4373
Testing Laboratory: Product Safety Labs
725 Cranbury Road
East Brunswick NJ  08816
Title Of Report: Primary Skin Irritation
Date of Report: 6/7/96     Author(s): Gary Wnorowski
Species: NZW rabbit
Source: Davidson’s Mill Farm, S. Brunswick NJ
Test Material: Bird Shield Repellant Concentrate
Dosage: 0.5 ml applied topically
Quality Assurance (40 CFR, Section 160.12): Acceptable

Summary: Moderate irritation at 72 hours
Toxicity Category: III Classification: Acceptable
Procedure (Deviation From Series 81-5):
Standard laboratory animal husbandry and GLP were observed.
Fur was clipped from the dorsal trunk one day prior to exposure.
Undilute Test Article was administered as a single topical dose of
0.5 ml under a 6 cm² gauze patch which was then secured with semi-
occlusive dressings and Elizabethan collars. After 4 hours the
dressings were removed and the test sites cleansed.

Observations for dermal irritation were made at 1, 24, 48 and 72
hours, and on days 7, 10 and 14. Dermal irritation was scored
after Draize (1944).

Results:

DERMAL IRRITATION SCOREBOARD

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<tr>
<th>Rab.#</th>
<th>1hr</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
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<th>6</th>
<th>7</th>
<th>10</th>
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</tr>
</tbody>
</table>

Score = sum of numerical grades/no. observation periods
at 1, 24, 48 and 72 hours.

PII = Sum of scores/No. animals = 9.5/6 = 1.6
Slight < 2.0; Moderate 2 - 5; Severe > 5

Conclusions: See summary above.
ACUTE TOX ONE-LINER

1. PC CODE:  128725; methyl anthranilate

2. CURRENT DATE:  11-6-96

3. TEST MATERIAL:  Bird Shield Repellant Concentrate

4. EPA Reg. #:  66550-1

<table>
<thead>
<tr>
<th>Study/Species/Lab/Study#/Date</th>
<th>MRID No.</th>
<th>Results</th>
<th>Tox. Cat.</th>
<th>Core Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eye irr./rabbit/PSL* /4372/6-11-96</td>
<td>440703-02</td>
<td>Corneal effects clearing in 8 - 21 days</td>
<td>II</td>
<td>A</td>
</tr>
<tr>
<td>Skin irr./rabbit/PSL /4373/6-7-96</td>
<td>&quot; -01</td>
<td>Mod. irr. @ 72 hrs</td>
<td>III</td>
<td>A</td>
</tr>
</tbody>
</table>

* Product Safety Labs
  725 Cranbury Road
  East Brunswick NJ 08816

Core Grade Key:

A = Acceptable
U = Unacceptable
S = Supplementary
ID #: 066550-00001 BIRD SHIELD REPELLENT

SIGNAL WORD: WARNING

PRECAUTIONARY STATEMENTS:

Causes substantial but temporary eye injury. Do not get in eyes or on clothing. Avoid contact with skin. Wear goggles or face shield. Wash thoroughly with soap and water after handling. Remove contaminated clothing and wash clothing before reuse.

STATEMENT OF PRACTICAL TREATMENT (SOPT):

IF SWALLOWED: Call a physician or Poison Control Center. Do not induce vomiting. Drink promptly a large quantity of milk, egg whites, gelatin solution, or if these are not available, drink large quantities of water. Avoid alcohol.

IF ON SKIN: Wash with plenty of soap and water. Get medical attention if irritation persists.

IF IN EYES: Hold eyelids open and flush with steady, gentle stream of water for 15 minutes. Get medical attention.

Probable mucosal damage may contraindicate the use of gastric lavage.